

gwinnett county



2030 unified plan

Comprehensive Plan

Consolidated Plan

Comprehensive Transportation Plan

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Gwinnett's Unified Plan in a Nutshell

It is easy to take Gwinnett's good fortune for granted. Decades of growth, excellent schools, good services, new roads, community parks, and convenient shopping suggest that these good times will last forever. The Unified Plan is a chance to pause, look around carefully and then look ahead thoughtfully. How is the world around us changing? How are we changing? What do these changes mean for planning and preparing for the future?

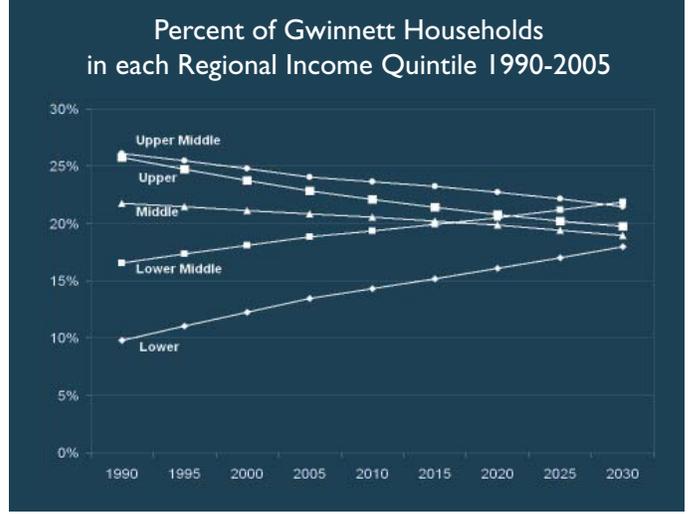
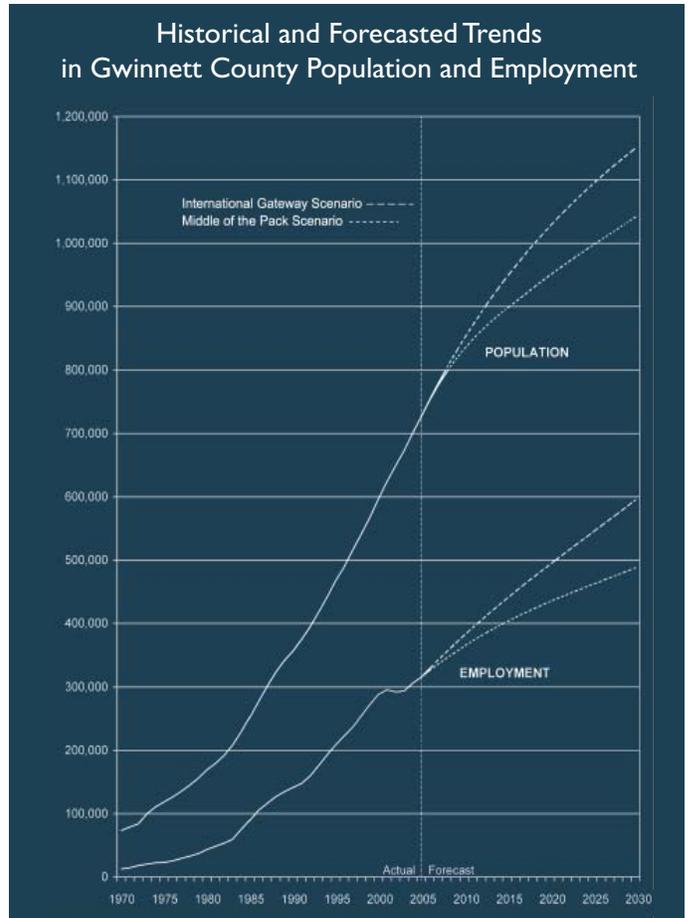
Trends

Gwinnett's growth in population is expected to slow somewhat over the next 25 years as its supply of land is developed. Job growth is expected to remain strong, but will increase more slowly as some sectors of the economy mature, relocate for better access (e.g., light industry, warehousing/distribution), correspond to slowing residential growth (e.g., construction, retailing). Gwinnett's population and employment figures expected to remain high, but the rate of growth will slow. The County's growing ethnic and racial makeup is projected to result in a mix with no majority group by 2013. Regional shifts in population over the past decades have resulted in a steady leveling of incomes within Gwinnett toward the regional average. Part I of the Plan describes current conditions and the issues they raise.

Future Scenarios

Taken together, the trends characterize a future scenario the Plan calls "Middle of the Pack" in which Gwinnett's phenomenal economic performance is not sustained, but remains respectable. The County's fiscal resources in this scenario are stretched thin and tough choices on the provision of services loom large if budget deficits are to be avoided.

The trends are powerful. They are not, however, inevitable. But to bend them to its advantage, Gwinnett will have to get involved and participate in ways it has not needed to before. An alternative future that maintains Gwinnett's dynamic momentum is also envisioned in the Plan. It is called the "International Gateway" scenario. The title recognizes the County's unique potential to capitalize on its diverse population near the international hub that Atlanta has become.



Plan Themes

Much of the work on the Plan involved playing out these contrasting scenarios and comparing their performance. While the International Gateway scenario is the preferred outcome, the Plan also provides guidance on the realities of a Middle of the Pack outcome. A summary of the fiscal performance of the two scenarios is shown in the table below. It underlines the need for proactive intervention by the County.

Population and Job Growth by Scenario			
	2005	2030 Middle of the Pack	2030 International Gateway
Population	727,000	1.04 million	1.15 million
Jobs	316,000	483,000	595,000

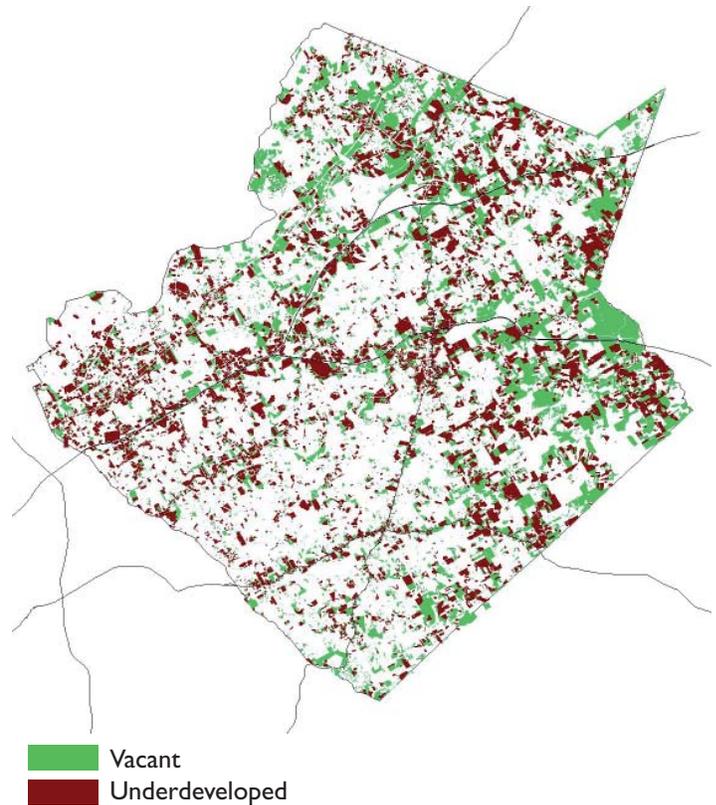
Revenue and Expenditures by Scenario			
	2005	2030 Middle of the Pack	2030 International Gateway
Revenue	\$675 million	\$1,025 million	\$1,090 million
Expenditures	\$675 million	\$1,028 million to \$1,109 million	\$1,028 million to \$1,045 million

Intervention, however, must go beyond economic development and needs to confront the new and complicated challenges of guiding redevelopment efforts. This is especially important within the County's southwest quadrant, where Community Improvements Districts (CIDs) have already begun to organize for this challenge. Another 20 percent of Gwinnett's land area can be considered redevelopment candidates over the coming decades. One economic development and redevelopment challenge facing Gwinnett is that many of its vacant and potential redevelopment parcels are small and not contiguous. The limited availability of prime parcels is one reason behind the Plan's policy to protect large, well-located parcels for the development or redevelopment of regional office space, an emerging market for Gwinnett.

Confronting the mobility and accessibility challenges of increased growth under both future scenarios will require new funding sources and approaches for transportation; to simply build its way out of congestion will be cost-prohibitive for Gwinnett County. The scenarios tested also show the consequences of Gwinnett County continuing to approve development without making corresponding improvements in transportation capacity.

Rush hour traffic is heavily influenced by where people work and live. Providing more opportunities for people to live near where they work across the income spectrum,

Vacant and Underdeveloped Land

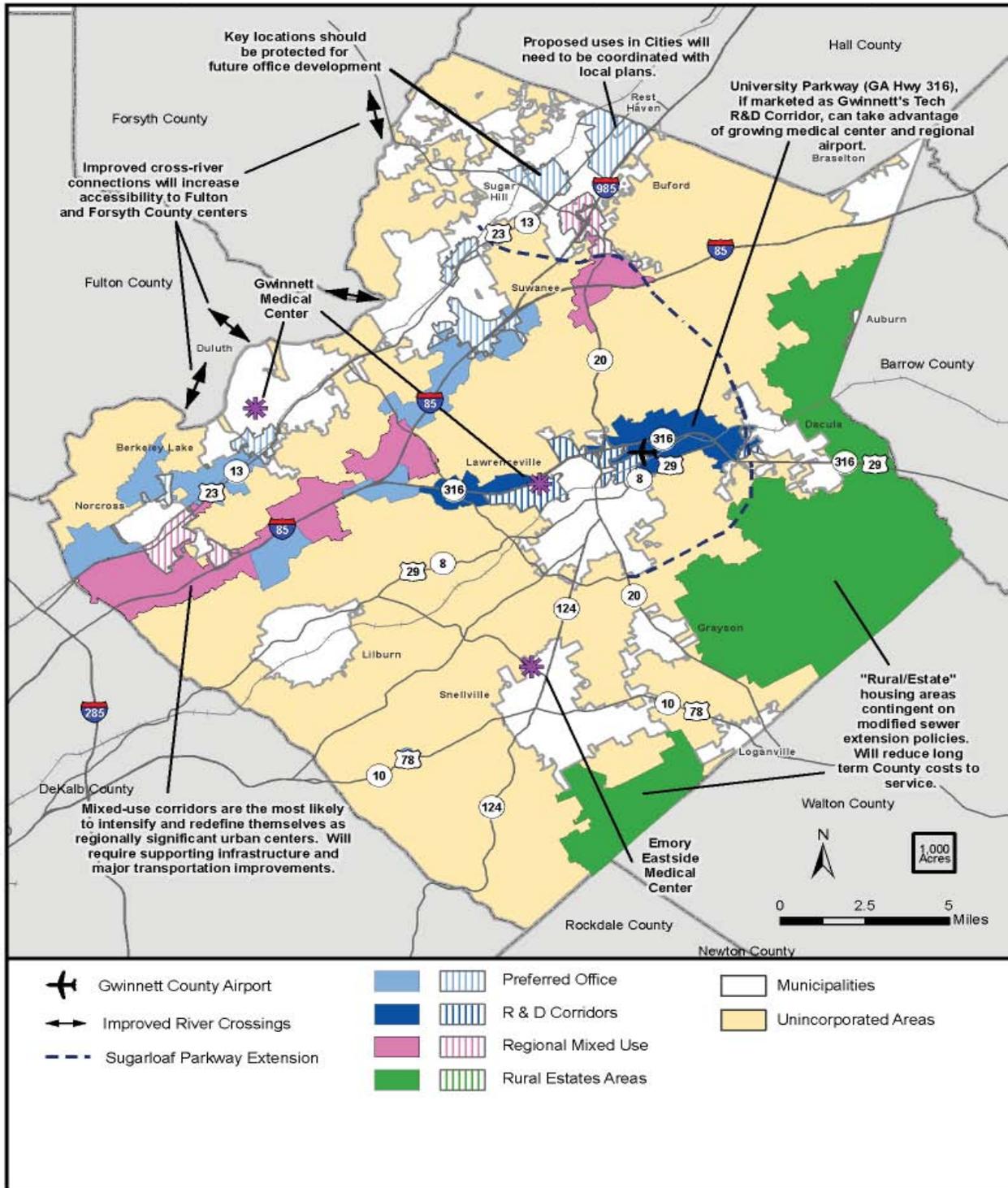


is therefore an appropriate focus of this Plan as well. As they are across the country, households in Gwinnett are shrinking and becoming less family-based. This means the County needs to take a fresh look at its emerging housing market.

The powerful demographic and employment shifts occurring in the region and the country require reframing Gwinnett's image. The County will have to go beyond the "bread and butter" of suburban living if it is to remain the preferred place for the emergent, footloose, information workers who crave more than the suburban lifestyle. Amenities – cultural choices, nightlife, pocket parks, transit options, and urban housing types – exist little outside of some of the County's cities. Government can help seed this evolution towards a more urban environment focused on the I-85 Corridor. Again, it is a new role for Gwinnett.

These important issues – maintaining economic development and fiscal health, fostering redevelopment, maintaining mobility and accessibility, providing more housing choice and keeping Gwinnett a preferred place – are the organizing themes of the Unified Plan. The next five pages treat each theme separately. The following theme maps highlight the key products of Part 2 of the Plan.

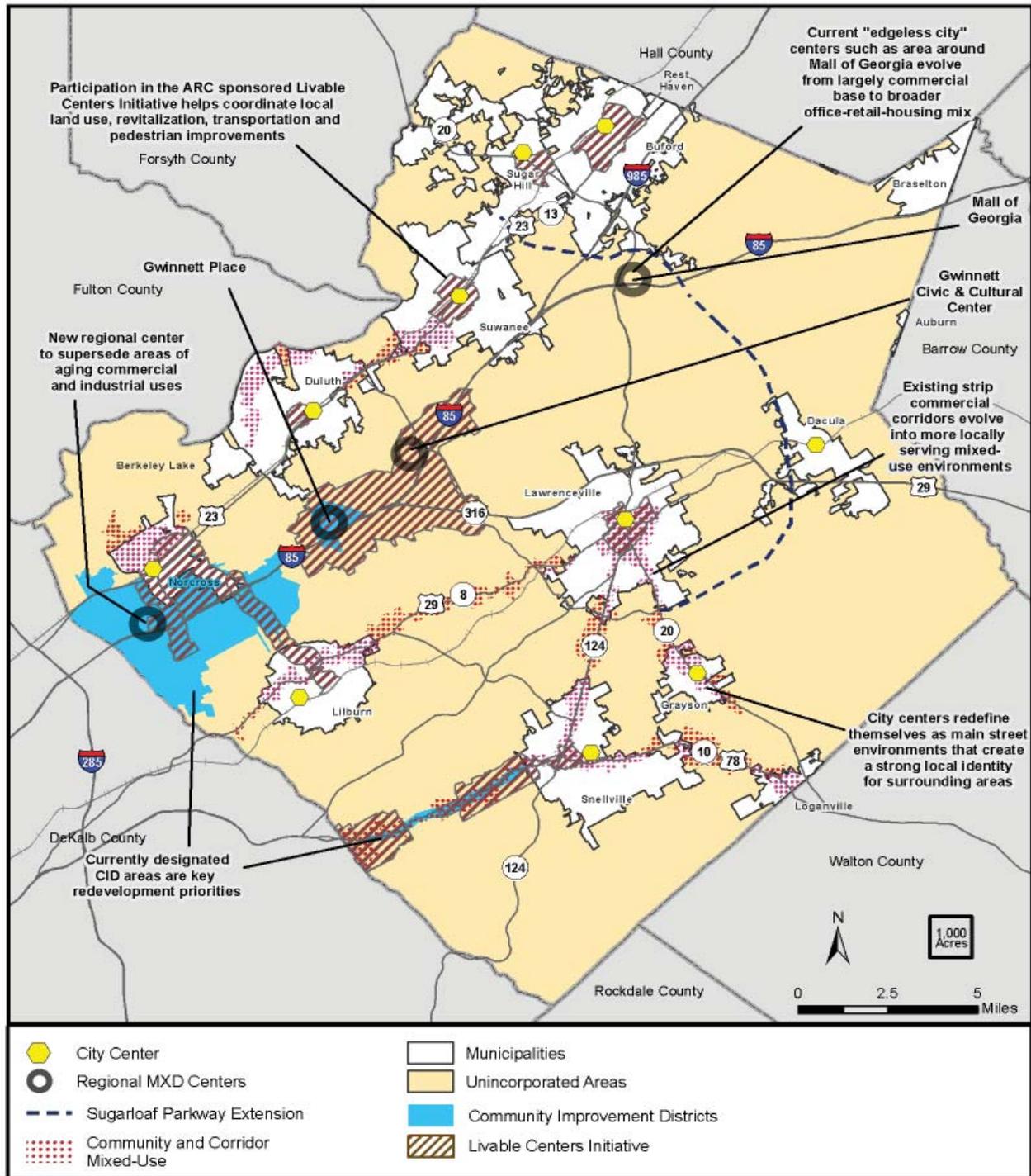
Maintain Economic Development and Fiscal Health



The major economic development and fiscal health policies are:

- Promote Major Mixed-Use Developments
- Protect Large, Well-Located Parcels/Areas for Office Use through Proactive Rezoning
- Strategic Placement of Sewer
- Use Transfer of Development Rights (TDR) for Rural Estate Housing in the East
- Revise Current Millage Rates
- Promote University Parkway (GA Hwy 316) Corridor as Gwinnett's Research and Development Belt
- Employ Debt Financing of Major Infrastructure
- Obtain Appropriate Balance of Retail

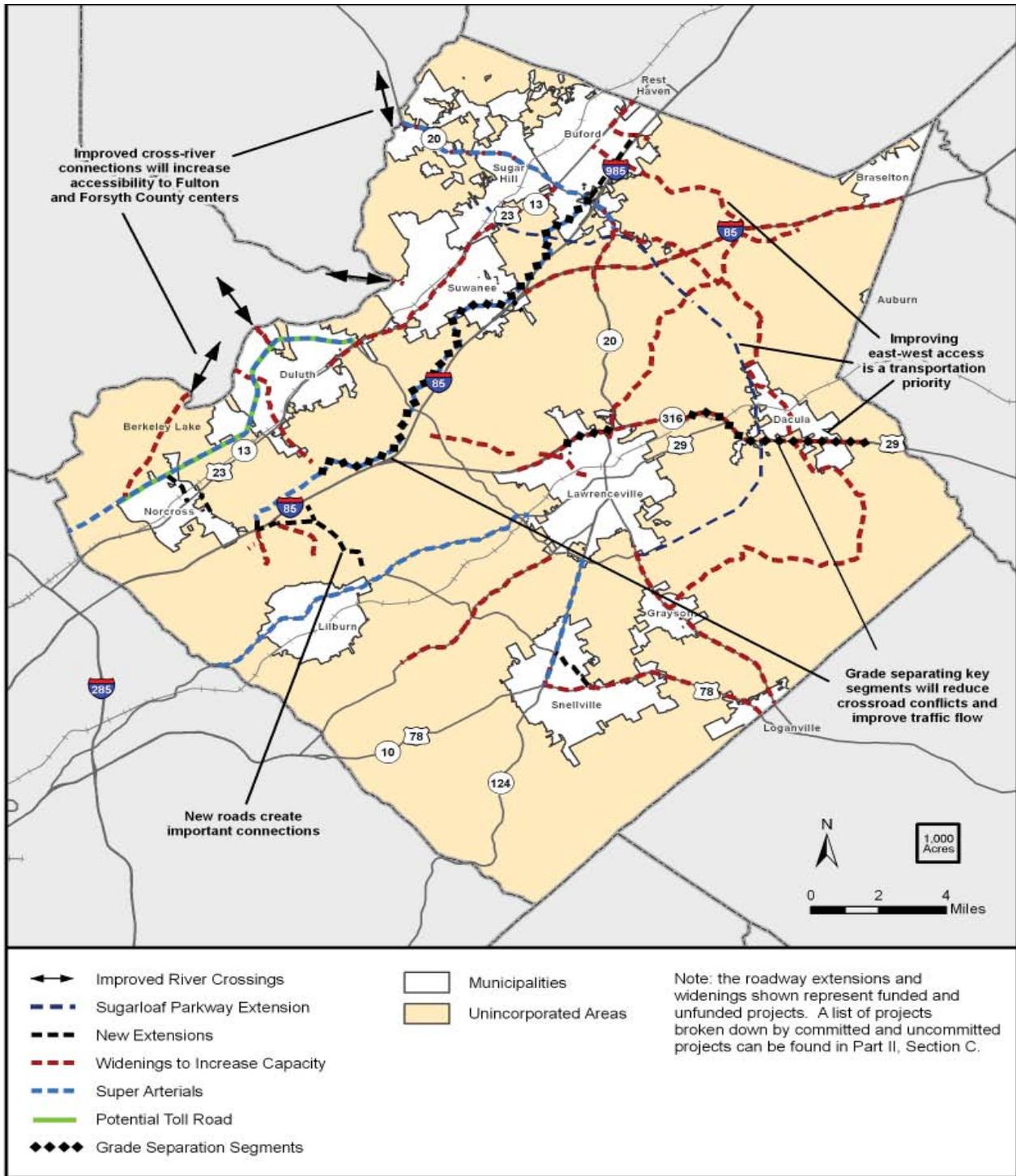
Foster Redevelopment



The major redevelopment policies are:

- Institute a Variety of Redevelopment Incentives and Bonuses
- Promote Densification in Specific Areas Designated for Mixed-Use Through TDRs, Rezoning, Increased Infrastructure Capacity
- Use Tax Allocation Districts (TADs)
- Promote Shared Infrastructure Facilities
- Allow "Corner Stores" within Specified Medium/Higher Density Areas as "Floating Zones"

Maintain Mobility and Accessibility

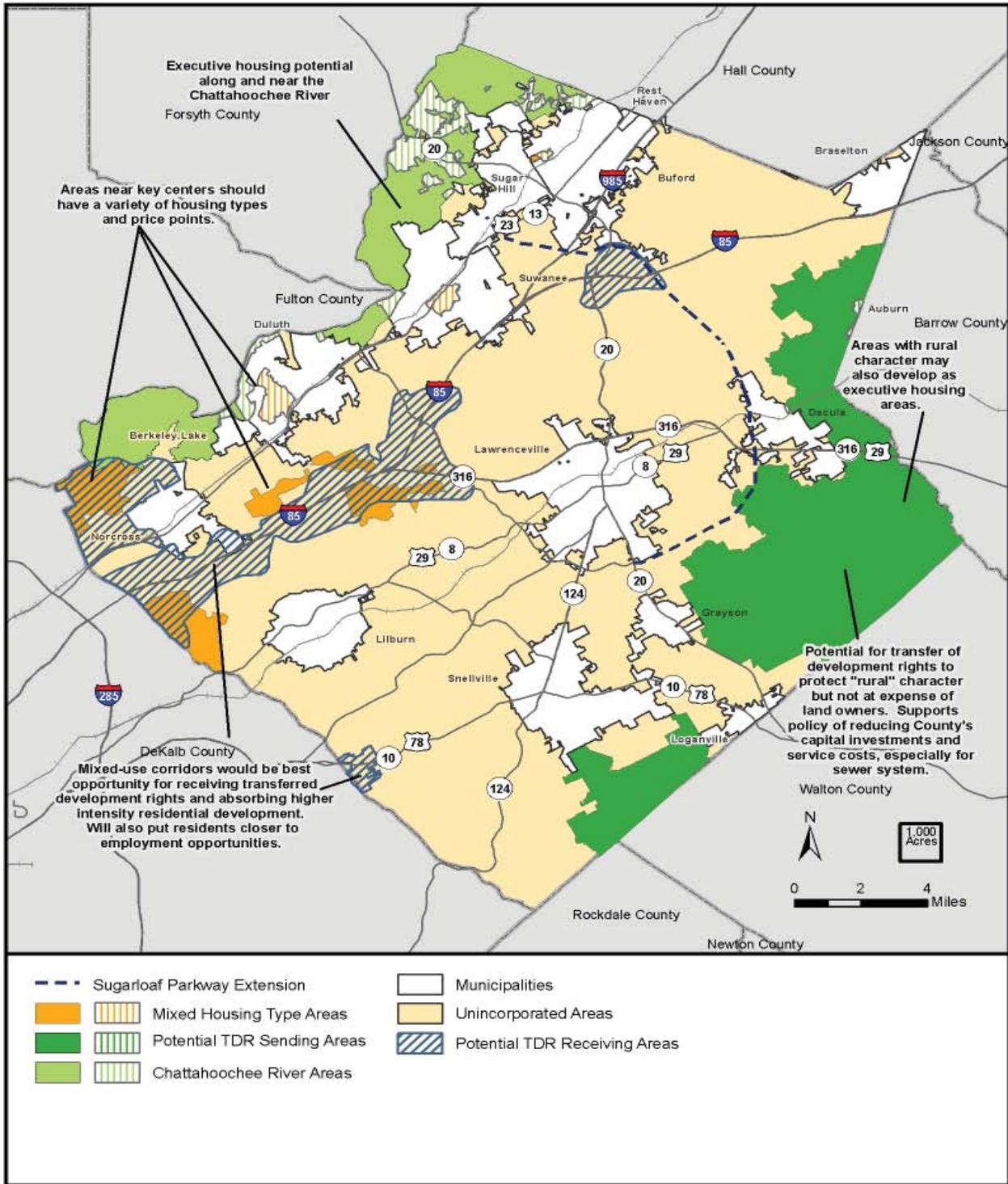


The major mobility and accessibility policies are:

- Enhance Signal Coordination and Intelligent Transportation Systems (ITS)
- Manage Access on Arterials
- Enhance Incident Management (Traffic Control Center)
- Establish a Road Connectivity Requirement for New Development
- Create Transit-Oriented Development (TOD) at Appropriate Sites through Proactive Zoning
- Establish a More Extensive Transit System
- Pursue Strategic Road Widening and New Alignments

Transit is not shown on this map.

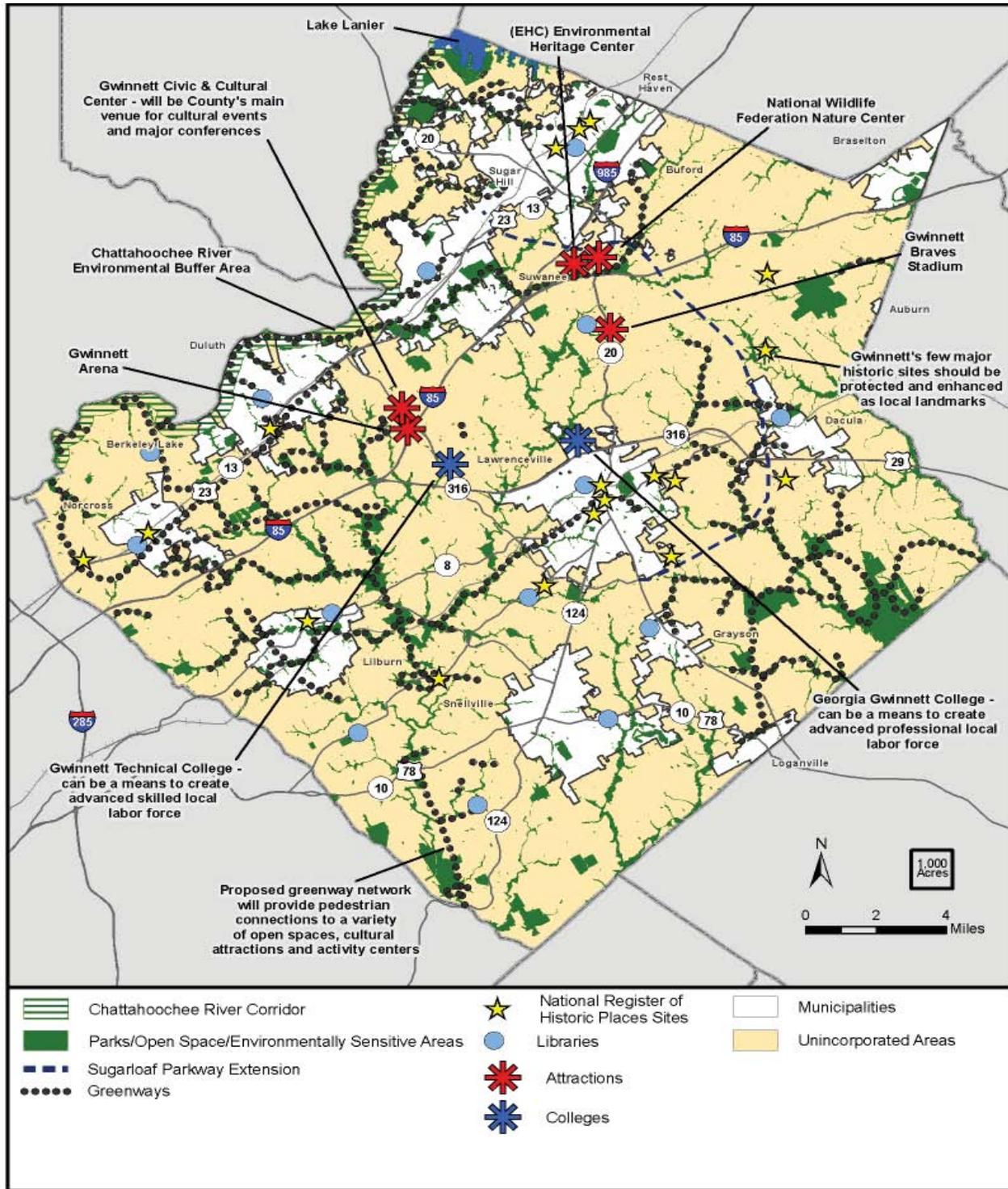
Provide More Housing Choices



The major housing policies are:

- Establish and Provide Access to More Executive Housing Areas
- Preserve Existing Workforce Housing
- Expand Maintenance and Rehabilitation Assistance to Homeowners and Small Businesses

Keep Gwinnett a Preferred Place

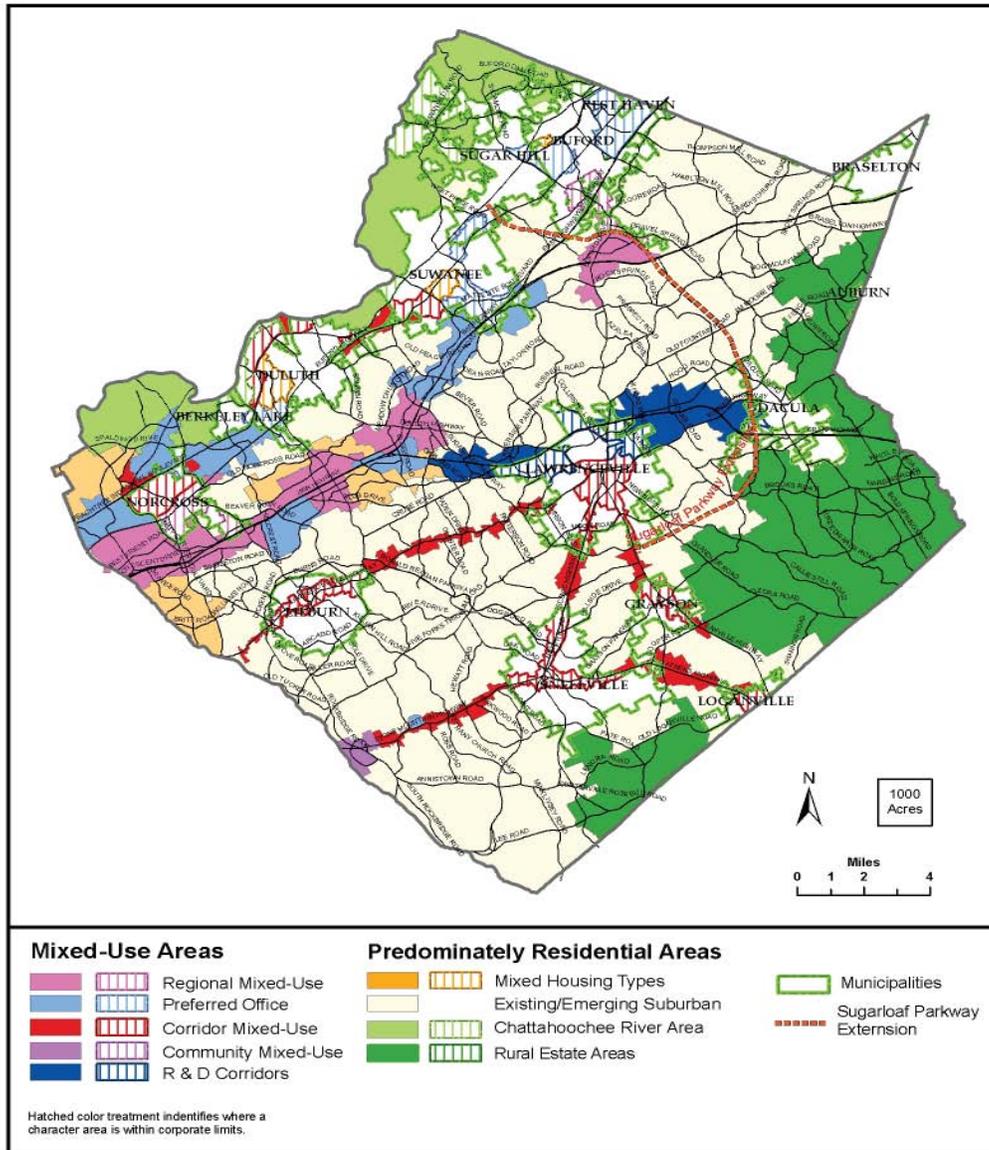


The major preferred place policies are:

- Improve the Walkability of Gwinnett's Activity Centers and Neighborhoods
- Support and Promote the Expanded Four Year College
- Invest in After School Programs
- Enhance Development Aesthetics
- Provide Venues to Celebrate Growing Cultural Diversity of County
- Expand Presence of "Arts Community"
- Provide Incentives for Enhanced Open Space/Trails
- Use Development Regulations to Create Local Parks
- Acquire Surplus Industrial or Commercial Sites for Open Space/Recreation

Future Land Development Map

The Future Land Development map reflects the outcomes of the International Gateway scenario. It shows where extensive rezonings and development will be required to carry out the intentions of the Plan and where suburban character will be maintained.



Implementing the Plan

Part 3 of the Plan focuses on its implementation. A section detailing the policies comprises the bulk of this part of the Plan. Each Policy is numbered and the policies are extensively detailed, noting implementation steps, entities responsible for them, assumed benefits, challenges, and costs and monitoring benchmarks. A section on policy prioritization presents those policies selected for inclusion in the Short Term Work Plan (2009 – 2014). The Plan divides the County in eight Character Areas. Land Uses to be encouraged and discouraged in each Character Area are described in a section on using the Plan and its maps. A section on recommended changes to the Zoning Resolution and development regulations addresses several

items central to the Plan's implementation: the different scale and purposes of Mixed-Use Districts; the protection of future Office Employment Sites; Rural Estate Land Uses and the Transfer of Development Rights option to achieve this goal; increasing access management on arterial roads to preserve their capacity; a needed Major Thoroughfare Plan that will classify existing and future roads and sets up access management; and finally, guidance on future roadway spacing. Ways to measure whether and how the Plan's targets are met are suggested, and periodic progress reports and the plan amendment process are discussed in a final section on monitoring and updating the Plan.

How (and Where) the Plan Meets DCA Requirements

The Georgia Department of Community Affairs (DCA) Chapter 110-12-1, describes the standards and procedures for local comprehensive planning and specifies the local planning requirements. The purpose of the requirements is to “provide a framework for preparation of local comprehensive plans that will involve all segments of the community in developing a vision for the community’s future, generate local pride and enthusiasm about the future of the community, engage the interest of citizens in implementing the plan, and provide a guide to everyday decision-making for use by local government officials and other community leaders.”

The framework consists of three components: a Community Assessment, a Community Participation Program, and a Community Agenda. The Department of Community Affairs reviews each of these documents for completeness and approval. Gwinnett County submitted its Community Assessment and Community Participation Program to DCA in February 2007, and received approval of them on July 9, 2007. The Community Assessment can be found in Appendix B and the Community Participation Program is included as a part of Appendix A. The Unified Plan document fulfills the requirements of the third component, the Community Agenda.

To make it easier for readers who may wish locate specific DCA-required Community Agenda items, the following table summarizes the requirements and lists the section(s) within the Unified Plan where the item can be found.

DCA Community Agenda Requirements	Where to Find the Item in the Unified Plan
(a) Community Vision: paints a picture of the future community, provides a description of development patterns to be encouraged, includes the following items:	Part 1: B. A New Type of Plan
(i) General Vision Statement (optional): a general statement of the overall goals and desired future the community seeks to achieve	Plan in a Nutshell
(ii) Future Development Map (required): shows the desired future development patterns by major character areas	Figure 73: Economic Development / Fiscal Balance Map Figure 74: Foster Redevelopment Map Figure 75: Maintain Mobility and Accessibility Map Figure 76: Housing Choices Map Figure 77: Preferred Place Map Figure 78: Composite Policy Map Figure 79: Future Land Use Needs Sidebar p126: Why No Parcel-Based Land Use Map? Part 3: C.1 Using the Plan for Future Land Use Changes by Planning Sector Part 3: C. 2 Using the Future Land Use Needs Map Table 53: Rezoning Targets - Approximate Recommended Acreage Changes
(iii) Defining Narrative (required): defines a specific vision for each character area	Part 3: C.1 Using the Plan for Future Land Use Changes by Planning Sector Part 3: C.1.1 Major Activity Center Part 3: C.1.2 I-85 Corridor Part 3: C.1.3 Highway 316 Corridor Part 3: C.1.4 River Corridor Part 3: C.1.5 Suburban I and Suburban II Part 3: C.1.6 Eastern Crescent Table 51: Future Land Use Actions Guidelines Table Table 52: Correspondence of Unified Plan Designations with Current Zoning Districts

DCA Community Agenda Requirements	Where to Find the Item in the Unified Plan
(b) Community Issues and Opportunities: lists the issues and opportunities the community intends to address	Part 1: A.2 Emerging Challenges and Unfinished Business Part 1: A.3 Keeping Gwinnett a ‘Preferred Place’ Part 1: C.1.3 Demographic and Socio-Economic Trends Issues to Address Part 1: C.2.3 Gwinnett’s Evolving Landscape Issues to Address Part 1: C.4.3 Economic Well Being and Opportunity Issues to Address Part 1: C.5.3 Housing Issues to Address Part 1: C.6.3 Transportation Issues to Address Part 1: C.7.3 Water, Wastewater and Stormwater Management Issues to Address Part 1: C.8.3 Environmental & Cultural Resources Issues to Address Part 1: C.9.3 Gwinnett Government and Fiscal Capabilities Issues to Address Part 1: D. Summary of Issues Part 2: D.2.1 Theme 1: Maintain Economic Development and Fiscal Health Part 2: D.2.2 Theme 2: Foster Redevelopment Part 2: D.2.3 Theme 3: Enhance Mobility and Accessibility Part 2: D.2.4 Theme 4: Provide More Housing Choices Part 2: D.2.5 Theme 5: Keep Gwinnett a “Preferred Place”
(c) Implementation Program: Overall strategy for achieving the vision and addressing the issues and opportunities, includes the following components:	Part 3: Implementation
(i) Short Term Work Program (required): Identifies specific implementation actions that need to be taken during the first five years	Part 3: B. Short-Term Work Plan and Priority Policies Table 50: Priority Policies, 2009 - 2019
(ii) Long-Term and Ongoing Activities (optional): Identifies specific, long-term or ongoing implementation activities to be taken beyond the first five-year timeframe	Table 50: Priority Policies, 2009 - 2019
(iii) Policies (required): provide ongoing direction to local government officials for making decisions consistent with achieving the vision and addressing the issues and opportunities	Part 3: A. Policies and Their Implementation Part 3: D. Changes to the Zoning Resolution and Development Regulations Part 3: E. Monitoring and Updating the Plan
(iv) Supplemental Plans (optional): include or incorporate by reference any supplemental plans that focus on special areas, issues, or situations	Comprehensive Transportation Plan – Appendix I Consolidated Plan – Appendix J 2007 Update of the Gwinnett County Parks & Recreation Capital Improvement Plan – referenced

Overview of the Appendices

The 2008 Gwinnett Unified Plan, at around 200 pages, is the tip of an iceberg. These appendices, nearly 950 pages long are its base. A very substantial research effort underpins the policies and maps of the Plan. The Appendices are its record. They will provide a deeper understanding than the Plan itself of the trends, driving forces, scenario development and analysis conducted for Gwinnett and the region.

Volume I of the Appendices contains two plans executed concurrent and parallel with the Comprehensive plan. These are the:

- **Consolidated Transportation Plan (CTP).** This is a Plan whose format and content is specified by ARC. Significantly contributed to by Moreland –Altobelli Inc., it is one of the three plans that make up and cross-pollinate the Unified Plan. It uses the Middle of the Pack scenario to generate a list of needed transportation projects and adds additional projects that are desirable, resources allowing. The modeling done for the CTP was used in the Unified Plan, which also modeled the International Gateway scenario.
- **Consolidated Plan (CP).** This HUD-specified Plan, developed by Bay Area Economics, is the third leg of the Unified Plan, and the result of a pilot program by HUD to better integrate such plans into the ongoing agenda of community plans. This pilot, thus, seeks to raise the profile of Gwinnett's housing affordability gap and the social services needs that lower income residents have. While the data required by the plan, and its detailed reporting requirements, are contained in this appendix the findings and implications of the CP have influenced the policies in the Unified Plan. A "crosswalk" between these two documents, that makes these influences clear, prefaces the appendix.

Volume 2 of the appendices is organized in a sequence of: Public Outreach Process (A); basic analysis (B through E); modeling and evaluation (F through H). They reflect the substantive contributions of the team of experts assembled to help prepare the Unified Plan. Some highlights of each appendix in Volume 3 follow.

A – Public Outreach Process. Summarized in Part 2, Section B.2 of the Plan, this appendix describes in full the outreach process used to develop the Plan. It

list interviewees, dates, agendas of the Plan Advisory Committee and so forth. It also contains summaries of the six focus group meetings, organized and conducted by Ventana Marketing Inc. These meetings were an effort to solicit the input of minority/ethnic groups, usually under-represented, into the planning work.

B – Community Assessment. This is the summary document produced at the end of the first phase of the Plan, a DCA requirement. It analyzes recent trends, discusses important features and issues for the county and sets up the meat of the Plan. Some of this material is incorporated in Part I of the Plan but the Assessment is obviously fuller and contains, in particular, more City-specific information.

C – Population and Employment Forecasts. Gwinnett has a 30-year history of outstripping its growth forecasts. It was deemed particularly important, therefore, to make sure that the forecasts for this Unified Plan were robust and defensible. Dr. Thomas Hammer undertook a comprehensive analysis of growth trends from a state, regional and county perspective, deploying a massive data base of counties nation-wide in which to ground his projections. Several meetings with ARC, which uses a different methodology, were held to review the Plan's assumptions. In the event, both approaches yielded very similar results, the projections generally showing a slowing of growth for Gwinnett.

D – Economic Development Overview. The Robert Charles Lesser Company, locally based, mined its hands-on familiarity with the region and Gwinnett to write this overview of economic development prospects for the County. Covering much ground and peppered with data nuggets and insights, much of this material found its way into different sections of the Plan and strongly influenced its direction. RCLCo's judgments also determined many of the parameters of the Land Use Allocation model.

E – Homeownership and Socio-Economic Trends.

The sweeping changes in the racial and ethnic makeup of Gwinnett over the decade since the last plan necessitated a closer look. These reports, by Dr. Dan Immergluck of Georgia Tech, constitute important original research on this phenomenon and its implications. They portray some encouraging signs and patterns of relative integration rather than wholesale racial/ethnic segregation. These 2006/2007 reports were also a very early warning of the sub prime mortgage fiasco in which Gwinnett is now so heavily embroiled. This analysis also informed the Consolidated Housing Plan.

F – Land Use Allocation. This appendix explains the way in which land uses were allocated in the various scenarios and their relationship to other forecasting and modeling efforts for the Plan. This guidance on future land use actions, conducted by Facet Decision Systems, also provides a tool for future use by the County as conditions change.

G – Transit Testing. As part of the transportation modelling effort different transit routes and services were tested. This appendix provides information on the additional transit services tested in the International Gateway Scenario and provides a detailed table of mode splits for the eight County subareas.

H – Fiscal Analysis. No analysis in this Plan is more sobering than that conducted by Dr. Robert Eger (Georgia State University) of the County's fiscal future. By significantly expanding the reach of existing fiscal models used by the County this analysis reveals the coming fiscal crunch. It compares the various scenarios against each other and recommends significant changes in the way the county raises and spends monies to secure a positive fiscal future. Its recommendations have deeply shaped the Plan's policies and maps. The fiscal model, part of the land use allocation modeling described above, also furnishes the County with a useful, ongoing tool.

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PART 1: TRENDS AND CHALLENGES

Gwinnett is changing rapidly and this Unified Plan must respond adequately to those changes if it is to be an effective guide for the future decisions that the County will need to make. This first part provides the background necessary to understand the many policy recommendations of the Unified Plan as well as the reasons this plan differs in approach and presentation from its predecessors.

A. TAKING STOCK

A.1 A New Approach

A comprehensive or 'general' plan is the key means to guide future decisions that will promote and support a community's economic capabilities, its physical well being, its overall quality as a place to live and its ability to deal with expected and unexpected challenges. Many of these decisions relate directly to the fiscal health of a jurisdiction and its abilities to provide a full range of high quality services to its citizens. Recognizing the direct correlation between development decisions and their economic and fiscal consequences is one of the things that makes this Unified Plan unique.

This Gwinnett 2030 Unified Plan is a new approach to

coordinating key County government responsibilities for growth management, transportation, housing and related social services, public utilities, economic development, open space and recreation. The Unified Plan is not just about 'government' or 'development;' it has the ability to affect how all Gwinnett residents, employees and employers will carry out much of their everyday business.

Updating a comprehensive plan gives a community the opportunity to take a hard look at itself. While it should document all its achievements and assets, the update process also challenges a community to face its current and emerging challenges in a open and frank manner.

Gwinnett is changing rapidly and this Unified Plan must respond adequately to these changes.



A.2 Emerging Challenges and Unfinished Business

Gwinnett County has changed rapidly during the past four decades. Most of this change has been the spread of suburban development throughout much of the County. Past comprehensive plans have directed their attention to the issues such suburban growth generates, along with growth still to manage.

Gwinnett is no longer merely part of an expanding band of new subdivisions and shopping centers. Once it was largely part of the rural exurban fringe; now Gwinnett is among one of the five counties that make up the core of metropolitan Atlanta. Almost 80 percent of the County's land base has been developed. Its 2005 population of 694,000 was the second largest in Georgia, after Fulton County. Its 316,000 jobs were exceeded only by Fulton, DeKalb and Cobb Counties.

As Gwinnett matures, parts of the County are changing to an unfamiliar status as "transitional" areas are now in need of reinvestment and revitalization. Though the change seemed to begin without warning, it was predictable. Many similar metropolitan counties in the United States have gone through a similar growth-slowdown-decline cycle over time. The typical steps of this cycle are:

- Rural edge
- Emerging bedroom suburbs
- Magnet for shopping centers and malls as well as typical suburban office or industrial parks
- Slower growth as build-out approaches

- Outflow of jobs and families to newer frontier jurisdictions
- Expansion of pockets of aging development; and finally,
- The beginning of concerted revitalization and renewal.

Such changes often occur over an extended time period of 50 to 70 years. In Gwinnett however; that process was exceedingly rapid. Trends that in other metropolitan counties have been more sequential and drawn out are occurring simultaneously in Gwinnett. Now the County must continue its suburban expansion while simultaneously taking on the issues and expenses of revitalization.

Gwinnett now confronts an array of new challenges that the Unified Plan must address:

- Continuing to expand its infrastructure to support suburban growth, while maintaining the level of fiscal health needed to support the high level of services its citizens expect—perhaps the most crucial issue the County faces
- Sustaining its economic well being as the regional economic context changes
- Maintaining the range and quality of housing choices needed to underpin its economic well being
- Revitalizing older areas and stabilizing today's healthy neighborhoods
- Adapting to significant demographic changes that are sweeping across the Atlanta region
- Coping with increasing traffic congestion and its impacts on economic development and the quality of life of its residents
- Increasing the operational and cost efficiencies of its utilities – especially its complex sewage collection and treatment system; and
- Maintaining and enhancing the overall quality of life experience of working and/or living in Gwinnett.
- Availability of sustainable drinking water sources to meet the needs of a growing community.

This plan meets the need for a useful document that provides effective guidance for the variety of decisions and actions needed to cope with such a range of challenges. Fully implementing the plan's priorities as well as its recommendations for tracking and monitoring the progress of such implementation will make Gwinnett a more active participant in charting its future.

Dealing with these emerging challenges as well as the more familiar growth-oriented ones of previous plans complicates the job of elected officials, agencies and others dealing directly with the requirements of plan implementation. These challenges represent uncharted territory. **Simply relying on the experiences of the past will not produce the expected results. Failure to recognize what is happening and why may cause decision makers to become advocates of what has worked before, rather than taking a lead in establishing a new vision for the future.**

A.3 Keeping Gwinnett a 'Preferred Place'

The Unified Plan is more than just a means to temper current problems and cope with a more complicated set of trends and circumstances. This Plan also charts a way to protect and add to those aspects of work, home, recreation, environment and culture that constitute a place's 'quality of life'. Put most simply, the Plan's aim is to create the belief and reality that Gwinnett is a **preferred place** among the competing places in the Atlanta region and, indeed, the greater southeastern United States.

The Plan's aim is to create the belief and reality that Gwinnett is a preferred place.



B. A NEW TYPE OF PLAN

B.1 Why is this Plan Different?

This Plan, in its analysis of issues and possibilities and in its recommendations, diverges from the approach of past Gwinnett County comprehensive plans.

Gwinnett has sufficient vacant land for continued suburban expansion to the north and east for the next twenty years. But, a plan focused on continued suburban growth with only one vision of its future is less and less useful as Gwinnett matures. Such an approach will not give Gwinnett the capabilities or the flexibility to cope with the economic and social change facing Gwinnett today.

While dealing with continued suburban expansion, Gwinnett must focus more energy into stabilizing and revitalizing many areas created during earlier waves of suburban growth. As Gwinnett matures, the County will face a number of important decisions about maintaining and upgrading county infrastructure and facilities such as its transportation network and sewer system, and these decisions will pose challenges to the County's fiscal capabilities. Gwinnett will also continue to transition from its earlier economic base dominated by light industry, warehousing and distribution, growth industries such as home building and real estate, and extensive commercial development. As these industries migrate out or age in place, Gwinnett will need to energetically recruit new economic sectors to employ its residents, support locally-based business development and sustain its tax base.

Perhaps the most important long-term consequence of failing to shift planning perspectives and approaches is the persistent erosion of the County's fiscal resources to a

point that impairs its ability to provide the adequate public services and facilities needed to sustain a decent quality of life for its residents.

The need for Gwinnett County to redefine its vision of itself and account for changing realities and new opportunities is a central message of the **Partnership Gwinnett** initiative of the Gwinnett Chamber of Commerce. This Chamber-sponsored project is a parallel and complementary initiative that clearly calls for new approaches to planning for the future. Some of the key issues **Partnership Gwinnett** is addressing include:

- Attracting new economic development opportunities before, not after, older segments of the local economy decline or depart;
- Establishing and maintaining education and workforce excellence, especially in a world of constant economic innovation and change;
- Fostering greater locally based economic and entrepreneurial opportunities, including those tied to Gwinnett's increasingly diverse population groups;
- Tackling, in a determined way, Gwinnett's redevelopment and transportation needs;
- Bringing to Gwinnett, in part to attract new employers, those cultural and "quality of life" aspects that are now missing; and
- Marketing Gwinnett's assets and opportunities more aggressively.

This Gwinnett 2030 Unified Plan shares all of these concerns of the **Partnership Gwinnett** initiative, especially the need to recognize and deal adequately with the County's changing demography and economy. Both this Plan and the Chamber initiative call upon Gwinnett's leaders and citizens to recognize that changing times call for new bold initiatives. The County needs a new type of comprehensive plan that can be utilized as an effective guide to the flexible and pertinent strategic decision-making that this complex future demands. This Plan provides that guidance.

Gwinnett needs to redefine its vision of itself and account for changing realities and new opportunities.

B.2 How this Plan is Different

The **first difference** is that the Gwinnett 2030 Unified Plan is made up of three major components that are usually separately conceived and only loosely coordinated – the Comprehensive Plan, the Comprehensive Transportation Plan and the Consolidated Plan (for housing and funding needs for other community based projects). While the latter two are stand-alone documents and included as Appendices, the Comprehensive Plan is the core of this Unified Plan document. The Comprehensive Plan is unusually rich in transportation and housing-related analysis and policies because of this coordination.

The Unified Plan has emerged through a process that developed each component simultaneously and required each plan to inform and respond to the needs of the others. Instead of individually developing and adopting each plan, their priorities, phasing and funding was coordinated. A pro-active and coordinated effort between the three components produced the 2030 Unified Plan. For example, the key land use priorities of the Unified Plan have been embedded in the Comprehensive Transportation Plan developed parallel to the overall Unified Plan process. The Consolidated Plan must include data and policies related to topics that the US Department of Housing and Urban Development (HUD) requires for a jurisdiction to be eligible for various federal programs. The key housing and community development policies of the Consolidated Plan are consequently also embedded in this Unified Plan. The need to accommodate all the HUD requirements also accounts for the Unified Plan's going beyond just the land use aspect of housing. Attention is given to the social and economic aspects of housing provision and related community needs and services tied to such issues as affordability, homelessness or needs of special groups within the overall population.

(A Unified Plan appendix presents the Consolidated Plan's background data and process overview.)

The **second difference** is the way this new plan is anchored in fiscal realities and is the result of rigorous testing and evaluation of growth impacts.

Deterioration of the County's fiscal health is ultimately the most serious threat facing Gwinnett. Without a fiscally sound and economically healthy public sector, it will be impossible to sustain current levels of services

This new plan is anchored in fiscal realities.

and maintain existing facilities. Consequently, the Unified Plan employed a rigorous fiscal and economic analysis to forecast the future fiscal impact of various development patterns and suggest the policies needed to improve the fiscal health of the county under each scenario.

The fiscal analysis demonstrated that without raising taxes, the continuation of current growth, demographic and economic trends may result in an annual eight percent (8%) deficit of revenues to expenditures. The slowing of current growth trends could result in much higher gaps. Awareness of these potential economic consequences for Gwinnett's fiscal future is one of the driving forces behind many of the recommendations of this new Plan.

Such conclusions stem in large part from the rigorous economic modeling, testing and evaluation of various growth patterns for the county. Analysis included the application of an employment driven growth forecasting model, a market analysis of Gwinnett's current role and economic development prospects within the entire Atlanta region, and the modeling by the County Department of Transportation of the impacts of various land use outcomes on the County's transportation networks. All of the potential futures or scenarios that these analyses examined had different fiscal implications.

A **third difference** is the organization of the plan's recommendations on the basis of five basic themes:

1. Maintain Economic Development and Fiscal Health
2. Foster Redevelopment
3. Maintain Mobility and Accessibility
4. Provide More Housing Choices
5. Keep Gwinnett a 'Preferred Place'

The traditional approach is to compile and present a number of separate topic driven 'elements,' such as land use, transportation, open space, parks and recreation. In the traditional 'elements' approach, policies and actions relating to a particular topic such as open space or transportation are usually isolated from other issues that they affect. In the traditional 'elements' style plan, understanding how all the various plan details interact requires back and forth

searching or elaborate cross referencing via tables or indexing. In contrast, using themes instead of elements enables the plan to discuss all the issues related to that theme.

The five themes this Unified Plan features are wide in scope in order to facilitate relating a variety of topics to the overall theme and its goals. The themes are in essence broad aspirations that the plan shows how to achieve e.g., how to foster redevelopment. These themes allow the presentation of plan priorities and recommendations to unfold as a coherent narrative. Each theme is a chapter in the overall story about what the plan aims to accomplish.

Cause and effect relationships that the traditional 'elements' approach can disguise are more overtly highlighted in the descriptions of the various themes (e.g., how economic development requires good transportation planning and a sound approach to housing choices). When all the details needed to tell a story are gathered, it is easier to understand the importance of less obvious details to achieving the overall aspirations of the Plan. Some users of the plan will have needs or interests focused on specific topics such as 'housing mix' or 'local streets' or 'industrial lands.' To assist readers in finding all of the plan's discussion and recommendations on a specific topic, several aids such as a cross referencing matrix are built into the Plan.

A **fourth difference** is not focusing on a single desired end state or static future for Gwinnett County. Between now and 2030 Gwinnett County must be prepared to deal with the possibility of more than one plausible future.

An effective plan cannot treat Gwinnett in isolation. Gwinnett's future is linked to that of the entire Atlanta region. If the region prospers, Gwinnett will prosper as well. If the region falters, Gwinnett may not escape the stresses and costs. Consequently, this plan presents more than one possible future for Gwinnett based on broad economic trends for the Atlanta Region and provides guidance for dealing with these different scenarios. These possibilities are illustrated in three defined scenarios:

- One future focuses on the County's opportunity to become one of the major growth centers within a very strong Atlanta area economy. This is the preferred alternative that the bulk of the plan addresses. Attaining this future requires a more proactive approach to planning and public sector initiatives than Gwinnett

Gwinnett County must be prepared to deal with the possibility of more than one plausible future.

has traditionally employed. For example if Gwinnett is unable to proactively address transportation problems but continues to approve rapid development, the implications of this posture are explicitly presented in the testing of transportation alternatives.

- Another outcome that the Plan contemplates is a more moderate expansion of the regional economy and the need to cope with stresses regarding economic development. This outcome is not one the Plan recommends, but nevertheless is one the plan acknowledges can happen. In fact, such an outcome is more likely to happen if Gwinnett does not adapt to its new realities and seize on new opportunities. The Chamber of Commerce and Partnership Gwinnett studies ably addressed these eventualities.
- The third outcome contemplates a major downturn in the regional economy. This possible future greatly reduces the options available for Gwinnett to control its own future. Therefore, while the impact of a regional economic downturn was analyzed, the Plan does not develop strategies for this alternative.

The **fifth difference** is the plan's flexibility and adaptability as it is implemented. This is one closely related to the presentation of different plausible futures.

This new Plan specifies a reasonable sequence of implementation steps and priorities, but does not establish a rigid set of actions that must be met at specified times to be considered successful. Instead, the Plan must be periodically reviewed and updated to adapt to changing circumstances, especially regarding major economic trends affecting the metro Atlanta region. The approach embodied in this Plan will require constant monitoring of economic trends and periodic determination of what scenario these trends and events most closely resemble. Adjustment of Plan expectations will also require complementary adjustments of supporting programs such as the Capital Improvement Program.

The ultimate test of this approach is how well the plan enables Gwinnett to maintain a proactive approach in determining its future fiscal health. Building into the Plan such follow-up monitoring and check points will enable Gwinnett to more quickly resolve the more pressing problems at any given time and better adjust to changing circumstances.

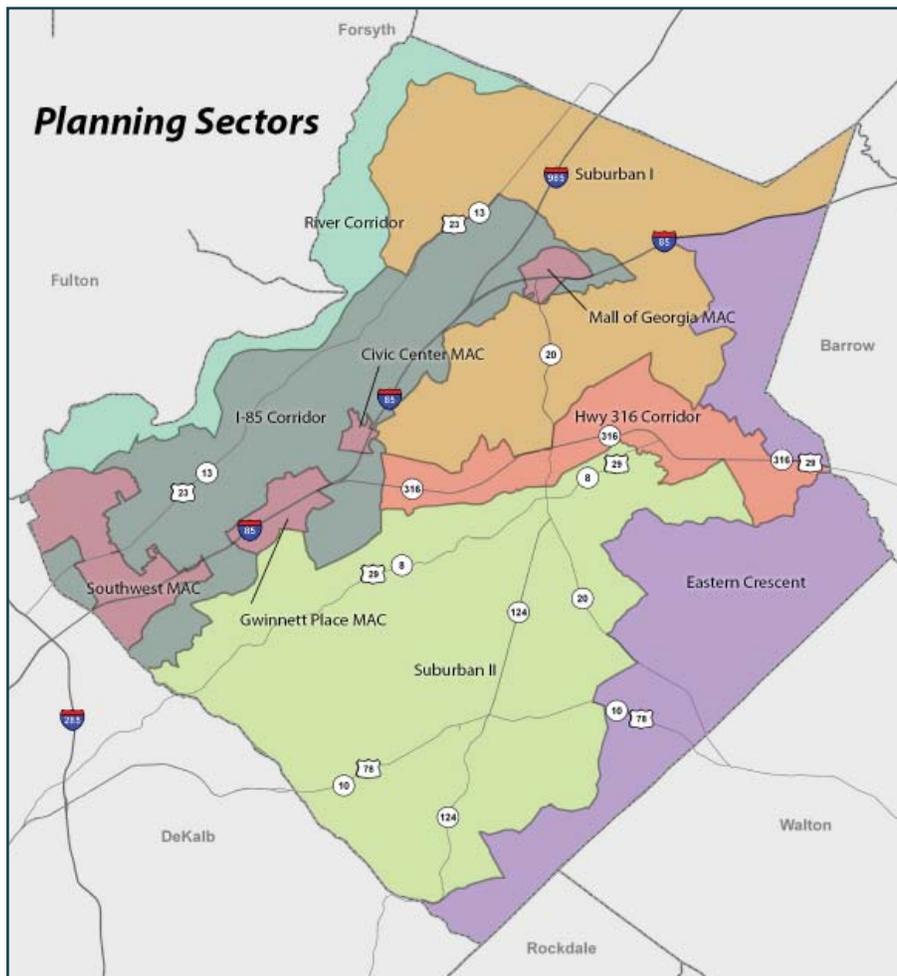
The **sixth difference** of this Plan from its predecessors is its introduction of the concept of **sector plans** as the vehicle for specifying many local details within the context of Gwinnett 2030 Unified Plan priorities. Sector plans are explained following the Planning Sector Map (Figure 1 below). This Plan provides guidance on major issues and recommends significant changes in land use allocation of public facilities and transportation improvements.

However, Gwinnett has grown too big and complex for one single plan to address in detail all its planning needs

and opportunities. Therefore, the Gwinnett County 2030 Unified Plan does not provide a specific designated land use for every parcel in the county. The plan is explicit regarding the future designations of strategically located land, but many land use decisions could be better made within the context of understanding local circumstances.

Many large jurisdictions deal with this issue by implementing a two tier approach to land use decisions: 1) general policies and guidance are provided via an overall jurisdiction-wide plan, and 2) more specific localized guidance are provided via a series of sub-area or sector plans. Gwinnett County is going to proceed with sector plans. By adopting this approach, the Unified Plan establishes the basic future development framework and priorities within Gwinnett, as well as key zoning framework recommendations while also specifying zoning changes required to fulfill the priorities outlined by the Plan. Subsequent to the Gwinnett 2030 Unified Plan adoption, development of sector plans will

Figure 1: Division of County into Planning Sectors



Gwinnett has grown too big and complex for one single plan to address in detail all of its planning needs and opportunities.

provide additional land use guidance, identify needed local road improvements and sites for redevelopment. The plans should also establish priorities for open space, infrastructure and urban design. To establish planning sectors based on common local traits and presumed future characteristics, the 2030 Unified Plan recommends the division of Gwinnett into the areas shown on Figure 1 on the previous page.

The Unified Plan contains a conceptual Composite Policy Map (Figure 77) and a Future Development Map (Figure 78) to provide flexibility for the unseen future. The Composite Policy Map shows how selected key policies (shown on the more detailed five basic theme maps of this Plan) will interact to create an overall geographic framework for future changes. The Future Development Map shows those areas of the County where implementation of the items highlighted on the Composite Policy Map will require significant (and often extensive) rezoning actions.

B.3 The Role of the Gwinnett 2030 Unified Plan

The Gwinnett 2030 Unified Plan is one of many plans that influence the County. The Gwinnett 2030 Unified Plan does not, and could not, cover every initiative that affects the County. Even if this plan is the keystone document, it is one of a number of plans and programs, including the Water and Sewer Master Plan, and the Parks, Open Space and Recreation Master Plan that must complement and support each other.

The implementation section of this new Plan (Part 3) includes specific recommendations for improving this coordination. Of special importance is having the Capital Improvement Plan and the Water and Sewer Master Plan be consistent with Gwinnett 2030 Unified Plan priorities. Both of these other plans directly influence the feasibility of many recommendations within the Gwinnett County 2030 Unified Plan regarding timing, intensity of land uses, and related efforts such as redevelopment.

B.4 Different Plan and Different Format

In order to make the 2030 Unified Plan more accessible and user friendly for the general public, this Plan uses a format that differs in key ways from its predecessor. This revised format and organization also enables different groups to use the Plan in different ways. The Plan users encompass a range of different people with different needs. These users include citizens who mainly wish to understand a particular issue, land owners and developers who are considering new projects or wish to request rezonings, business interests who are exploring whether Gwinnett is a good place to set up shop, Gwinnett officials and agency staff who need to oversee plan implementation, as well as other local, regional, and state officials and planners who want to compare Gwinnett's policies and results to their own.

The transparency of the plan's overarching message through using a theme based approach and its utility as a guide to future decision making is enhanced by:

- Providing the Plan in a Nutshell section to generally publicize the key priorities and features of the Plan.
- Providing a straightforward narrative about how Gwinnett can improve.
- Using sidebars ("boxes") to discuss background issues, technical approaches or relevant, but secondary issues, without impeding the smooth flow of the main narrative.
- Explaining clearly who does what – who leads, who supports and the respective roles and responsibilities of the public and private sectors in implementing plan recommendations.
- Including most of the technical data and analysis that guide the narrative in a separate appendix. This is done partly to streamline the narrative and partly to stress the Plan's role as a guide to decisions rather than as a data sourcebook.

How to Use This Plan

This plan does not tell you everything that planning encompasses (zoning district regulations, how to get a building permit, current capital projects, school policies, etc.). Instead it provides a variety of ways to enable readers to use the plan for different purposes.

- Those desiring only a concise overview of what the plan means should read the Plan in a Nutshell section.
- Those wishing to see more detail about a major topic such as roads, housing or redevelopment may find all they need by reading one of the theme based sections of Part 2 or consult the "Cross-Walk" table at the end of the Plan
- Traditional elements as separate chapters are not used, but there are numerous ways to follow a particular issue – mixed-use, urban design, environmental enhancements, etc. – by looking under the different themes.
- "Crosswalk tables" show how various sections of the Plan conform to state requirements for local plans and in which sections of the Plan various Plan topics or policies are discussed.
- Each policy and action identifies which agencies have a primary role in plan implementation – a feature that also helps citizens and other interests more effectively direct inquiries about specific areas of the plan.
- Staff, properly trained to use the plan and interpret its maps and recommendations, will be better able to answer such inquiries and, if they cannot, they will know who can.
- The Plan's implementation chapter lists criteria or describes how to use the plan for such key follow up actions as rezoning.

C. TRENDS AND DRIVING FORCES

This section presents background information on a variety of key plan topics. Where available, the following discussion provides data on recent trends affecting the topic presented. This discussion also describes some of today's and tomorrow's driving forces that will help define many of the key opportunities or challenges facing Gwinnett County that are addressed in the Unified Plan.

C.I Demographic and Socio-Economic Trends

C.I.I Regional Trends

In every decade since 1960, the Atlanta region has gained in population at a compound rate of at least 2.35% per year. This is at least twice as fast as the U.S. as a whole. Table 1 summarizes the region's population growth from 1940 onward.

The region's employment growth has been the driver of this population explosion. Between 1969 and 2000, the region gained employment at a compound annual rate of 3.67%, far higher than the U.S. rate of 2.02% per year. This remarkable 31-year period included only two individual years in which the region lost employment and four years in which it failed to exceed the national rate of job growth. There was no five-year interval in which the region's



In every decade since 1960, the Atlanta region has grown at least twice as fast as the U.S.

employment gain failed to exceed 100,000 jobs.

But around the year 2000, the region's explosive job growth came to a halt. Its employment base expanded by only half a percentage point between 2000 and 2001, and then declined for two consecutive years. The ensuing gains during 2003 through 2005 just succeeded in bringing the 2005 annual average for metro Atlanta to 48,500 jobs or 2.1% above the 2000 figure. This unprecedented period of stagnation was linked to national economic conditions, but in contrast to prior experience, the Atlanta region did not fare appreciably better than the U.S. as a whole. In fact, the Atlanta region's losses from 2001 through 2003 were proportionally worse than the national declines during that period.

Table 1: Historical Population Trends in the Atlanta Region

	Fulton & 8 Contiguous Counties*		Other 20 Counties in Region		Totals: 29-County Region		
	Persons	Growth Rate	Persons	Growth Rate	Persons	Growth Rate	Ratio to U.S. Growth Rate
1940	608,513		334,849		943,362		
1950	778,895	2.50%	340,542	0.17%	1,119,437	1.73%	1.266
1960	1,077,299	3.30%	359,825	0.55%	1,437,124	2.53%	1.478
1970	1,479,108	3.22%	424,630	1.67%	1,903,737	2.85%	2.258
1980	1,851,693	2.27%	550,451	2.63%	2,402,144	2.35%	2.162
1990	2,445,317	2.82%	719,536	2.71%	3,164,853	2.80%	2.981
2000	3,338,334	3.16%	1,048,924	3.84%	4,387,258	3.32%	2.670
1950-2000		2.95%		2.28%		2.77%	2.218

* All counties touching Fulton except Carroll and Coweta.

Source: US Census

Figure 2: Regional Map



Remarkably, the near-stand still in regional employment from 2000 through 2005 had only a modest impact on regional population growth. Table 2 describes the region's population growth and net migration for five-year intervals starting in 1990. (Both sets of figures include breakdowns by racial/ethnic status - with all Hispanic persons isolated from the three race-based groups).

Table 2 also highlights the huge population increases of the region's three major minority groups. This demographic transformation for Gwinnett has implications for a variety of issues that the Unified Plan must address including labor force characteristics, economic development, housing and human service needs. The expected increased diversification of Gwinnett in upcoming years is detailed later as part of the regional and local forecasting that was analyzed for the Unified Plan.

Table 2: Population and Net Migration in the Atlanta Region

	Population				Estimated Net Migration		
	1990	1995	2000	2005	1990-95	1995-00	2000-05
White	2,271,623	2,464,579	2,701,199	2,845,548	93,575	137,941	62,192
Black	778,212	984,446	1,237,349	1,490,731	141,611	172,660	167,505
Asian	51,660	96,309	151,061	209,681	38,558	44,135	45,555
Hispanic	63,358	168,596	297,649	459,867	90,003	96,813	114,354
Total	3,164,853	3,713,930	4,387,258	5,005,827	363,747	451,549	389,606
Annual % Change		3.25%	3.39%	2.67%			

Source: US Census

Table 3: Population Change, 1970-2005

	1970 Population	1980 Population	1990 Population	2000 Population	2005 Population (est.)	Population Change 1970-2005	Percent Change 1970-2005
Gwinnett County	72,349	166,903	352,910	588,448	693,900	621,551	859.10%
ARC**	1,500,823	1,896,182	2,557,800	3,429,379	3,813,700	2,312,877	154.11%
Georgia	4,589,575	5,457,566	6,478,216	8,186,453	8,821,142	4,231,567	92.20%

**The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for the 10-county Atlanta area, including Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale counties, as well as the City of Atlanta.

Table 4: White and Non-White Population

	White 1990	White 2000	Percent Change, 1990-2000	Non-White 1990	Non-White 2000	Percent Change, 1990-2000
Gwinnett County	320,971	427,883	33.3	31,939	160,565	402.7%
Atlanta ARC Region	1,773,404	2,017,854	13.8	784,396	1,411,525	80.0%

Source: 1990 and 2000 Census (SF1)

C.1.2 Gwinnett Recent Trends

[Note: A fuller description of recent socio-economic and other trends is found in the Technical Appendix of the Joint County-Cities Community Assessment that was produced as part of the Unified Plan development process. The following is a selection from that data.]

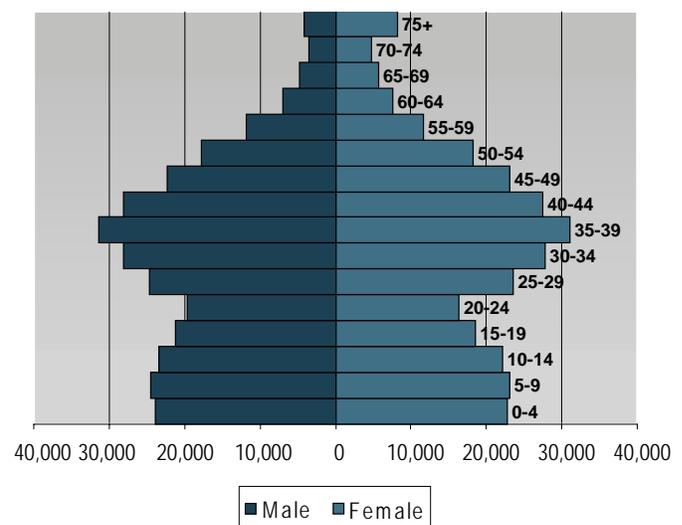
Population Trends and Growth Rate Comparison

Gwinnett County and its Cities have experienced tremendous growth over the past thirty years, with a nine fold increase in population between 1970 and 2005. (See Table 3)

Age Distribution and Household Size

Gwinnett County continues to be a predominately family-oriented area, composed predominately of adults of child-bearing age and children under 14. However, Gwinnett's share of the older populations has also grown significantly from several years ago. Between 1990 and 2000, the population age 55 and older doubled and now comprises more than 12% of the total population. According to the 2003 American Community Survey, Gwinnett's 229,000 households had an average size of 2.92 persons, significantly higher than the state average of 2.65.

Figure 3: Gwinnett County Population, 2000



Source: 2000 Census (SF3)

Race and Ethnicity

As shown in Table 4, between 1990 and 2000, the number of non-white residents in Gwinnett County increased at ten times the rate of the white population, making non-white residents 160,565 (approximately 27 percent of the total population) compared to 39,939 in 1990.

Table 5 depicts the dramatic growth in the Hispanic

population in the county and its cities. (The Hispanic population is not classified as a race in Census tabulations, so this category is presented separately.) In 2000, Gwinnett County's population was 10 percent Hispanic, and several cities such as Norcross had significantly higher shares of Hispanic residents.

Table 5: Percent Hispanic (County and Cities), 1980-1990

	1980 Total	1980 Percent	1990 Total	1990 Percent
Gwinnett County	1,426	0.80	8,470	2.40

Source: 1980 Census, 1990 Census, 2000 Census (SF3)

Income

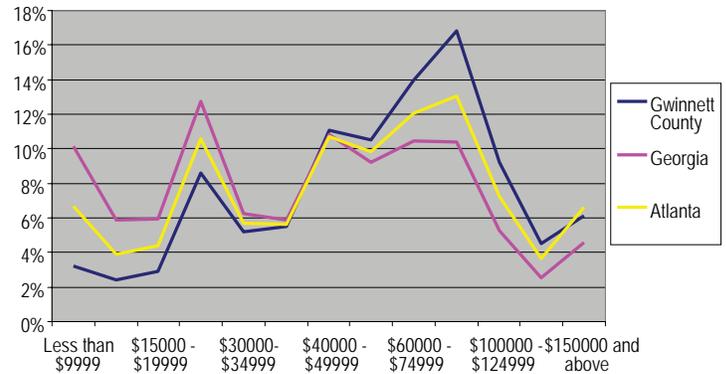
Economically, Gwinnett County residents were in better shape in 2000 than in 1990. This economic growth has not been uniform across the county, as a handful of cities were relatively unchanged or experienced slight declines in such categories as per capita income in the past decade.

Median household income in Gwinnett County has grown moderately in the ten years between 1989 and 1999, and it remains greater than that of the Atlanta region or the state of Georgia (see Table 6). Nevertheless, between 1989 and 1999, Gwinnett County's income growth has slowed compared to the Atlanta region and state.

Figure 4 illustrates how Gwinnett County has a larger

share of higher incomes than the rest of the Atlanta region or Georgia with only 2 percent of its households with incomes between \$10,000 and \$14,999 but nearly 17 percent of households with incomes between \$75,000 and \$99,999.

Figure 4: Income Distribution, 2000



Source: 2000 Census (SF3)

Gwinnett County's average per capita income grew slightly between 1990 and 2000 while per capita income in the Atlanta metropolitan region as a whole declined sharply between 1990 and 2000.

Table 6: Median Household Income, 1989-1999

	1989	1999 (adjusted)	Median Household Income Change, 1989-1999	% Change 1989-1999
Gwinnett County	\$43,518	\$45,976	\$2,458	5.65%
Atlanta MSA**	\$36,051	\$39,453	\$3,402	9.44%
Georgia	\$29,021	\$32,227	\$3,206	11.05%

Source: 1990 Census (SF3) and 2000 Census (SF3). Incomes adjusted to use 1989 as a base year.

**Atlanta MSA includes the following 20 counties: Barrow County, Bartow County, Carroll County, Cherokee County, Clayton County, Cobb County, Coweta County, DeKalb County, Douglas County, Fayette County, Forsyth County, Fulton County, Gwinnett County, Henry County, Newton County, Paulding County, Pickens County, Rockdale County, Spalding County and Walton County.

Table 7: Per Capita Income, 1990-2000

	1990	2000 (adjusted)	Per Capita Income Change, 1990-2000	% Change 1990-2000
Gwinnett County	\$17,881	\$18,991	\$1,110	6.21%
ARC	\$23,918	\$19,674	-\$4,244	-17.74%
Georgia	\$13,631	\$16,066	\$2,435	17.86%

Source: 1990 Census (SF3), 2000 Census (SF3), and ARC Envision6 Report. Incomes adjusted to use 1990 as a base year.

C.1.3 Issues to Address

The above regional and local data raise a number of key issues that will influence Gwinnett's future characteristics and that the Plan must therefore address.

- **Aging Population**

The County will need to prepare for ever-increasing numbers of residents across all age ranges. Gwinnett County was once a family-dominated suburb. In the future, however, as residents age in place, the County will increasingly need to provide programs and services for older adults.

- **Continued Pressure on Schools**

Despite this aging of the overall population, Gwinnett will still experience the pressure to provide additional school facilities to serve the influx of families with school-age children that move to Gwinnett.



- **Multi-Ethnic Community Needs**

Gwinnett County, a homogenous community in the 1970s and 1980s, is now a diverse, multi-ethnic community. Programs and resources for non-native English speakers such as English as a Second Language will need to be provided in order to include this growing sector in the opportunities available in Gwinnett County.

- **Multiple impacts of less affluent overall income profile**

The County's median income has been slowly declining since 1980. If this trend continues, the current, overall highly affluent, income profile, with its very high proportion of upper and upper middle income

Gwinnett County is now a diverse, multi-ethnic community.

brackets, will become more like the regional norm. This income leveling will affect a variety of future trends and planning needs. These include accommodating housing needs of lower and middle income groups, areas with declining retail sales and property values (which are the two key sources of County revenues), demand for health, housing and other social services, and the nature of public safety needs. (The discussion of the County's fiscal condition and prospects in Part I. Section C. 9 below directly addresses the significance of this trend.)

- **Rising Proportion of Population Below Poverty Line**

Although the residents of the County and most of its cities are prospering, special attention must be paid to the residents that are struggling economically. According to the Census, Gwinnett's share of residents in poverty grew from 4 percent in 1989 to 5.7 percent in 1999.

C.2 Gwinnett's Evolving Landscape

The physical changes to Gwinnett that stem from the growth trends documented above have been profound, and the last 30 years have witnessed rapid development and constant change. Each successive wave of newcomers has preferred that Gwinnett not change from what it was like when they arrived. From the early 19th century through the mid-20th century, Gwinnett was a rural landscape dotted by small locally oriented centers. Beginning in about 1970, however, the rise in property values and the associated increase in taxes spurred by the rapid growth have driven most agricultural pursuits from the County. Some pastoral views can still be found today, but Gwinnett is now a predominantly suburban landscape. And now, just as many of its residents long to settle into and live out a comfortable suburban lifestyle, significant portions of the county are transitioning from a suburban to an urban status.

C.2.1 Early History

Established in 1818, Gwinnett County was covered by a vast first-growth hardwood forest. In the early 19th century scattered small farms were cleared, first by the Cherokee Indians and later by the settlers who displaced them. Lawrenceville (the county seat), Duluth, and the hamlets of Hog Mountain and Pinckneyville were the only established towns. Following the forced relocation of the Cherokee Indians in 1837, a series of lotteries were held to distribute former Cherokee lands to settlers, and this led to a pattern of land clearance for new farms. Many of Gwinnett's oldest families came to Gwinnett at the time of those lotteries. By the time of the Civil War, cotton had become the major cash crop in Gwinnett County.

Railroads reached the county in the 1870's, and many of the towns that are familiar today, such as Buford, Sugar Hill, Suwanee, Norcross, and Lilburn sprang into being along the rails. The rail lines also spawned some industrial activity such as saddle manufacturing at The Tannery in Buford. Nevertheless, the County changed slowly and remained predominantly agricultural for many decades. A Gwinnett resident of 1860 would have found many aspects of the Gwinnett of 1960 quite recognizable.



C.2.2 Suburban Growth

In 1930, the population of Gwinnett was about 27,000 persons, and over the next 30 years it increased to only 43,000 residents. In the 1960's the pace of population growth began to pick up, and then it exploded. Gwinnett County experienced one of the most exceptional population booms of any U.S. county with a tenfold increase from 1970 - 2007. Several factors explain this rapid rate of growth. The first was Gwinnett's proximity to Atlanta, the booming metropolis of the southeast. Access to Atlanta's rapidly expanding economy is a prime reason for Gwinnett's population explosion of the past few decades.

But mere proximity to Atlanta does not fully account for such growth. Building Interstate 85 placed the County on one of the primary commercial arteries carrying goods and services between Atlanta and the industrial northeast. The middle class flight that characterized many urban areas in the country in the 1970's and 1980's was also influential and was responsible for a wave of affluent newcomers from

Atlanta and DeKalb County relocating to Gwinnett County. Additionally, Gwinnett's public school system maintains a reputation for quality which is a powerful attractor for families, whether out-of-state residents moving to the region or a young married couple residing in Atlanta faced with schooling their first child. Recently, SPLOST (Special Purpose Local Option Sales Tax) funded improvements for new roads, parks, schools, and other government facilities have also made Gwinnett that much more attractive for newcomers.

Extensive low-density subdivision development coupled with the general decline in farming acreage during the twentieth century led to the disappearance of much of the agricultural landscape. Between 1984 and 2004, about 50 percent of Gwinnett was developed, mostly in residential subdivisions. Intensive agriculture such as row crops, poultry and dairy farms became a thing of the past. Sizable areas of livestock pasturage and harvestable timber remained, but these came to be viewed as transitional uses awaiting development.

Clusters of multifamily dwellings, mostly apartments, appeared in western parts of the county, particularly in the 1970s and early 1980s. Due in part to market saturation and in part to resistance to increasing density, few apartment rezonings were approved from 1988 to the early 1990s. Most of the existing apartments are close to the border with DeKalb County, near Interstate 85, or near Peachtree Industrial Boulevard. The portion of multifamily dwelling units (counting apartments, condominiums, and townhouses) is now about 30 percent of the total County housing stock, with the remainder being single-family homes on individual lots.

During this period of rapid growth, Gwinnett became more than just a bedroom community. Employment in the county expanded as fast as the population, at least until about 2000. According to Georgia Department of Labor figures, Gwinnett went from 129,209 jobs in 1989 to 282,229 in 2000 to 325,070 in 2006. During that time, Gwinnett went from one major shopping mall to three, and major distribution warehouses lined the Interstate 85 and Highway 316 corridors. Warehousing and distribution remain one of Gwinnett's most distinctive land uses along the major highways. Gwinnett County serves as a distribution center for goods across the southeastern United States, mostly distributed by truck along the interstate highways.

As in many areas, the 2001 recession slowed employment growth in Gwinnett in the early part of this decade. Job growth resumed afterwards, but the new jobs were not as highly paid as those created in the 1990s. This trend spurred initiatives to encourage economic growth. The County government established an office for economic development in 2006. During that same period, the Gwinnett Chamber of Commerce established its Partnership Gwinnett initiative, which promoted a specific goal of 65,000 new high-wage jobs over the next five years.

By 2000, the character of Gwinnett's population had changed. Ethnic minorities and immigrants poured into the County seeking a better quality of life; at the same time, the rate of increase of whites declined. The influx of newcomers remains multifaceted and complex, with large numbers of African-Americans, Hispanics, South Asians, Koreans, and others each forming their own communities to varying degrees. The school system has already become majority-minority (less than 50 percent white), and according to the US Census, the nonwhite population measures about a third of the county as a whole, compared with about 10 percent in 1990.

Existing Land Use

Gwinnett's recent history has resulted in the land use patterns shown on Figure 5. This map shows existing land use in 2006.

Table 8 on page 18 shows low-density residential as the dominant single land use in Gwinnett, more than one-third of the County's total acreage. Large-lot 'estate' residential properties (listed within the Low Intensity Land Uses category) are another 11 percent of the County. In contrast, medium and high density residential together total less than five (5) percent of Gwinnett's total acreage. Although it dominates the landscape along many of Gwinnett's arterial roads, commercial/retail and office land uses only occupy some 4.4 percent of the County and industrial uses only slightly more at 5.1 percent). Public parks and other forms of non public conservation and green spaces total almost 12 percent though such areas are often less visibly located and may not be perceived to be this extensive.

Figure 5: Current Land Use

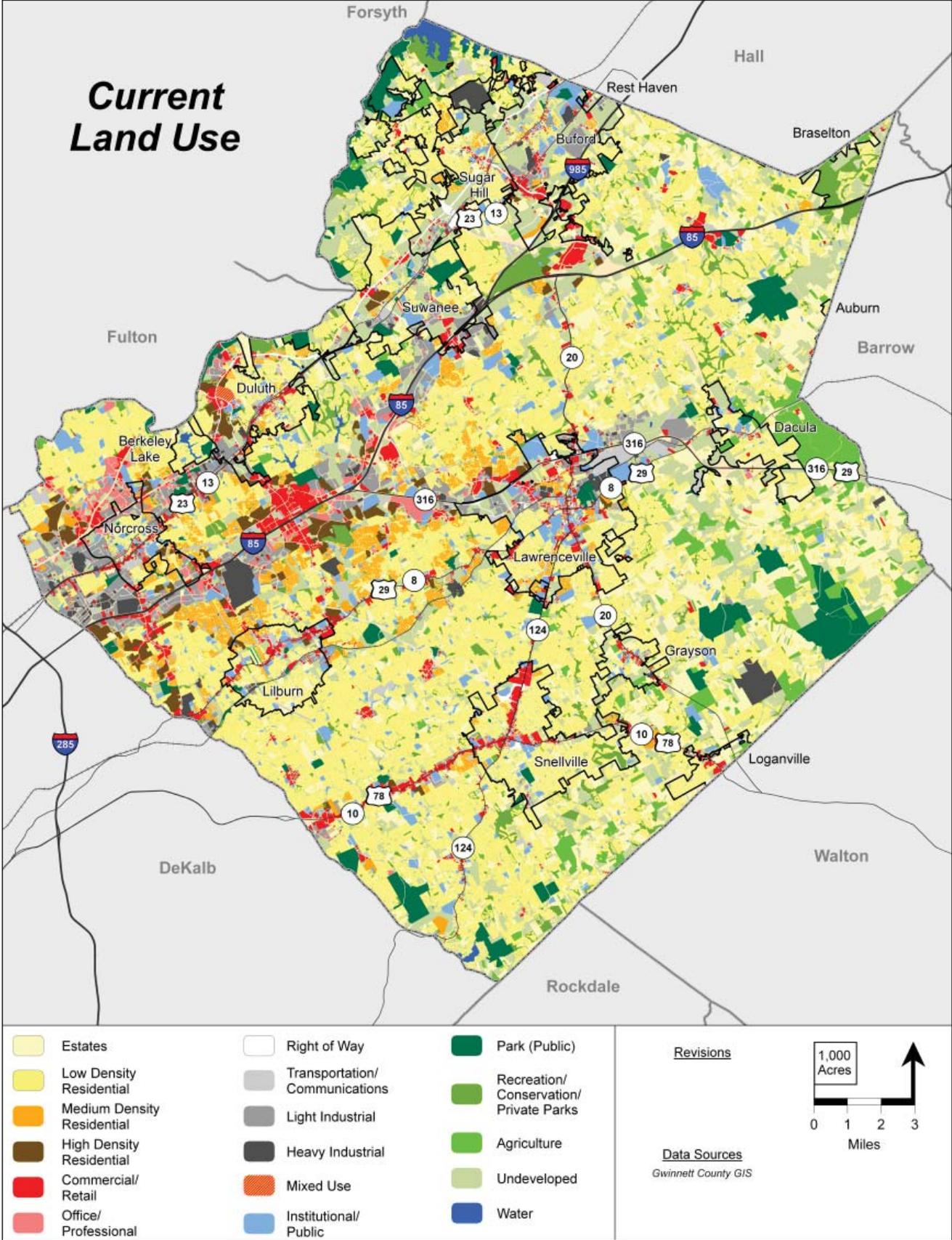


Table 8: Existing Land Uses by Acres and Percentage of Total

Land Use	Acres	Percentage
Residential		
Low Density Residential	91,286.1	35.0
Medium Density Residential	8,475.1	3.3
High Density Residential	4,211.3	1.6
Commercial/Office		
Commercial/Retail	8,650.6	3.3
Office/Professional	2,807.6	1.1
Industrial		
Light Industrial	9,279.4	3.6
Heavy Industrial	3,817.3	1.5
Mixed Use		
Mixed Use	1,196.5	0.5
Supportive Infrastructure		
Institutional/Public	10,387.0	4.0
Transportation/Communications	3,730.0	1.4
Right of Way	21,488.7	7.6
Park (Public)	10,495.9	4.0
Recreation/Conservation		
Non-Public Parks	20,681.5	7.9
Water	376.6	0.1
Unlabeled	26.6	0.0
Low Intensity Land Uses		
Undeveloped	44,802.0	17.2
Agriculture	9,057.7	3.5
Estates	30,775.1	11.8
TOTAL	281,545	100.0

Source: Gwinnett County Department of Planning and Development

C.2.3 Issues to Address

• Future of Remaining Undeveloped Lands

Gwinnett has become a much more urbanized County over the past three decades. Nevertheless, a large proportion of its land is still undeveloped or in active agriculture (20.7 percent together). These lands can be classified as greenfield opportunities for future development because they are largely without significant obstacles to new subdivision and construction. They are shown on Figure 6. A closer look at the size of the parcels that make up the greenfield lands reveals that the great majority of these parcels are small. Figures 7 through 9 show how few are the development opportunities on parcels 25 acres and larger. This is an important reality. It increases this Plan's sensitivity to conserving these scarce opportunities for optimal uses; it also highlights the dearth of larger parcels for economic development uses. The ultimate land use disposition of these areas of the County will be a major focus of the updated Unified Plan.

Definition of Low-Intensity Development

Residential parcels are considered to be low-intensity when:

- Their land value is greater than their building value; or
- Multi-family areas have less than 12 units / acre and more than one unit built prior to 1980.

Non-residential parcels are low-intensity when:

- Their land value is greater than their building value;
- They have an FAR* less than 0.2 and are located within 2 miles of a Traffic Analysis Zone (TAZ) with housing valued at an average of more than \$350,000 per parcel; or
- They have an FAR of less than 0.2 and are located within one mile of a highway interchange.

*FAR = Floor-Area Ratio, a measure of land use intensity (building gross square footage / lot area)

Figure 6: Developable Greenfields

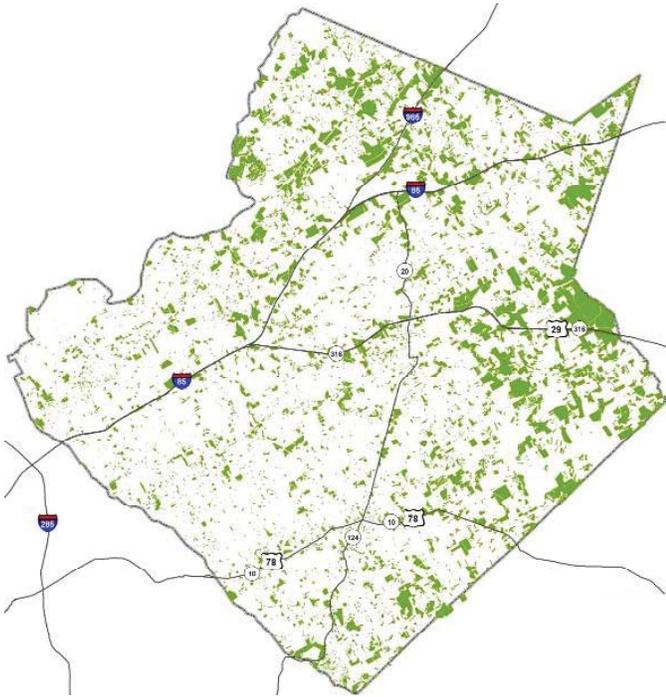


Figure 8: Developable Greenfields > 50 Acres

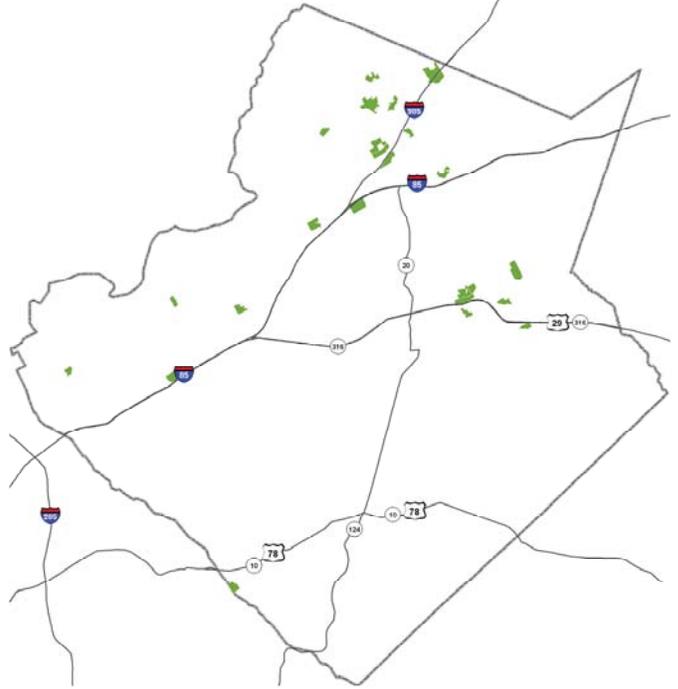


Figure 7: Developable Greenfields > 25 Acres

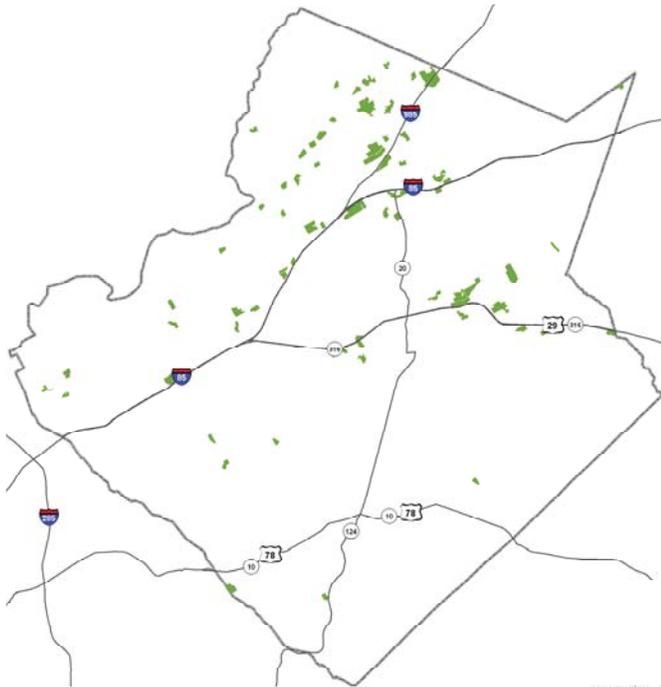
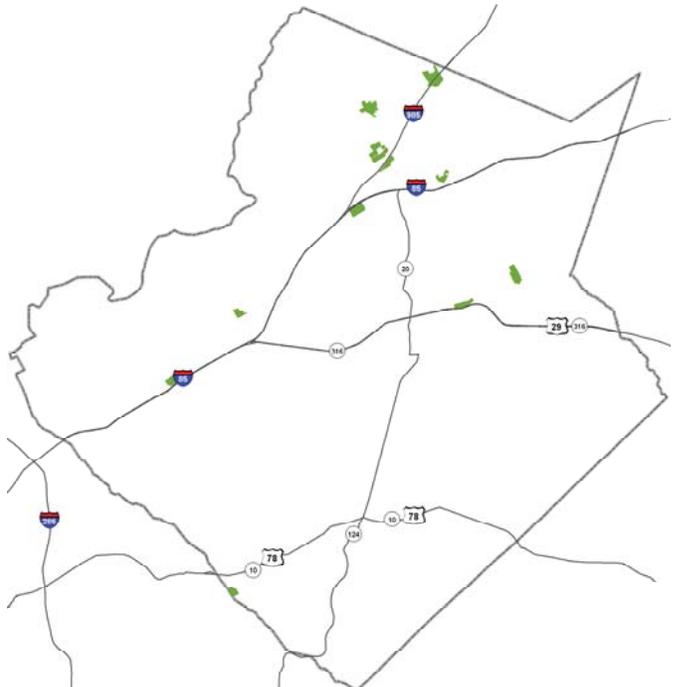


Figure 9: Developable Greenfields > 75 Acres



- Increasing Need to Redevelop Existing Uses**

Greenfield sites are not the only source of future land use change. Although 80 percent of the County is developed, many areas of Gwinnett are now or will be ripe for redevelopment in the coming years. One issue the updated Unified Plan addresses is how many of these areas may be redevelopable as new single uses or more mixed uses. This is especially true for many of the commercial and industrial areas that were built 20 to 50 years ago. Analysis done at the beginning of the planning process indicated that another 20 percent of Gwinnett is now, or is likely to be, ready for redevelopment over the life of the Unified Plan. Figures 10 and 11 show the remaining lands that a property data screening indicated were likely to be ready for residential or non-residential redevelopment, based on current zoning, within the planning horizon. In a planning effort like this, the current zoning on redevelopable parcels should not be viewed as an inflexible constraint on future usage, particularly given the small, scattered nature of the remaining Greenfield lands. This Unified Plan addresses the redevelopment needs of such areas and, in key respects, success of the Plan depends on such redevelopment, at specified locations, to achieve many of its priorities and absorb the levels of projected growth.

- Location of Potentially Developable Lands in Relation to Transportation Network**

Most of the greenfield sites are in the eastern and northeastern sections of the County, places that are generally away from the main regional transportation corridors. This makes them unlikely sites for significant employment development. On the other hand, most of the land near the more regionally accessible highways is already developed. To accommodate the level of economic development that the Plan outlines and accommodate the population growth such development will attract to Gwinnett, requires the County to plan for widespread redevelopment within many of its aging areas. Most of these are located in the southwest portions of the County.

Figure 10: Potential Commercial (Re)Development Land

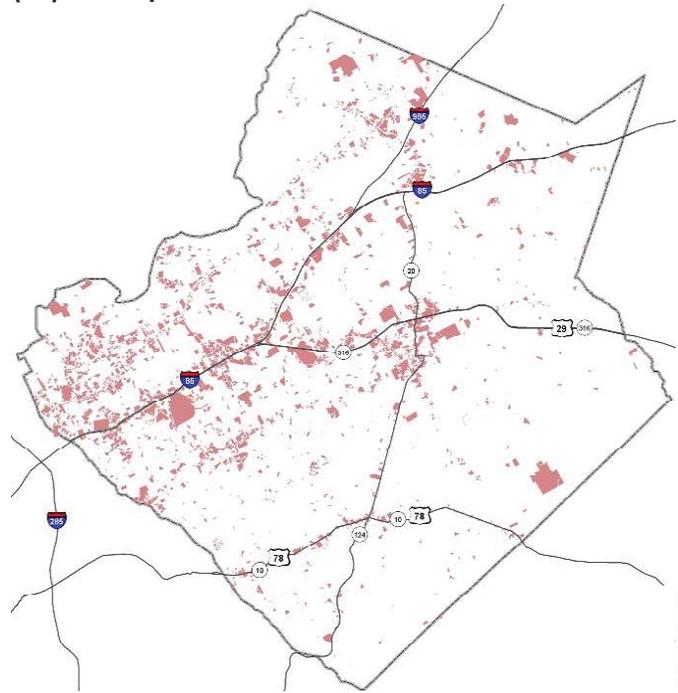
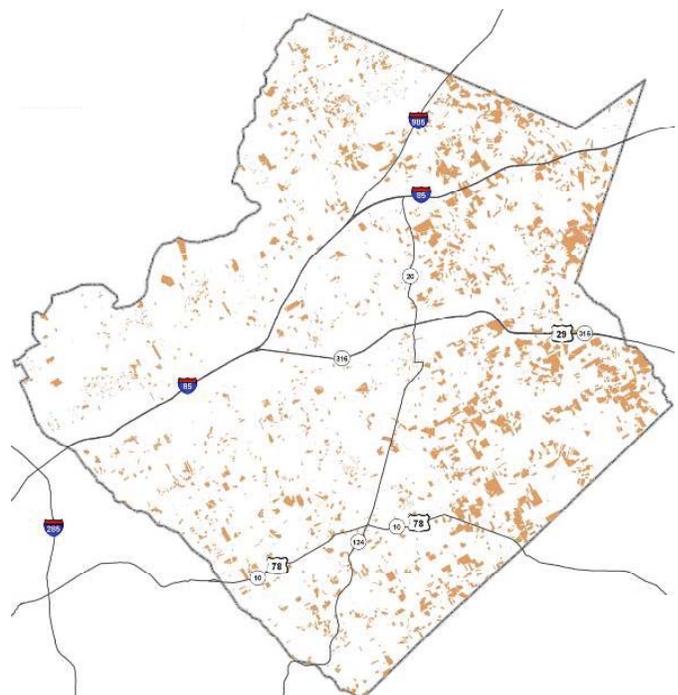


Figure 11: Potential Residential (Re)Development Land



C.3 Regional Setting and Implications

C.3.1 Overview

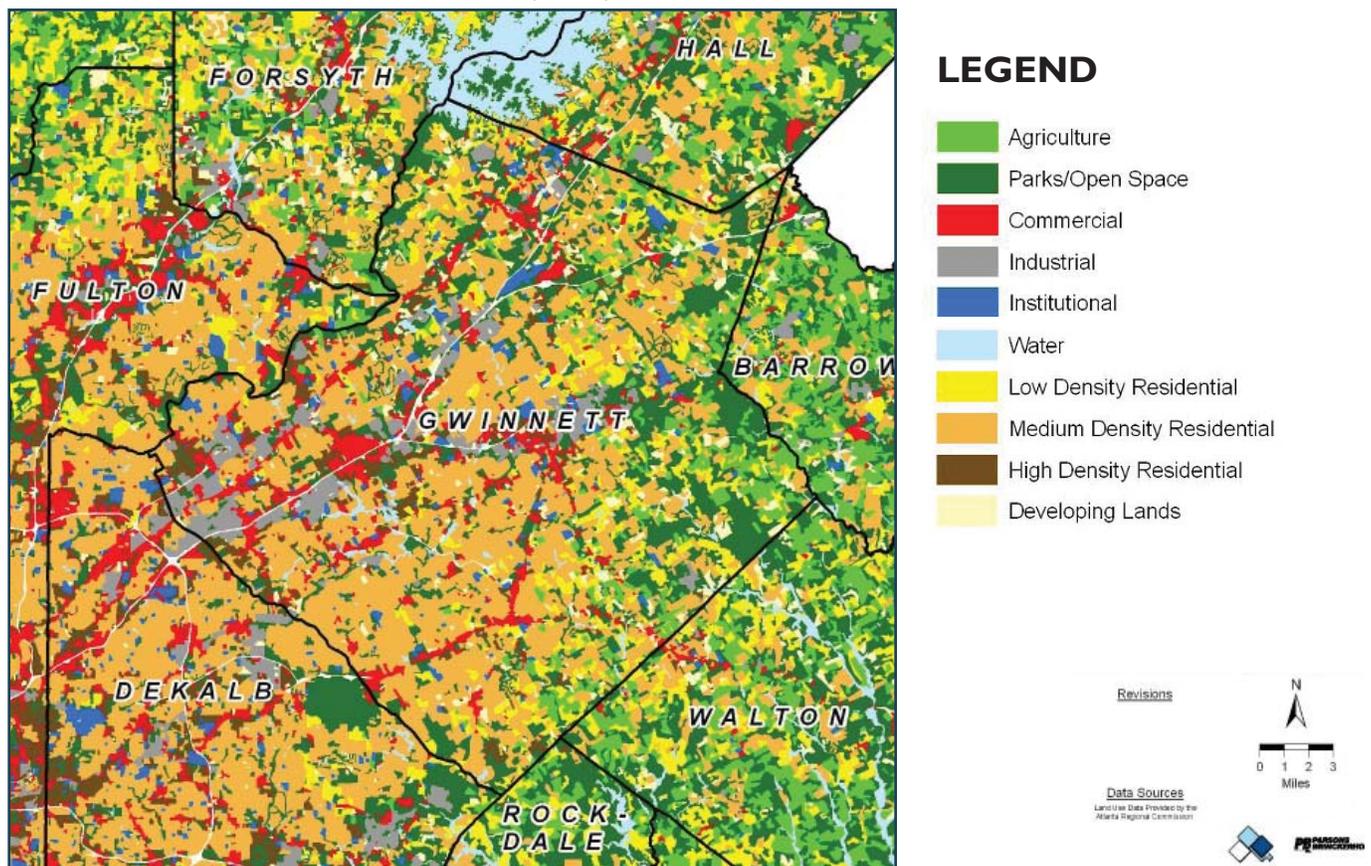
Gwinnett County is adjacent to seven different counties. Figure 12 shows the existing land uses in the jurisdictions surrounding Gwinnett and how they relate to uses within Gwinnett.

For the most part, uses along Gwinnett's borders are largely compatible with uses in Gwinnett. Indeed, the map clearly shows how many land use patterns in Gwinnett are, in essence, extensions of patterns established in the older jurisdictions to the west and south (e.g., along regional corridors such as I-85 or US 29). The map also shows how the still rural and relatively lightly developed areas of the east side of Gwinnett are a part of the region that is still part of the expanding suburban-rural edge. This edge is likely to push out much further during the life of this Unified Plan. Even if Gwinnett retains some of its rural

character in this part of the County, the land use patterns in adjacent jurisdictions to the east are likely to change more drastically than along Gwinnett's other borders. Nevertheless, as the rest of this section describes, there will be changes all around Gwinnett.

The Unified Plan process included a staff analysis of the comprehensive plans (as available in early 2008) for the counties and cities surrounding Gwinnett. This review focused on the future land use maps of adjacent jurisdictions and identified planned development and redevelopment patterns within approximately three to four miles of Gwinnett County. The purpose of this review was to see where policies affecting land uses in these surrounding jurisdictions would be compatible or in conflict with what will occur nearby in Gwinnett.

Figure 12: Gwinnett's Land Use Context (2007)



General Overview

Gwinnett is adjacent to two of metropolitan Atlanta's urban core counties, Fulton and DeKalb to the west and south. The still exurban and rural counties (Hall, Barrow, Walton, and Jackson) are to the north and east. The growth centers and corridors of these counties are located away from Gwinnett's borders. Areas planned for the most intensive development are located in Forsyth County (Georgia 400) and in Rockdale County (I-20/Conyers) and are distant from Gwinnett's borders. Likewise, the growth centers of Hall, Barrow, Walton, and Jackson, are not close to Gwinnett County.

Mainly a product of Atlanta's earlier suburban expansion, the areas of Fulton and DeKalb near Gwinnett are generally projected to remain the less intensively developed portions of those two counties. They will remain predominately suburban in character, and the primary planning initiatives for these areas concern neighborhood preservation and redevelopment at appropriate locations.

The only locations where adjoining counties plan ambitious growth adjacent to Gwinnett are in Barrow County along University Parkway (SR 316) and in the cities and counties to the north along Interstates 85 and 985. Other than Loganville and the Athens Highway corridor, Walton County plans mainly lower intensity development near Gwinnett.

The following is a closer County-by-County look at current patterns or planned development for the areas within each jurisdiction that are closest to Gwinnett. (Land use plans for independent municipalities are included under the County in which they are located.)

C.3.2 Fulton County

Gwinnett County's westerly border with Fulton County extends for approximately 17 miles along the Chattahoochee River. Almost all this nearby land in Fulton County is located within the recently incorporated City of Johns Creek. Where Holcomb Bridge Road crosses the Chattahoochee River, the cities of Sandy Springs and Roswell in Fulton County also briefly share a common border with Gwinnett County.

City of Johns Creek¹

The majority of development in Johns Creek near Gwinnett consists of upscale housing and is projected to continue as low to medium density single-family residential. Along the Chattahoochee River, the Johns Creek Plan shows a large amount of protected and environmentally sensitive land (parks/recreation/conservation) as well as some undeveloped areas near McGinness Ferry Road projected as low density residential. About five miles west of Gwinnett at the McGinness Ferry Road/Medlock Bridge Road (SR 141) intersection, the Johns Creek plan recognizes the growing office and medical district at the core of Johns Creek.

The Johns Creek plan also calls for mixed-use and higher density "live-work" communities up to four stories in height on Medlock Bridge Road close to Gwinnett (more specifically the City of Duluth). These live-work areas would be concentrated at the State Bridge Road (Pleasant Hill Road in Gwinnett) and Abbott's Bridge Road intersections and, to a lesser extent, the corridor connecting these nodes. Presently occupied primarily by shopping centers, scattered retail and office buildings, multifamily housing, and undeveloped tracts, the plan projects these areas will evolve into functional mixed-use communities through redevelopment, improved connectivity, and greater integration of land uses.

City of Roswell

The eastern tip of Roswell in Fulton County is the corner formed by Holcomb Bridge Road crossing the Chattahoochee River. At this point Gwinnett County and Roswell briefly share a border across the Chattahoochee River. The Future Land Use Map of the Roswell Comprehensive 2020 Plan indicates most of Roswell near Gwinnett County is built-out and anticipates no major changes in land use. Present uses in the area include a park bordering the river, large areas of single-family homes and some apartment and commercial development adjacent to Holcomb Bridge Road. Parcels in this area have

¹ Shortly after its Dec. 1, 2006 incorporation, Johns Creek adopted the Interim Comprehensive Plan 2025 and Land Use Map. These documents are based on Fulton County's 2025 Comprehensive Plan (Focus Fulton) and the North Fulton County 2025 Land Use Plan. The city has just initiated creation of a new plan, The City of Johns Creek Comprehensive Plan 2030, which they expect to complete in November 2008. The status and nature of this plan will be monitored for issues significant to Gwinnett County. Documents from Johns Creek state that the community supports the main concepts of the recently completed North Fulton County 2025 Land Use Plan. Given this, and the well-established development patterns in the area, review of the present plan should give good guidance regarding the general location and intensity of land use anticipated near Gwinnett.

been acquired for green space and the city plans for a more extensive, multi-jurisdictional greenway along the Chattahoochee River.

City of Sandy Springs

The intersection of Holcomb Bridge Road and Spalding Drive forms a portion of the boundary between Gwinnett County and Fulton County. At this intersection the southwest quadrant is incorporated Sandy Springs in Fulton County. The City of Sandy Springs' Future Land Use Map shows the existing commercial and office development in this quadrant as suitable for a "community living working center." This designation supports redevelopment and/or adaptation of the existing development to form a mixed-use environment containing residences, businesses, public space, and supporting amenities. The plan shows the other nearby areas in Sandy Springs as remaining low-density residential communities.

C.3.3 DeKalb County

Gwinnett County's approximately 22 mile southeast border with DeKalb County is the longest shared with any adjoining county. The initial development surge in Gwinnett from the early 1970s to early 1980s was largely an outward expansion from DeKalb along Interstate 85 and other major thoroughfares including Peachtree Industrial Boulevard, Buford Highway, Lawrenceville Highway, and Stone Mountain Highway. Due to the historical and geographic relationships between the counties, the areas along this boundary share some common issues and opportunities.

The DeKalb County Comprehensive Plan Future Development Map designates the vast majority of DeKalb County near Gwinnett, either developed or planned, as suburban. This designation equates predominately to existing low to medium density residential and small-scale business development typical of metro-Atlanta's suburban areas. Only near extreme southern Gwinnett along Scenic Highway (SR 124) are there substantial undeveloped areas, however, these too are mainly planned for suburban development. Most of the land use policies for these areas emphasize maintaining stable residential areas and promoting mixed-use redevelopment within identified nodes and corridors. In this way, DeKalb's policies are consistent with what Gwinnett County has underway nearby in the Gwinnett Village Community Improvement District (CID) along Interstate 85 and in the Evermore

CID along Stone Mountain Highway.

The major roads with redevelopment corridor designation on segments adjacent or near Gwinnett are Peachtree Industrial Boulevard, Buford Highway, Lawrenceville Highway and Stone Mountain Highway. At three intersections near Gwinnett, the plan calls for conversion of older, primarily commercial, districts into mixed-use "neighborhood centers" – "a neighborhood focal point with a concentration of activities such as retail, service commercial, professional office, higher-density housing, and appropriate public and open space." The DeKalb Plan recommends providing landmarks and signage at strategic locations to provide a sense of arrival and orientation. Toward this sense of place objective, gateway signage and other features are planned along the DeKalb/Gwinnett border at Interstate 85 and several arterial roads.

City of Doraville

Near Buford Highway, the City of Doraville borders Gwinnett County for a distance of approximately one mile. The Future Development Map of the City of Doraville 2006-2026 calls for Buford Highway in this vicinity to remain a commercial corridor. However, the Plan lays the groundwork for converting the highway's "strip commercial" character into that of a traditional shopping district by using a zoning overlay that requires such things as reorienting buildings closer to the street, pedestrian safety improvements, design/architectural guidelines, and creation of an attractive streetscape.

I-285 and the Doraville MARTA station are located approximately 1.5 miles down Buford Highway from Gwinnett County. Doraville plans to take advantage of the MARTA station by redeveloping the area between Buford Highway and the station as a transit-oriented town center. This mixed-use redevelopment will serve as the city's center of civic activity, include a town green, and provide opportunities for traditional main street retail with an international theme. Longer term, the city's plan forecasts two additional mixed-use centers, one on the site of the soon to be closed GM plant and another in the northeast quadrant of the I-285/Buford Highway interchange. To improve transportation and promote redevelopment in Doraville, the plan also accounts for bus rapid transit (BRT) on Buford Highway.

C.3.4 Rockdale County

Approximately two miles of Gwinnett's southeastern

county line borders Rockdale County. Although a number of new subdivisions have been built in this portion of Gwinnett County, it retains a rural, low-density residential character. This low-intensity development pattern continues into Rockdale County. The Rockdale County Future Land Use Map adopted January 9, 2007 seeks to preserve rural/low-density residential as the predominant land use near Gwinnett County. These areas are shown as low-density residential or watershed protection on the plan with recommended maximum housing densities ranging from 0.3 to one unit per acre. The watershed protection category calls for extremely low-density development and other measures to protect the surface water that flows to Randy Poynter Lake, formerly known as the Big Haynes Creek Reservoir, the main water source for Rockdale County.

C.3.5 Walton County

Most of the nearby areas in Walton County on the future land use map of the Joint City-County Comprehensive Plan 2006-2026 (Future Land Use Map) are suburban. The suburban designation calls for very low-density housing, rural/agricultural uses, and some neighborhood-scale business centers. Near Gwinnett, at the Bold Springs Road/Charles S. Floyd Road (SR 81) intersection, the plan shows a village center. This is envisioned as a low-intensity mixed-use area much like a small town or hamlet. Near southern Gwinnett, the plan indicates another village center at the Loganville Highway (SR 20)/Rosebud Road intersection. Adjacent segments of Loganville Highway have the highway corridor classification, where larger scale commercial development including major shopping centers and “big box” retailers are projected.

City of Loganville

Extending partially into Gwinnett, the City of Loganville represents the portion of Walton County with the most substantial development near Gwinnett. The city plan largely reflects the existing development pattern in and adjacent to Loganville. Community-scale commercial development is shown along U.S. Highway 78 on either side of the downtown area. The surrounding area is classified primarily as low density residential. (Note: The Community Agenda document (Comprehensive Plan) for Loganville was not yet available at the time this Gwinnett Unified Plan was drafted).

C.3.6 Barrow County

Most of the property near Gwinnett in Barrow County and the City of Auburn is designated as emerging suburban or suburban neighborhood on the County’s Character Areas Map. These classifications equate mainly to low-density residential housing with some supporting community and neighborhood commercial development. The Character Areas Map designates three locations in Barrow for concentrations of business activity that are adjacent or near Gwinnett County. These are along University Parkway (SR 316), in the City of Auburn, and near Interstate 85 adjacent to the City of Braselton.

A large industrial district borders Gwinnett County along University Parkway. The plan shows commercial uses along the Interstate 85 corridor at Winder Highway (SR 211) and Hog Mountain-Braselton Road (SR 124).

City of Auburn

The City of Auburn extends slightly into Gwinnett County along approximately one mile of the eastern border. The Character Areas Map shows a commercial corridor near Gwinnett County along Winder Highway.

C.3.7 Jackson County

Most of the land in Jackson County in proximity to Gwinnett County is now part of the City of Braselton. The Jackson County 2017 Future Land Use Map recognizes Interstate 85 near Gwinnett as an industrial corridor. Other areas near Gwinnett are shown as low density residential.

City of Braselton

The City of Braselton lies along Interstate 85 and is primarily in Jackson County but also includes portions in Gwinnett, Barrow, and Hall Counties. In recent years, Braselton has annexed several thousand acres along Interstate 85 and Hog Mountain-Braselton Road such that the city now extends from Gwinnett County and the Chateau Elan development northward on I-85 beyond Exit 129 (SR 53). The Town of Braselton Future Land Use Map 2023 adopted in 2003 and updated in November 2007 shows a number of low-density residential areas existing or planned near Gwinnett. However the majority of the property is shown as light industrial. It is most likely intended for office/warehouse uses. Braselton’s Plan also shows major commercial districts surrounding Exit 126 (SR 211) and Exit 129 (SR 53).

C.3.8 Hall County

The Future Land Use Map of the Gainesville-Hall County Comprehensive plan was adopted on June 24, 2004 and most recently amended on May 12, 2005. Low-density residential remains the primary planned land use near Gwinnett. However, the plan designates some large areas in the Interstate 85 and 985 corridors for more intensive land uses. West of I-85, just above Braselton and the northeastern point of Gwinnett County is a large area designated for industrial and mixed-use development surrounding the Road Atlanta racing complex. Other locations where intensive land use is planned near Gwinnett include a commercial/retail district on Spout Springs Road and the River Place mixed-use medical complex on Thompson Mill Road. River Place will be anchored by a 100-bed hospital associated with the Northeast Georgia Medical Center in Gainesville. Along the Gainesville Connector (I-985) adjacent to the portion of Buford in Hall County large areas are shown in commercial/retail, industrial, and mixed-use classifications around the Friendship Road exit.

C.3.9 Forsyth County

Gwinnett County's border with Forsyth County extends from Lake Lanier south along the Chattahoochee River to McGinnis Ferry Road. The Forsyth County 2025 Future Land Use Map designates most of the land near Gwinnett as low density residential. The plan projects the most intensive development in close proximity to Gwinnett on Cumming Highway (SR 20) near Buford and Lake Lanier. This development would be associated with the Windermere master planned community and is recommend as having commercial, retail, mixed-use, and multifamily residential components.

About five miles west of Gwinnett along McGinnis Ferry Road, the plan recommends a large area as commercial and industrial surrounding the Medlock Bridge Road (SR 141) intersection. This reflects the growing employment and retail center found in the Johns Creek master planned development that extends south ward into Fulton County.

C.4 Economic Well Being and Opportunity

C.4.1 Atlanta's Favored Quarter

Gwinnett is fortunate to lie within the Atlanta region's favored quarter – the radiating quarter of the region in which the bulk of white-collar jobs locate and which attracts the largest portion of both executive and affordable new housing growth. Atlanta's favored quarter largely equates to the area north of Downtown between I-75 and I-85 and is anchored by the Georgia 400 corridor and the Chattahoochee River. According to Census figures, between 1990 and 2000, nearly 80% of the region's job growth occurred within this favored quarter. Although an increasing amount of growth has located in areas outside of the favored quarter in the last few years, the large majority of growth will continue to move up I-75, I-85 and Georgia 400.

Much of the region's new office development is projected by economists to occur in the metro cores within the favored quarter. Metro cores are concentrations of office employment and regional activity and have evolved as the metro area continues to grow. Atlanta's largest metro cores include Downtown, Midtown, Buckhead, Central Perimeter and Cumberland-Galleria. These latter three cores are examples of 3rd generation cores. These 3rd generation cores were founded in the 1970s and dominated office growth in the 1980s. In the 1990s, they evolved into major employment and activity concentrations.

Although still experiencing positive growth in the years afterwards, the 3rd generation cores have experienced gradual declines in their capture of new office and retail demand, in part due to significant traffic congestion along major freeways feeding the cores. Demand for new office space has been increasingly met in newer 4th generation cores, (typically more amorphous and somewhat edgeless) located even further out from the center of the region. The strongest example of a 4th generation core in Atlanta is the Georgia 400 North corridor in North Fulton, which accounted for close to half of the region's office growth in the late 1990s and 2000s. The Gwinnett Place Mall and Sugarloaf areas in Gwinnett are among the emerging 4th generation cores.

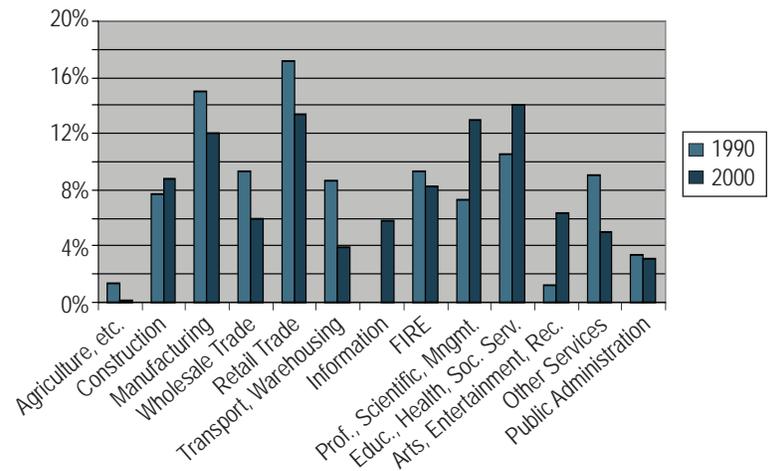
Employment growth in Gwinnett County has been relatively strong over the past few years, averaging more than 5,000 net new jobs per year from 2000 to 2006.²

Over the past three years, the Northeast/ I-85 corridor (which includes Gwinnett County) has captured slightly more than its fair share of office absorption (representing 10 percent of current space compared to 12 percent of absorption).³ While there has been much discussion of shifting attitudes towards more inside-the-perimeter lifestyle, Gwinnett County and the rest of the suburbs still constitute a large capture of the metro area's employment growth. This is a trend that is likely to continue over the next few decades.

C.4.2 Current Employment Trends

Gwinnett County's residents are employed in a wide range of industries. Significant changes between 1990 and 2000 include job growth in the professional, education and health, and arts and entertainment industries.

Figure 13: Employment by Industry, 1990-2000



Source: 1990 and 2000 Census (SF3)

Table 9: Unemployment Rate, 1990-2000

	Labor Force 1990	Unemployed 1990	Percent Unemployed	Labor Force 2000	Unemployed 2000	Percent Unemployed
Gwinnett County	210,295	6,646	3.16%	325,379	10,596	3.26%

Table 10: Personal Income by Type

	1990 Constant Dollars	1990 Percentage	2000 Dollars	2000 Percentage	Difference
Wage or Salary	\$7,161,124,061	86.20	12,422,379,700	85.40	-0.80
Other Types	\$59,077,605	0.70	152,224,200	1.00	0.30
Self Employment	\$472,778,197	5.70	801,120,400	5.50	-0.20
Interest, Dividends, Rental	\$317,018,907	3.80	494,207,100	3.40	-0.40
Social Security	\$146,010,769	1.80	287,405,300	2.00	0.20
Public Assistance	\$12,794,760	0.15	29,618,600	0.20	0.00
Retirement	\$134,919,270	1.60	357,304,100	2.50	0.90
Total Income	\$8,303,723,578		\$14,544,259,400		

Source: 1990 and 2000 Census (SF3); 1990 CPI was 130.7

² Source: 2007 Atlanta Regional Commission estimates

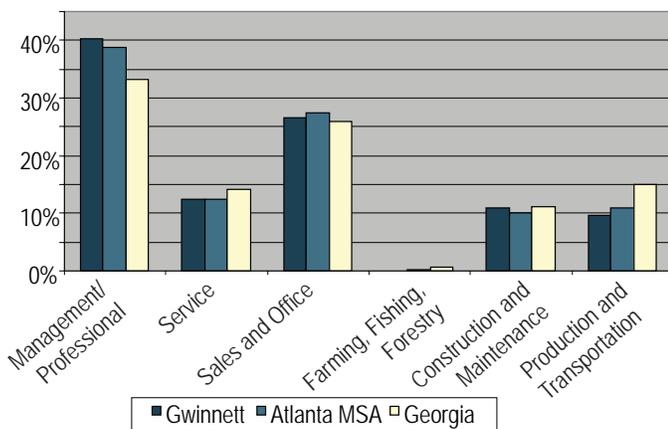
³ Source: CoStar 4th Quarter Office Guide 2007

Labor Force

Gwinnett County's unemployment rate of 3.26 percent in 2000 (Table 9) was lower than the state average of 3.5 percent and the national rate of 4.0 percent. However, five of Gwinnett's Cities had unemployment rates higher than the national average in 2000. Buford, Dacula, Grayson, Lawrenceville, and Norcross each had unemployment rates of more than 4.0%, with Norcross the highest at 6.3% according to Census figures.

One 2003 American Community Survey (ACS) indicates that a higher percentage of Gwinnett residents are employed in management and professional fields and construction and maintenance than the Atlanta region as a whole (See Figure 14). Compared with the state, Gwinnett has a higher percentage of management and professional jobs and a lower percentage of production and transportation employee residents. The 2003 ACS also indicates that 84 percent of Gwinnett residents employed were private wage and salary workers, 10 percent were federal, state, or local government workers, and 6 percent were self-employed.

Figure 14: Occupations in Gwinnett Compared to MSA and State, 2003



Source: 2003 American Community Survey, Selected Economic Characteristics

Table 10 shows that the trends in personal income have remained stable from 1990 to 2000. Somewhat more Gwinnett residents are earning income through retirement now than in 1990, an indicator of an aging population.

Table 11 shows the median wage earned in 1999 for males and females in Gwinnett County.

Table 11: Median Earnings in 1999 by Sex

1999 Median Earnings	Male	Female
Gwinnett County	\$36,403	\$24,903
Atlanta MSA	\$32,654	\$22,916
Georgia	\$29,053	\$19,649

Source: 2000 Census

Several significant trends will shape economic growth and investment in Gwinnett in the coming years.

- Gwinnett is transitioning from an industrial job center to a more office-oriented job center;
- Gwinnett will continue as a major regional shopping destination for the I-85 corridor;
- Several areas, particularly those in the southern end of the county are adjusting to revitalization; and
- Currently Gwinnett lacks a center or downtown area, although multiple centers are emerging as cities are reinvesting in their downtowns.

The following represents a more detailed discussion of these major trends.

From Industrial to Office Based Economy

Historically, Gwinnett's economy has been concentrated in warehouse, distribution, manufacturing, and retail services jobs tied to the role of Interstate 85 as the primary distribution corridor in the Southeast. Consistent with the evolution of metro cores discussed earlier, the Gwinnett/I-85 corridor now includes an emerging office core as jobs continue to follow executive housing growing between the Chattahoochee River and I-85. This emerging office core can be expected to grow. The scale and regional significance of such growth may depend on the degree that Gwinnett County pursues accommodating such economic development.

Although the industrial market in Gwinnett County remains strong, the supply of land for this market is decreasing significantly, resulting in shifting industrial growth to more exurban areas such as Jackson County, as well as to southern Atlanta region counties such as Henry and South Fulton where land is currently cheaper. In 2007, of the 6.3 million square feet of industrial space either delivered or under construction in the Northeast Atlanta submarket, only 1.7 million square feet, or 27 percent, was located in Gwinnett County. This share of new activity is significantly below Gwinnett County's 53 percent share of existing industrial space in the northeast Atlanta submarket.⁴

⁴ Source: CoStar 4th Quarter 2007 Industrial Guide



Figure 15 shows this close relationship between centers of office growth and upper income housing within Atlanta's favored quadrant.

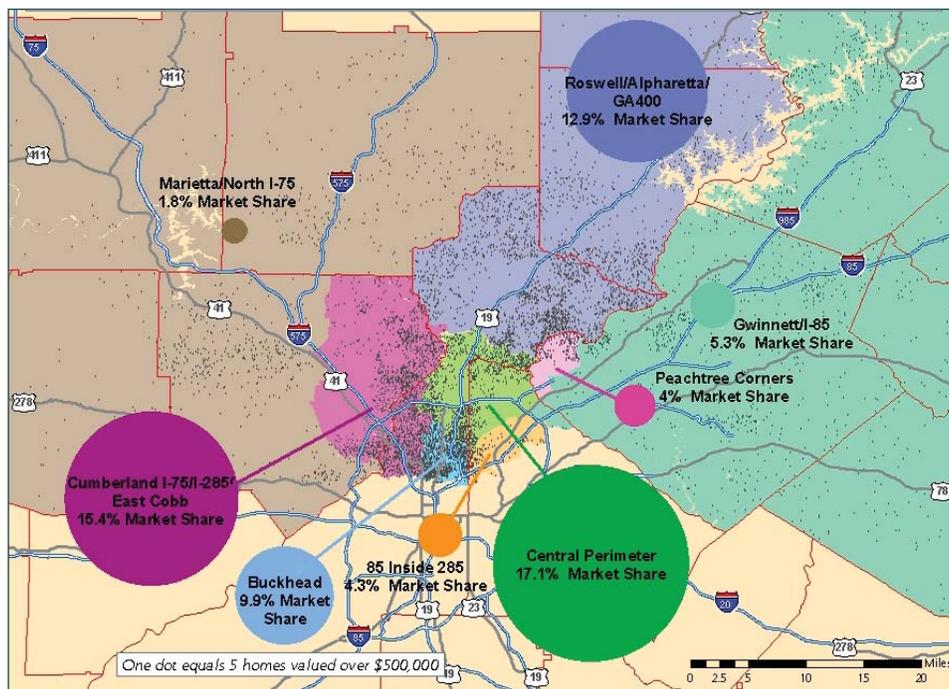
As executive housing has continued to emerge along the Chattahoochee River in Gwinnett County (in particular the Sugarloaf/Civic Center area), office growth has continued to decentralize. Office growth has increased along I-85 in Gwinnett County, particularly around Gwinnett Place Mall outward to Sugarloaf Parkway. Outside of Peachtree Corners and some mid-rise office surrounding Gwinnett Place Mall, office flex space or service centers were the only viable options for prospective office tenants until the latter part of the 1990s. Since then, the supply of true office space has increased to accommodate an emerging demand.

Stimulated by the county's rapid residential growth, supporting developments such as the Mall of Georgia, the Gwinnett office market experienced more substantial growth in the early part of this decade. However, until recently Gwinnett has suffered from high vacancy rates, which has stalled new development. Currently there is nearly 500,000 square feet of office space under

construction and an additional 300,000 square feet planned.⁵ Although Gwinnett office vacancies are still high overall, they are approaching normal levels in areas furthest south on I-85, particularly in the Peachtree Corners area. It appears that despite existing high vacancies, developers are banking on continued job and population growth in Gwinnett to fill new office space.

The most prominent submarket for office development in Gwinnett County has historically been Peachtree Corners, near Peachtree Industrial Boulevard and Jimmy Carter Boulevard. This area, characterized by single-story and mid-rise space surrounded by

Figure 15: Locations of Office Concentrations Relative to Executive Housing



Source: Housing data from Claritas, Inc; Office data from Dorey's 4th Quarter 2007 Office Guide

⁵ Source: Dorey's 4th Quarter 2007 Office Guide

business parks and residential subdivisions, offered the only viable option for companies seeking to establish operations in the northeastern sector of the metro area. However, as more office space has emerged along I-85, the market in Peachtree Corners has tightened. There has been only 100,000 square feet of space built since 2001 and since early 2005 vacancies have steadily dropped in the Peachtree Corners area, dropping to 17.8 percent in the fourth quarter of 2007.⁶

Enabled by its solid labor base, close proximity to I-85 and GA Highway 316, and considerable supply of executive housing, the Sugarloaf / Civic Center area has emerged as the new corporate center of business in the county. The majority of recent development activity in the Gwinnett/I-85 submarket has occurred in this area and it serves as the primary supplier of new Class A office space. This area has further benefited by the near build-out conditions in the Peachtree Corners area.

One noteworthy, yet challenging trend to quantify is the strong growth in Gwinnett, and the Atlanta region of smaller office firms increasingly locating in suburban areas. Technology is allowing small firms to locate away from major employment cores, typically closer to where the firm owner or manager resides. This trend has led to a proliferation of office condominiums and small office buildings in many areas of Gwinnett, including in some town centers; a trend that will likely continue to gain momentum in the coming years.

Retail Sector Challenges

Gwinnett County is now a major retail destination serving not only northeast Atlanta, but much of northeast Georgia. The I-85 corridor is home to three major regional malls, including:⁷

1. Gwinnett Place Mall

Built in 1984, this was the original regional mall in the county. With 1.2 million square feet plus significant retail in surrounding “big box” centers, Gwinnett Place is now experiencing significant competition from other regional retail cores and needs to reposition the itself in the regional market;

2. Discover Mills

1.1 million square feet, built in 2001 to offer more value, outlet shopping; and



3. Mall of Georgia

Built in 1999 with 1.7 million square feet of space, plus significant additional space in surrounding centers, the Mall of Georgia is among the largest retail nodes in the Southeast and serves much of northeast Georgia.

There is increasing concern that the market cannot support three regional malls within such close proximity and that at least one of these malls may potentially be affected by this oversupply.

Another significant question is whether Gwinnett is over-retailed. Roughly 10% of Gwinnett’s approximately 27 million square feet of retail space, (not including free-standing space) sits vacant today.⁸ This means Gwinnett has roughly 35 square feet of multi-tenant space per person, well above the U.S. average of 21 square feet per person and above the Atlanta MSA average of approximately 28 square feet per person.⁹ The ability of Gwinnett County to support this large amount of retail, and issues of retail abandonment in aging suburban areas (an issue nationally, not just in Gwinnett) will require an understanding of the future of these aging strip retail corridors and centers and the impact they have on surrounding residential neighborhoods.

Retail expenditures are being spread across too much space, resulting in high vacancies and, in many cases, centers that are suffering from disinvestment. This over-supply of retail is negatively impacting the retail market in the sales achieved per square foot (Table I2) which, in turn, negatively impacts the rents that properties can garner. Although the sales in Gwinnett County are performing better than Georgia as a whole, they are significantly below the U.S. average and are likely below the metro Atlanta average as well.

⁶ Source: CoStar 4th Quarter 2007 Office Guide

⁷ Mall data from Dorey’s 4th Quarter 2007 Retail Guide

⁸ Source: Dorey’s 4th Quarter 2007 Retail Guide

⁹ Source: RCLCO analysis of local, regional, and national retail figures

Table 12: Impacts of Over Supply of Retail Space

	U.S.	Georgia	Gwinnett County
Sales per Square Foot	\$253	\$222	\$230*

*Please note that \$230 per square foot is likely optimistic as the secondary retail data sources have eliminated small centers and chronically vacant centers from their statistics.

Source: US and Georgia figures from National Research Bureau's 2006 Shopping Center Census. Gwinnett figures compiled from ESRI retail sales data and Dorey's 4th Quarter 2007 Retail Guide

According to CoStar, there are three retail submarkets in Gwinnett County: Peachtree Corners/Norcross, Snellville/Stone Mountain, and Northeast Gwinnett. The tables below demonstrates that the aging retail submarkets (Snellville) are struggling to keep competitive rents and fill space while the newer submarkets are performing better and likely siphoning demand from the older properties.

Table 13: Average Rents (\$/SF)

	2005	2006	2007
Peachtree Corners	\$14.98	\$16.91	\$17.26
Snellville	\$11.52	\$10.91	\$11.39
NE Gwinnett	\$15.02	\$16.59	\$16.48
Metro Atlanta	\$14.34	\$15.63	\$15.37

Source: Dorey's 4th Quarter Retail Market Report

Table 14: Vacancy Rates

	2005	2006	2007
Peachtree Corners	7.6%	8.2%	14.8%
Snellville	14.8%	17.3%	19.8%
NE Gwinnett	9.8%	9.7%	17.2%
Metro Atlanta	10.5%	11.8%	16.6%

Source: Dorey's 4th Quarter Retail Market Report

Adjusting to Revitalization

To date, the large majority of new development in Gwinnett County has been greenfield development. Redevelopment is difficult, logistically and financially, and until recently was nearly impossible due to a lack of mixed-use zoning regulations. The county is in the process of exploring means by which some of the areas that built out 10 to 25 years ago can experience reinvestment.

In part due to the market saturation of retail discussed previously, many areas within the county are adjusting to retail revitalization. Retail abandonment has created the perception, and in some cases the reality, of crime. Most of the concentration of disinvestment is in the southwestern portion of the county, areas in which most of the new

development occurred 25 years ago and are now having to compete with the "shinier, newer" competition further north in the county.

Many of the older apartments have become the primary means to serve affordable housing needs in the county and have attracted significant population of recent immigrants. The upkeep and quality of these concentrations of earlier apartment developments is both an economic development issue as well as part of Gwinnett's challenges regarding housing affordability and housing choices.

Gwinnett County selected three areas of the county to study how revitalization may take place, each representing a different prototype of redevelopment. Community Improvement Districts (CIDs) have been formed in these areas to help spur revitalization.

1. **Gwinnett Place Mall:** A major retail core that has the opportunity to turn into a more integrated metro core with office, retail and residential.
2. **Gwinnett Village:** A large area that has older single-family homes, lower density apartment stock, and aging retail complexes.
3. **Evermore:** A corridor (Stone Mountain Highway) that is largely over-supplied with retail and lacks integration of uses.

Building Urban Centers

No single city currently serves as downtown Gwinnett. Most parts of Gwinnett County typify the sprawling, suburban development model with single-family subdivisions and garden-style apartments separate from strip retail and local-serving offices.

Gwinnett Place Mall once served as one of Gwinnett's major activity centers but was developed primarily for retail and is now adjusting to competition from other regional malls. As the mall area tries to reinvent itself, it has the opportunity to evolve into a central hub for the county. But to do so requires finding answers to the challenges posed by traffic congestion and the physical, financial and functional complexities of infill development and redevelopment.

Numerous Gwinnett cities are creating small, community-serving centers either through redevelopment of their historic downtowns or the creation of a new town center based on Main Street scale mixed-use developments.

The magnitude of growth projected for the county will require that the types of developments built in the future be different from today's typical low key suburban model.

- **Existing city centers:** Duluth, Suwanee, Norcross, Snellville, and Lawrenceville
- **Planned city centers:** Lilburn, Buford/Mall of Georgia, and Grayson

Although these efforts are relatively modest on a regional scale, they seek to integrate retail, higher-density housing, local-serving office, and public services (among other uses) to create a focal point for the community.

The magnitude of growth projected for the County (See Part 2.A), the shifting demographics and market factors such as land values, will require that the types of developments built in the future be different from today's typical low key suburban model. The most concentrated and ambitious changes in scale and character are likely to emerge from today's edgeless centers such as the area around the Mall of Georgia or the area around Gwinnett Place. Furthermore, although none of the town center efforts cited above represents a regionally significant concentration of activities, several cities are also exploring the potential of more urban-scale development nodes on land within their boundaries near major transportation facilities that include potential transit. Successful change of such locations to a more urban feel may give Gwinnett a greater variety of local centers and will add to Gwinnett's attractiveness for new employers and residents.

C.4.3 Issues to Address

- **Promote shift from industrial to an office dominated economic base.** Gwinnett's future well being will depend in large part on its ability to attract a larger share of regional office employment. This will require an appropriately trained labor force, suitable sites to develop, better regional access and a quality of life that attracts and retains the executives of such office based enterprises and their employees.
- **Prevent future "over-retailing" of Gwinnett and establish a retail base more in line with future demand.** Gwinnett County provides roughly 35 square feet of multi-tenant space per person, well above the U.S. average of 21 square feet per person and above the Atlanta MSA average of approximately 28 square feet per person.¹⁰ In addition, approximately 10 percent of Gwinnett's 27 million square feet of retail space (not including free-standing space) is vacant.¹¹ Gwinnett's ability to support this large amount of retail and issues of retail abandonment need to be addressed.
- **Develop strategies to deal with redevelopment needs.** Gwinnett needs to have in place a variety of effective ways to redevelop extensive existing and expected future needs in commercial, industrial and residential areas.
- **Create new centers within Gwinnett.** Gwinnett currently lacks any regionally significant non-retail based centers. The most likely places for such centers to emerge may be through transforming such places as the areas around the Mall of Georgia or Gwinnett Place Mall into more urban mixed-use centers.

¹⁰ Source: RCLCO analysis of local, regional, and national retail

¹¹ Source: Dorey's 4th Quarter 2007 Retail Guide

C.5 Housing and Community Services

Gwinnett County benefits from a high-quality housing environment, particularly for families seeking a safe and appealing place to raise their children. One challenge of the Unified Plan is to broaden such opportunities for a changing population. In keeping with this, the Unified Plan's housing policies and strategies respond to the vision statement, adopted by the Gwinnett County Board of Commissioners in 1995:

"Gwinnett County will reflect a safe well-balanced, quality of life for people of all backgrounds and economic circumstances. The county should be a place where all people can feel good about where they live, have the opportunity for employment, have a sense of community spirit and are concerned for their future and the well being of their neighbors."



C.5.1 Trends

Development over the last 20 years has focused on single-family detached housing, the type most highly sought by area residents. Gwinnett offers good-quality housing in a variety of subdivisions, several of which offer attractive amenities and have homeowner associations to help to maintain them and the residents' quality of life. Several cities in the County offer quality housing often featuring historic street grids and walkable environments.

Housing Types and Distribution

The success of the single-family subdivision model has made it the dominant housing offered and thereby limited other housing choices available to Gwinnett County residents. As of 2000, 71.4 percent of the county's housing stock was detached single-family homes with townhouses making up an additional 3.7 percent. Multifamily housing represented 22.4 percent of all units in the county. Continuing the trend, since 2000 new construction consisted almost exclusively of single-family homes. This was 88 percent of new units according to building permit data from 2000 to 2006. Even though nationally, attached townhouses grew from five (5) percent of new home sales in 2000 to 22.6 percent in 2007, in Gwinnett, the private market and decisions were responding to only part of Gwinnett's housing needs. An increasing proportion of Gwinnett's population are groups whose needs and lifestyles do not require the typical single-family subdivision type of housing. In 2007, Claritas, Inc. estimated that 17.3 percent of all Gwinnett County households were single people and 29.7 percent were two person families. Many of these smaller households are empty nesters whose children have moved out. The county's population over the age of 65 is expected to nearly double in the next 20 years.

One interesting aspect of Gwinnett's housing patterns is the distribution of housing for different racial and ethnic groups. This is a distribution that makes apparent Gwinnett's increasing diversity, as well as the distribution of housing by income groups.

Figures 16 through 18, from a study for this Plan of ownership housing patterns by Daniel Immergluck of the City and Regional Planning Program of Georgia Tech, show the percentage within census tracts of home purchases in 2004 by three major minority groups – Asians, Hispanics and African-Americans. Although there are discernable concentrations of ethnic buyers

in some census tracts, the most interesting aspect of these maps is how such groups are establishing a widespread presence throughout the county. Gwinnett County was an overwhelmingly predominant white jurisdiction less than two decades ago.

A similar distribution also affects house purchases by various income groups. As Figures 19 and 20 show, in 2004 low income and moderate income families purchased homes all across Gwinnett. Although there remain clear patterns of where higher and lower income families predominate, the spatial divides between different income groups are not as absolute as may be commonly thought.

Figure 16: Percentage of Home Purchase Loans for Owner-Occupied Homes to Asians by Census Tract, 2004

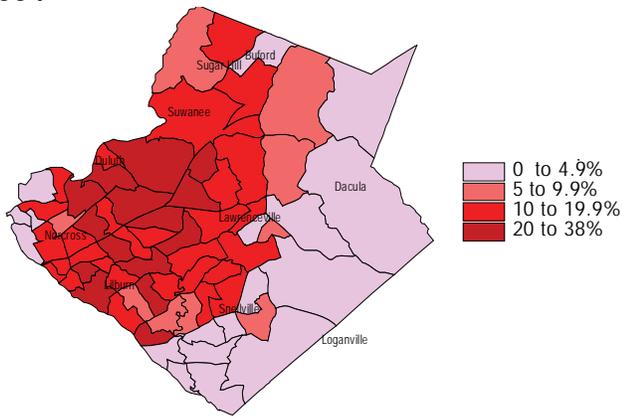


Figure 17: Percentage of Home Purchase Loans for Owner-Occupied Homes to African-Americans by Census Tract, 2004

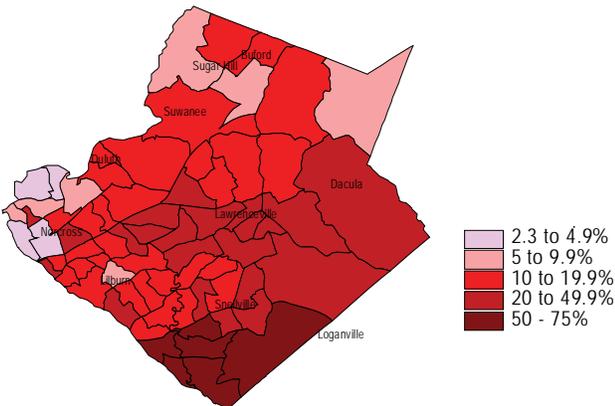


Figure 18: Percentage of Home Purchase Loans for Owner-Occupied Homes to Hispanics by Census Tract, 1997-2004

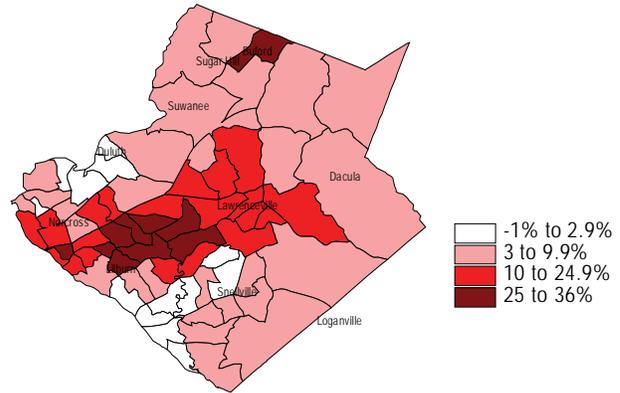


Figure 19: Percentage of Home Purchase Loans for Owner-Occupied Homes to Buyers with Low Incomes by Census Tract, 2004

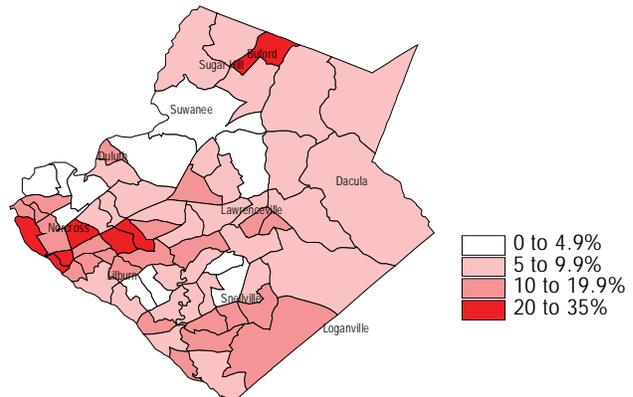
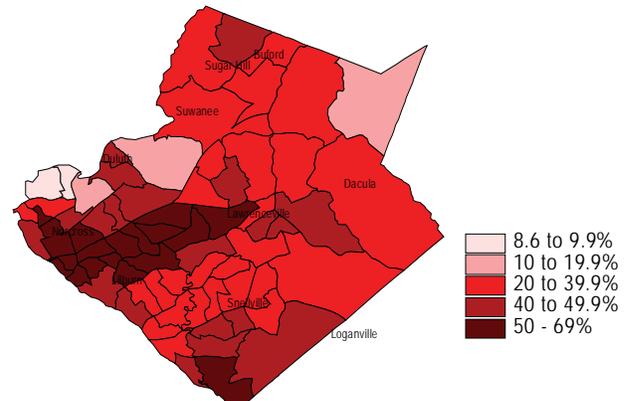


Figure 20: Percentage of Home Purchase Loans for Owner-Occupied Homes to Buyers with Moderate Incomes by Census Tract, 2004



Although Gwinnett is a relatively affluent county, housing affordability is still an issue of concern.

Housing Affordability

Although Gwinnett is a relatively affluent County, housing affordability is still an issue of concern. Almost eight percent of county households, roughly 16,000 households, spent more than one-half of their income for housing in 2000. This amount is above the standard established by HUD that recommends that households spend no more than 30 percent of their total income on gross housing costs. Another 31,000 households or 15 percent of the county total paid between 30 and 50 percent of their income for housing. Rising housing prices and rents since 2000 suggest that these proportions have likely increased significantly as the county has experienced significant price/rent increases.

Prevailing monthly rents in Gwinnett County for a two-bedroom apartment averaged \$763 in 2006. Such rents were well beyond the financial capability of workers earning low wages. The National Low Income Housing Coalition (NLIHC) provides another way of understanding the affordability gap – the wage a single-earner household would need to earn to pay for the average unit (assumed at HUD’s Fair Market Rent, which is based on prevailing monthly rents). NLIHC reports that a worker would need to earn \$15.85 per hour to afford a two-bedroom unit while working 40 hours per week. A worker making minimum wage would need to work 108 hours per week to afford the two-bedroom Fair Market Rent (FMR) (see Table 15). Many low-income residents work more than one job and much more than 40 hours per week, but frequently the gap between market and affordable rents requires such households to spend more than 30 percent of their incomes on rent.

Table 15: Hourly Wage vs. Work Hours Required to Afford Rental Housing

Unit Type	Hourly Wage Required to Afford Unit*	No. of Work Hours Required for Minimum Wage Worker to Afford Unit**
Efficiency	\$13.15	90
1 Bedroom	\$14.25	97
2 Bedroom	\$15.85	108
3 Bedroom	\$19.29	132
4 Bedroom	\$21.04	144

*Hourly wage required to afford each unit type of housing

**Hours per week necessary at minimum wage to afford each size of housing unit

Source: National Low-Income Housing Coalition

The Georgia Department of Labor lists various occupations paying wages that do not support the two-bedroom FMR. Figure 21 shows the incomes of selected professions that earn less or just above that required wage.

Figure 21: 2006 Gwinnett Area Median Hourly Occupational Wages



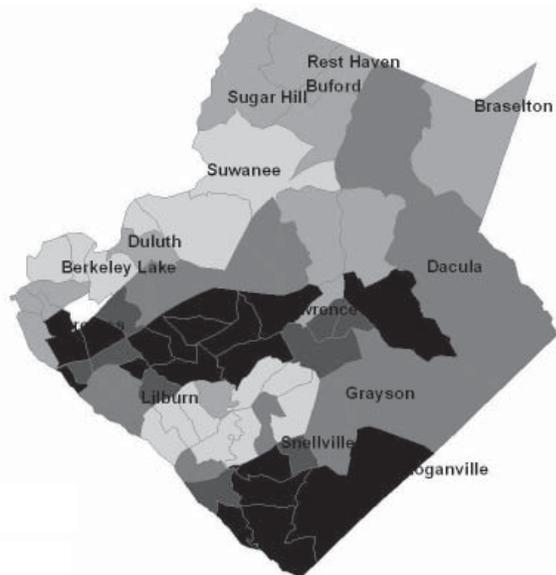
A healthy economy needs workers at all income levels to provide the full range of required and desired services. Failure to provide sufficient affordable housing limits the workforce that would be available to county businesses. County businesses have reported shortages of entry-level workers and workers to fill the County’s many retail and service jobs. The limited supply of affordable housing within Gwinnett County forces workers for these jobs to live far away, yet the rising cost of gasoline is making that solution less and less tenable. Among those who cannot afford the median-priced apartment are single-wage earner households headed by

social workers, construction workers, child care workers and cashiers. Note that some low-income households can find affordable housing options within their reach by renting older or smaller units or by sharing housing.

Foreclosures and Their Impact

The Atlanta Metropolitan Area and Gwinnett County, in particular, were hard hit by the mortgage crisis that intensified at the same time as the Unified Plan was being prepared. Foreclosures in Gwinnett County in the first eight months of 2006 were 258 percent higher than in the same period in 2000 with foreclosures in 2007 at even higher levels. The first eight months of 2006 saw the start of 3,984 foreclosures in the county.¹² Foreclosures are hitting every part of Gwinnett. Figure 22 shows the distribution across the County in 2006 of foreclosure starts per 100 loans originating in 2002 through 2004. This analysis suggests that the rate of foreclosures in the county was increasing substantially, particularly in some parts of the County, even before the bursting of the housing bubble within the first half of the decade had peaked.

Figure 22: 2006 Foreclosure Index



2006 Foreclosure Starts per 100 Loans (2002 - 2004)

0.00 - 0.99	3.00 - 3.99
1.00 - 1.99	4.00 - 4.99
2.00 - 2.99	Over 5.00

* Estimated foreclosures based on annualizing January—July, 2006 data. Denominator is the number of home loans made from 2002 through 2004.

The sources of this rise in foreclosures are in the housing bubble that arose in the years immediately preceding the development of the UP. From 2001 into 2007, there was a large growth in the use of exotic mortgages, including low or no-documentation loans, interest-only loans, payment-option loans, piggy-back 80/20s (where a 20 percent junior mortgage is made in conjunction with an 80 percent senior mortgage) and zero-down payment loans. These loans created risks for both lenders and borrowers.

Following a sustained period of lending to households with weak credit ratings and alternative or exotic mortgages for households with good credit, the foreclosure rate spiked. Increases in interest rates on adjustable-rate mortgages and the expiration of “teaser” introductory rates led to sharp increases in monthly mortgage payments for many households. This was often beyond the capacity of the borrower to pay. Through a combination of low down payments and inflated home appraisals, many homebuyers borrowed more than their homes were worth. When they could no longer afford to make the mortgage payments, they were unable to sell their homes to avoid foreclosure. The lenders underestimated their vulnerability to an economic downturn or a downturn in the housing market, exposing the lenders to massive losses from poorly performing subprime loans. The tightened standards subsequently used in underwriting mortgages prevented many homeowners who had fallen behind on their mortgage payments from qualifying for replacement mortgages at affordable rates.

In addition to the high cost to individual households of losing their home, the cycle of foreclosures also threatened to foster neighborhood decline. The foreclosure process can take some time before the lender takes possession of the house or condominium, and some homeowners facing foreclosure stripped their houses of appliances and other valuable fixtures. Some foreclosed units were not well maintained by lenders who were themselves ill-equipped to deal with the onslaught of foreclosed properties.

Foreclosures can entail significant costs and hardships for those most directly affected. They often involve losing not only accumulated home equity and the costs associated with acquiring the home, but also access to stable, decent housing. Moreover, foreclosures can damage credit ratings, hurting the owners’ prospects not only in credit markets but also in labor and insurance markets, and in their ability to find quality rental housing.

¹² Immergluck, Dan and Yun Sang Lee. Foreclosure Trends in Gwinnet County, Georgia, 2000 – 2006. May 2007.

The costs of foreclosures are also born by the communities in which they occur. Neighborhoods see values and confidence decline. Even after considering other neighborhood characteristics, higher foreclosure levels negatively affect the values of nearby properties. For every foreclosure within one-eighth of a mile of a single-family home, property values are expected to decline by approximately one percent. According to The Center for Responsible Lending,¹³ the foreclosure spillover impact on neighboring homes in Gwinnett County has affected as many as 73,000 properties. Home devaluation was one impact that not only affected homeowners but the County itself. When such value declines translate into decreases, then the annual local property tax revenues available to County government and the school systems declines. When property is abandoned or vacated following foreclosure, these properties can become blighted and havens for crime, thus, begetting a spiral of neighborhood decline.

Foreclosures also entail out of pocket costs to local government. William Apgar and Mark Duda found that the direct costs of foreclosure processes and ancillary services (e.g., securing dangerous vacant property, etc.) to city government in Chicago, not counting those due to falling property values, involve more than a dozen agencies and two dozen specific municipal activities, generating governmental costs that in some cases exceeded \$30,000 per property.¹⁴

(During the preparation of this Unified Plan, the federal government was exploring a range of policy options to respond to the mortgage crisis that had increased since the data cited above. It was thus too early to know whether these programs will provide significant relief for Gwinnett County homeowners.)

The Homeless

Though the homeless are relatively invisible in the County, the hardships they experience are very real for the 8,600 persons reported to be homeless in Gwinnett County in January 2006.¹⁵ Fundamentally, homelessness in Gwinnett County relates to the limited stock of decent, safe and

sanitary low-cost housing units combined with the limited financial capacity of homeless families and individuals (low wages, depleted savings and excessive debt).

As a participant in the State of Georgia's Balance of State Continuum of Care, the County cooperates with a diverse network of non-profit housing and homeless service providers to provide:

- Outreach and assessment to identify the needs of individuals and families and to connect them to facilities and services;
- Emergency shelter as a safe, decent alternative to life on the streets of the community;
- Transitional housing with various appropriate services; and.
- Permanent housing or permanent supportive housing.

The Gwinnett Coalition for Health and Human Services coordinates the efforts of the many non-profit service providers and operates a hotline to refer citizens to appropriate service providers.

Social services assist special needs populations experiencing problems with aging, dealing with physical or mental disabilities, or recovering from mental illness or addictions. In 2000, Gwinnett County had an estimated 2,236 low- and moderate-income households headed by an elderly person with physical or mental disabilities, known as the "frail elderly." Overall, the County had almost 24,000 individual residents with physical disabilities (four percent of the population), more than 16,000 residents with mental disabilities (three percent of the population) and an estimated 1,800 individuals who test positive for HIV/AIDS. Many of these individuals need supportive services and/or specialized housing in order to live independently and productively. Access to available services is often difficult and expensive for these residents due to the County's pattern of low-density development with limited transit service.

C.5.2 Driving Forces

High construction costs, the limited supply of affordable housing sites and the limited financial resources available have inhibited the non-profit sector's ability to provide new affordable housing. Other key barriers to affordable housing include:

- Local building requirements such as minimum square footage and minimum lot size requirements and certain infrastructure requirements that prevent development

¹³ Ernst, Keith, Wei Li & Ellen Schloemer. Center for Responsible Lending. *Subprime Spillover*. 18 January 2008. <http://www.responsiblelending.org/pdfs/subprime-spillover.pdf>
¹⁴ Apgar, W. and Duda, M. (2005). *Collateral damage: The municipal impact of today's mortgage foreclosure boom*. Washington, DC: Homeownership Preservation Foundation. May 11.
¹⁵ Gwinnett County Continuum of Care, 2006; Bay Area Economics, 2006

- of smaller units on smaller lots;
- Zoning and community opposition that block group homes and other supportive housing with services for individuals with special needs;
- Burdensome federal and state regulations constraining use of Community Development Block Grant funds;
- Historically weak policies to preserve the existing housing stock through renovation;
- Lack of public/private partnerships with financial institutions to encourage greater investment in low- and moderate-income areas; and,
- Need for more awareness of affordable housing issues and solutions among the overall community and more education for prospective homebuyers.

Many prospective homebuyers are constrained by lower incomes, inadequate savings to fund the down payment and closing costs, and poor credit records resulting from bouts of unemployment or illness.

C.5.3 Housing Issues to Address

By including the Consolidated Plan, the Unified Plan addresses the following concerns:

- **Limited Housing Choices**
A wider range of housing types and prices is needed to meet the needs of smaller households, young adults, the elderly and low-income households.
- **Limited Supply of Affordable Housing**
A greater pool of available sites and resources to fund new affordable housing must be established.
- **Economic Development Impacts of Limited Housing Affordability**
An inadequate supply of affordable housing impairs the ability of local businesses to fill and retain workers in entry-level and lower-wage jobs.
- **Quality of Housing Stock**
Deterioration of some older neighborhoods, including those impacted by housing foreclosures, must be checked.
- **Impact of Foreclosures on Households Losing Their Homes**
Foreclosures not only deprive families of shelter, they also creates serious impacts on the

economic resources available to them. Preventing foreclosures can help families retain credit worthiness, build future equity and avert a number of social disruptions such as pulling children out of their schools.

- **Transportation-Housing Nexus**

Dealing with how increasing costs of transportation without access to adequate transit affects the financial plight of low-income families and their ability to provide for their housing needs, among other competing demands on their resources.

- **Housing and other Services for Special Needs Populations**

Social service needs of special populations experiencing problems with aging, dealing with physical or mental disabilities, or recovering from mental illness or addictions, need to be addressed.

- **Dealing with “Latch-Key” Child Issues**

Opportunities and support for youth, particularly those with working parents who lack the financial means to afford quality child care.

C.6 Getting Around: Transportation Network and Needs¹⁶

C.6.1 Trends

An evaluation of Gwinnett County's existing transportation system provided a baseline for planning the County's future mobility needs. Mobility is an increasing concern as population and employment grow. Fast paced growth has contributed to increasing levels of traffic congestion and, as in the rest of the metro Atlanta area, long commute times.

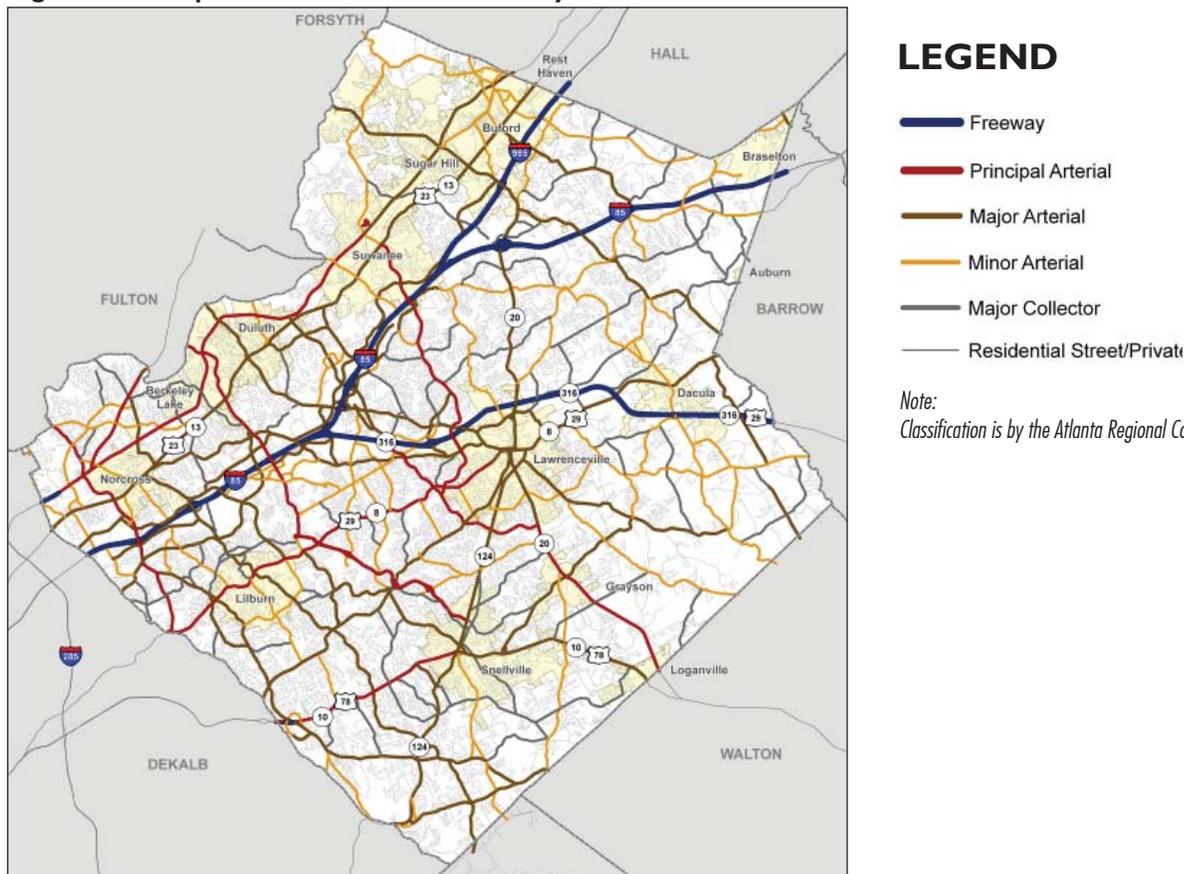
Figure 23 shows the major roads in Gwinnett as classified by the ARC. Scrutinizing the lower third of the

county, one sees a reasonably dense network of arterial roads, whose spacing averages between 1.5 and 3.0 miles. The middle third of the County is more sparsely served at an arterial network spacing between 2.25 and 4.5 miles. The northern third is the least densely networked, and the least densely developed, at an average spacing of between 3.5 miles and greater. Because of the County's rapid growth from exurb to suburb, there was little time for the County and State to develop the incremental web of roads that could have served as the backbone for a continuous arterial network that could be improved over time. Consequently Gwinnett has come to rely on a small number of major and principal arterials to carry most of its traffic. These 6 or 8 lane facilities result in many left turn movements and concentrate shorter and longer trips on them in the absence of a more redundant continuous network. Future planning should try address and redress this imbalance.

¹⁶ This section highlights the data and analysis of the Comprehensive Transportation Plan final draft that was submitted in April 2008. Those desiring more detail regarding current transportation issues should refer to that document, which is part of Volume 2 in the 2030 Unified Plan. A copy can be found at www.gwinnettcountry.com, under Transportation.

Traffic volume in Gwinnett County has increased markedly over the past decade. Previously, the highest daily traffic volumes have been along I-85 from the DeKalb County

Figure 23: Major Roads in Gwinnett County



line to the I-85/SR 316 split. Today, however, heavy traffic stretches all the way to the I-85/I-985 split with more than 147,000 vehicles using the road per day. Additionally, more than 80,000 vehicles travel on I-85 from the I-85/I-985 split to SR 20 on a daily basis. Other significant arterials with more than 80,000 vehicles per day are Peachtree Industrial Boulevard from the DeKalb County line to Peachtree Parkway and SR 316 from I-85 to Sugarloaf Parkway.

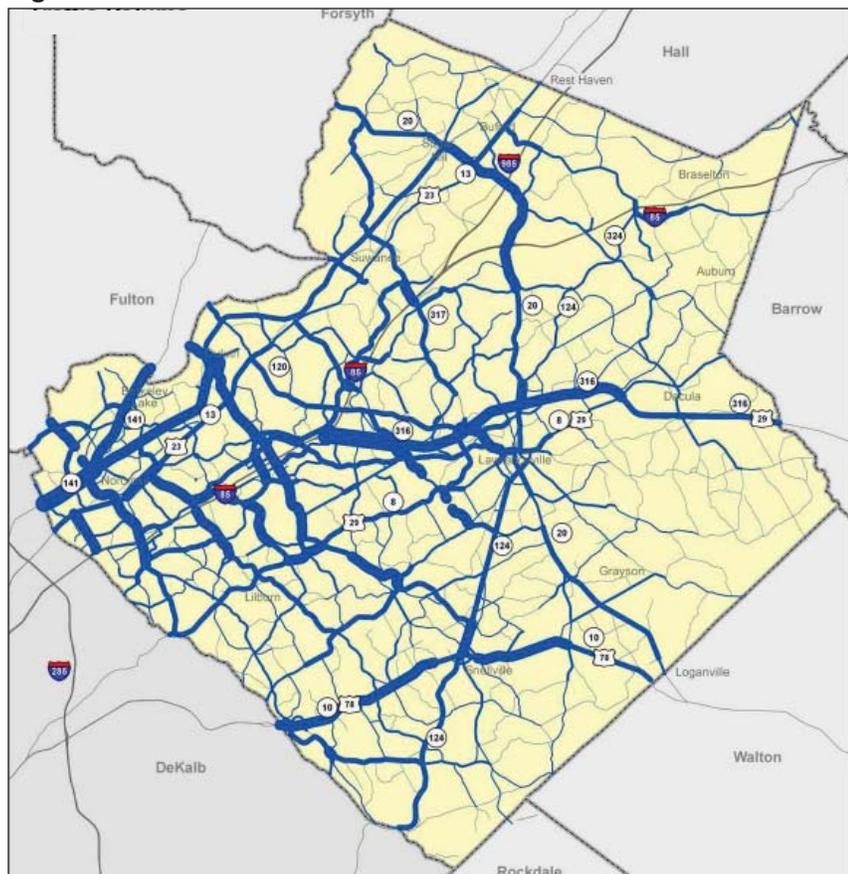
Figure 24 shows Gwinnett County's traffic volumes according to GDOT and the Gwinnett County Department of Transportation (the traffic count data dates range from 2004 to 2007). The traffic volumes for the interstates are excluded from the map to prevent the very large volumes on I-85 and I-985 from obscuring other major roads in the figure. Key routes showing heavy volumes are Peachtree Parkway, Peachtree Industrial Boulevard, Buford Highway (US 23/SR 13), Lawrenceville Highway (US 29/SR 8), Five Forks Trickum Road, Stone Mountain Highway (US 78/SR 10), SR 316, Buford Drive (SR 20), Pleasant Hill Road, Jimmy Carter Boulevard, Ronald Reagan Parkway, Lawrenceville - Suwanee

Road, Beaver Ruin Road, Indian Trail-Lilburn Road, Killian Hill Road, Satellite Boulevard, SR 124, and SR 120.

An additional trend affecting Gwinnett is that its arterials lack regulations for access management. This means that the capacity/mobility functions of many of its major roadways are deteriorating. Failure to manage access can have the following impacts:

- An increase in vehicular crashes;
- More collisions involving pedestrians and cyclists;
- Accelerated reduction in roadway efficiency;
- Unattractive commercial strip development;
- Degradation of scenic landscapes;
- More cut-through traffic in residential areas due to overburdened arterials;
- Homes and businesses adversely impacted by a continuous cycle of widening roads; and,
- Increased commute times, fuel consumption, and vehicular emissions as numerous driveways and traffic signals intensify congestion and delays along major roads.

Figure 24: Traffic Volumes



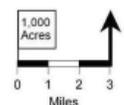
LEGEND

- AVERAGE DAILY TRAFFIC**
- 0 - 5,000
 - 5,001 - 10,000
 - 10,001 - 20,000
 - 20,001 - 40,000
 - 40,001 - 80,000
 - 80,001 - 120,000

Note:
The traffic volumes for the interstates are excluded from the map to prevent the very large volumes on I-85 and I-985 from obscuring other roads.

ADT represents the latest daily traffic count available as of Spring 2007. Count dates range from 2004-2007. Some values may be estimated.

Data from Gwinnett County traffic counts, GDOT.



Not only are these impacts costly for Gwinnett County and the public, but they may also adversely affect corridor businesses. Closely spaced and poorly designed driveways can make it more difficult for customers to enter and exit businesses safely. Access to corner businesses may be blocked by traffic, which makes it difficult for customers to enter and exit the business.

Robert Charles Lesser and Company, part of the team for this Plan, suggests that the County's increasing congestion is starting to impact its economic development. Existing warehouse and shipping businesses, dependent on reliable interstate mobility and access, are becoming caught up in Gwinnett's traffic and as a result are moving away from Gwinnett and into Barrow and Hall Counties, which are further away from metro Atlanta's traffic congestion.

C.6.2 Driving Forces



Land Use Patterns

Gwinnett County has a typical, suburban development pattern of low density, disconnected developments spread across the County. Although most development is low-density, there are some more densely developed areas such as in downtown areas in the cities. Most of these were typically founded around the railroads, and subsequent development focused around the County's major roads. This is particularly the case in areas surrounding interstate exit ramps where regional attractions tend to be located.

Poor connectivity is also a factor in Gwinnett's traffic problems. Individual developments in Gwinnett County are not often connected to adjacent developments. Access to virtually all developments require an automobile trip. If walking, a relatively long and not particularly pedestrian-friendly walking trip must be made. Furthermore, the trip often requires one to exit one development onto a collector or arterial street and then enter another development. This occurs even if the developments are adjacent. This is almost always the case with adjacent residential developments and is usually the case with adjacent commercial uses. This pattern of development has increased the need for an automobile for most trips in the County.

The partially radial nature of Gwinnett's road network, a function of serving the County's cities, also contributes to the County's transportation problems. Traffic is concentrated on major roads that intersect in downtown areas rather than being distributed over a wider network. An additional challenge facing the County is that the road network is predominately north/south focused, and there are very few east/west roads. When travel demand centered on the cities or downtown Atlanta, this orientation may have worked well for most people. However, today, people and jobs are located across the County and the region. Having limited east/west travel options requires people to make longer trips on already crowded roads to get to their destinations.

Another land use factor that influences Gwinnett's transportation network is the Chattahoochee River. It divides Gwinnett County from Fulton County and Forsyth County and the many jobs located in those counties. The river's four crossings are congested so it is difficult for people to commute between the counties. This hurts Gwinnett in its ability to attract residents who work in Fulton or Forsyth County and to attract employers who want access to the highly educated, white-collar labor pool.



Transportation Alternatives to the Private Automobile

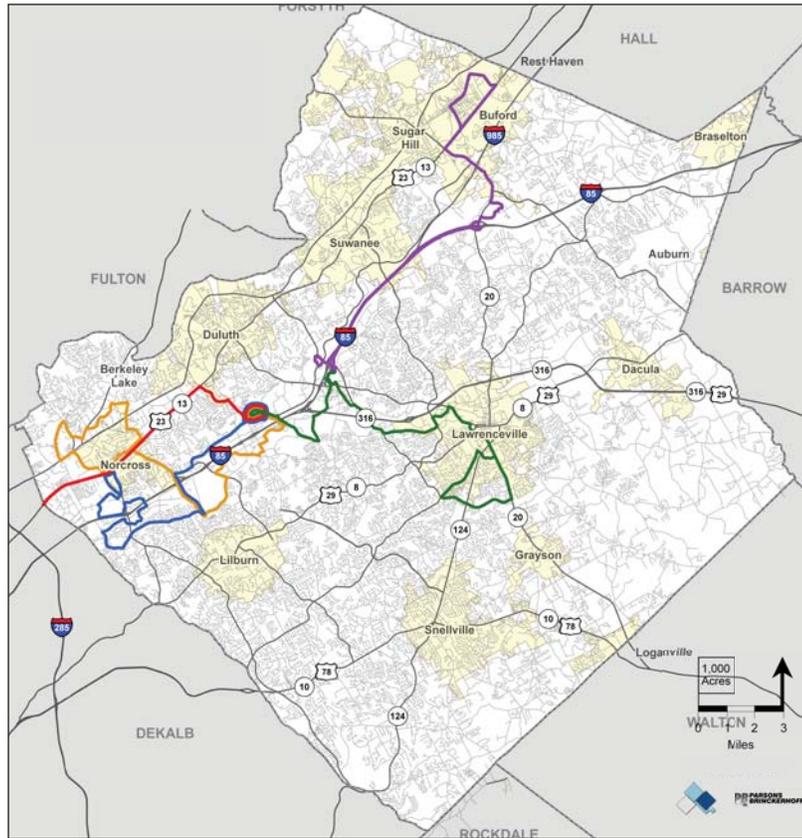
Travel in Gwinnett County is very reliant on the private automobile, especially for commuting. In 2005, there were 575,500 daily work trips. Of the total work trips, Gwinnett's travel demand model calculated that 0.9 percent, or 5,300 daily trips, were made by transit. The ARC travel demand model, as enhanced by the study team, was used to examine present and future year travel demand and congestion in Gwinnett County. The travel demand model forecasts roadway and transit demand based on information such as development density, income, household size, automobile ownership, employment type, travel time, and travel cost. The travel demand model numbers for 2005 are slightly different from those reported in Census 2000 for Gwinnett County. The travel demand model tends to understate transit, walking, bicycling, and work from home numbers and overstate vehicle trip numbers. Census data indicate that 79.7 percent of people drive alone and 14.1 percent carpooled. They also show that 0.8 percent of people used public transportation, 0.8 percent walked, 0.8 percent traveled some other way, and 3.8 percent worked from home.

In 2006/2007, there were approximately 2,030,000 annual transit trips (or approximately 5,600 daily transit trips) in Gwinnett County. This includes 1,320,000 annual boardings on Gwinnett Transit's five local, fixed bus routes, 470,000 boardings on Gwinnett Transit's three express bus routes into Downtown and Midtown Atlanta, and 240,000 boardings on the Georgia Regional Transportation Authority's (GRTA) four routes. Two of these provide service to Atlanta, one to the Lindbergh MARTA station, and one to the Doraville MARTA station.

Local fixed route transit service is focused in the I-85 corridor and includes service to Norcross, Duluth, Lawrenceville, Buford, the Gwinnett Place Mall area, the Discover Mills Mall area, and the Mall of Georgia Area. (Please see Figure 25 showing the transit service area.) Four of the five fixed routes have headways ranging from 15 minutes to 30 minutes in the peak period; 30 minute headways in the weekday, off peak period; and 30 to 60 minute headways on Saturday. Transit Route 50, which serves the Buford area, has a 90 minute headway at all times. There is no Sunday service. A transfer center, where four of the five routes connect, is located adjacent to Gwinnett Place Mall. Route 10 provides service to the Doraville MARTA station in DeKalb County.

In addition to local, fixed route service, Gwinnett County is served by seven express bus routes. Three are commuter bus routes. The routes originate at the I-985 Park and Ride lot, the I-85 Indian Trail Park and Ride lot, and the Discover Mills Park and Ride lot and serve Downtown and Midtown Atlanta. GRTA offers four additional routes. Two of the routes originate at Discover Mills. One terminates service at the Lindbergh MARTA station, and the other terminates in Midtown via the I-85 Indian Trail Park and Ride facility. The third route originates from the John's Creek area near the Fulton County and Forsyth County boundary and extends through Gwinnett County (with several stops) to terminate service at the Doraville MARTA station. The fourth route begins service in Snellville and terminates Downtown. (Please see Figure 26 for a map showing the express bus service area.)

Figure 25: Intra-County Bus Routes



LEGEND

Bus Routes (2008)

- 10
- 20
- 30
- 40
- 50

Figure 26: Express Bus Service



LEGEND

GRTA Express Bus Routes

- Route 408
- Route 412
- Route 418

Gwinnett County Express Bus Routes

- Route 101 - I-895 / Route 101A - Mall of Georgia
- Route 102 - I-85 Indian Trail / Route 102A - Gwinnett Place Mall
- Routes 103 and 103A - Discover Mills

Park and Ride Lots

- P Park and Ride Lot
- Gwinnett County Transfer Center

C.6.3 Transportation Issues to Address

- **Congestion Mitigation**

The most obvious and pressing transportation issue facing Gwinnett County is congestion. It is important to recognize that it will not be possible for Gwinnett County to eliminate congestion. This is because it is, in part, a region-wide issue with many trips in Gwinnett originating elsewhere, for example, interstate travel on I-85. Even if the County spends billions of dollars, as in our scenarios, there would still be congestion. At best, the County may be able to slow the rate of growth in congestion. However, just because the congestion problem cannot be solved, the County must still take action to identify and fund transportation projects that ease congestion. Identifying projects will be the easy part; finding funding will be much more difficult. State and Federal funding sources are providing less funding than they have in the past so it will be necessary for Gwinnett County to contribute a greater percentage of a project's total cost. It will require political will to identify the revenue sources that will fund projects.

- **Increase Connectivity in New and Existing Developments**

Developing a strategy to address Gwinnett's lack of connectivity will be an important issue affecting congestion and the County's future travel patterns. The lack of connectivity between different developments has forced people to use major arterials to travel for short, local trips. These short trips add to traffic volume and slow through traffic. Changing policies to require connections between new developments will be difficult; additionally, changing policies to create connections between existing developments will be even more difficult.

- **Lack of Access Management along Many Key Roads**

Access management is one way to reduce some of the roadway congestion caused by vehicles directly entering and exiting major roads from commercial and residential driveways. The goal of access management is to allow access to private properties in a manner that does not disrupt traffic flow. Reconstructing arterial roadways is costly and disruptive, but in order to preserve access to businesses and improve traffic flow some selective reconstruction may be essential.



Gwinnett's lack of connectivity will be an important issue affecting congestion and the County's future travel patterns.

- **Increasing Transit Coverage and Ridership**

Gwinnett County does not have a history of transit support or ridership. As congestion increases and the demographics of the County change, it will be necessary for the County to provide more effective and efficient transit services. However, the success of transit service is not simply dependant on reducing the time between buses. Developing and redeveloping Gwinnett in a way so that transit can work better will also be necessary if more intensive transit modes like light rail or bus rapid transit are to be realized.

- **Finding Adequate Sources of Transportation Funding**

Transportation improvements can be expensive and are sometimes controversial. In many cases, the improvement does not provide a long-term or permanent solution to the transportation problem it is designed to solve. These factors can make funding transportation projects difficult. Gwinnett currently funds many of its capital improvements through SPLOST and "pay as you go" sources. To afford the kinds of large-scale transportation improvements that will be necessary, Gwinnett County residents and officials will need to consider alternative financing methods for how it approaches paying for large infrastructure improvements. The funding challenge is considered further in the fiscal analysis section where some new sources of revenue are discussed.

C.7 Water, Wastewater and Stormwater Management

C.7.1 Trends

Water and wastewater infrastructure in Gwinnett County is owned by the Gwinnett Water & Sewerage Authority. Stormwater infrastructure in the County is owned by the Gwinnett Stormwater Authority. The Gwinnett County Department of Water Resources operates and maintains this infrastructure for the respective Authorities.

Water

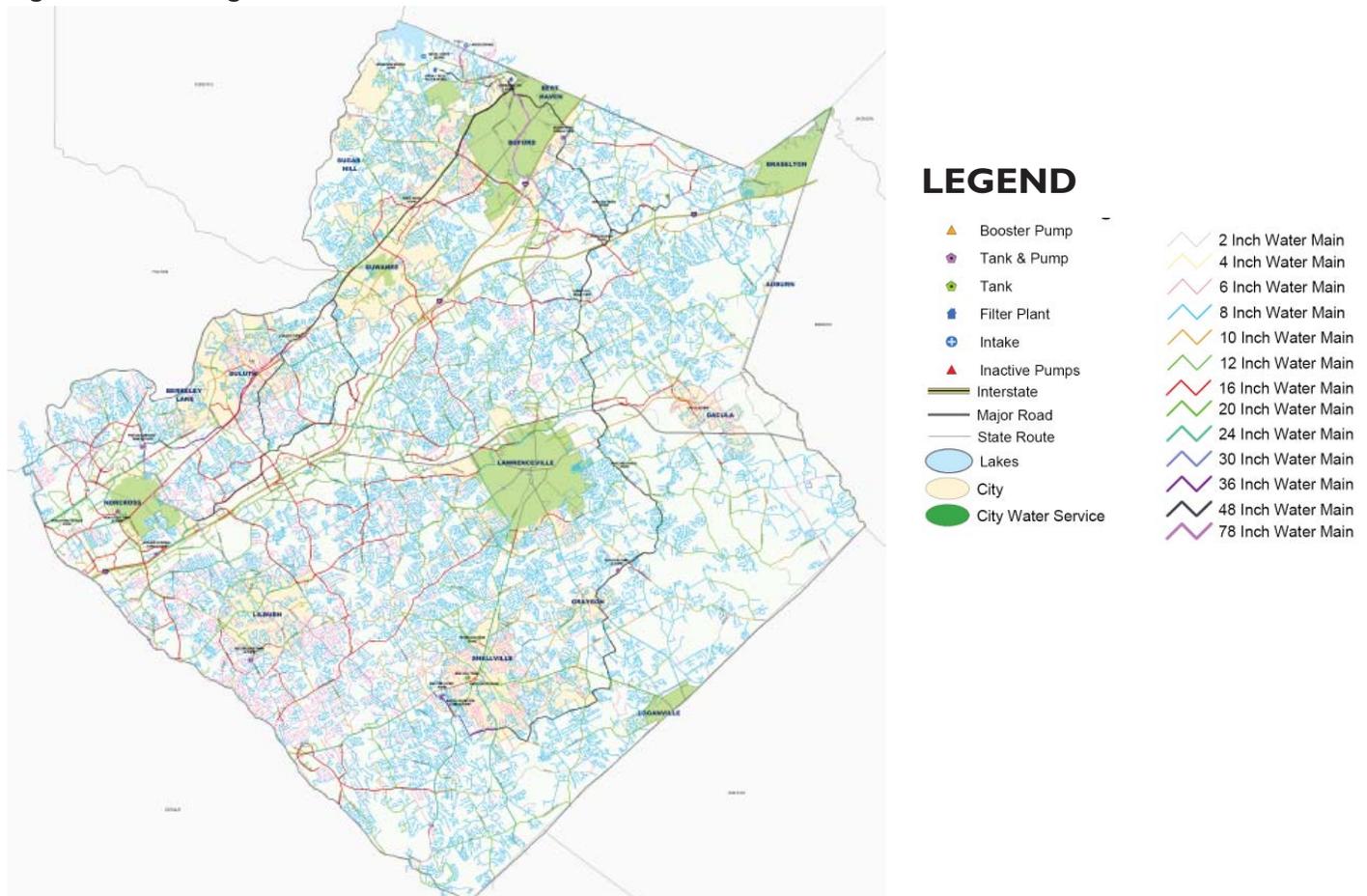
Gwinnett County's water source is Lake Sidney Lanier, a manmade lake created by Buford Dam on the Chattahoochee River. The Georgia Department of Natural Resources controls water withdrawals from Lake Lanier, with Gwinnett's monthly average withdrawal permit set at 150 million gallons per day (MGD). This amount is also governed by a contract with the U.S. Army

Corps of Engineers, which operates Buford Dam and generates electricity there.

The County provides water from two separate raw water intakes located on the lake. Finished water is produced at two independent filter plants, Shoal Creek and Lanier. Pumps move finished water from the clear wells at the filter plants through transmission mains into the water distribution system. There are over 3,300 miles of pipes in the distribution system, ranging in size from two to 78 inches in diameter. Over 90 million gallons (MG) of water are stored in distribution storage tanks, located throughout the County to ensure the provision of consistent line pressure, fire protection, and water availability during periods of high usage.

In 2007, Gwinnett County's average daily consumption was 86.8 million gallons, with a peak day of 125 million gallons. The County serves nearly 235,000 water customers.

Figure 27: Existing Water



Wastewater

The total wastewater treatment capacity for Gwinnett County is currently 71.62 million gallons per day (MGD). An additional 40 MGD of treatment capacity has been constructed at the F. Wayne Hill Water Resources Center. A 40 MGD discharge permit to Lake Lanier has been issued and construction of an effluent pipeline is expected to be complete at the end of 2009.

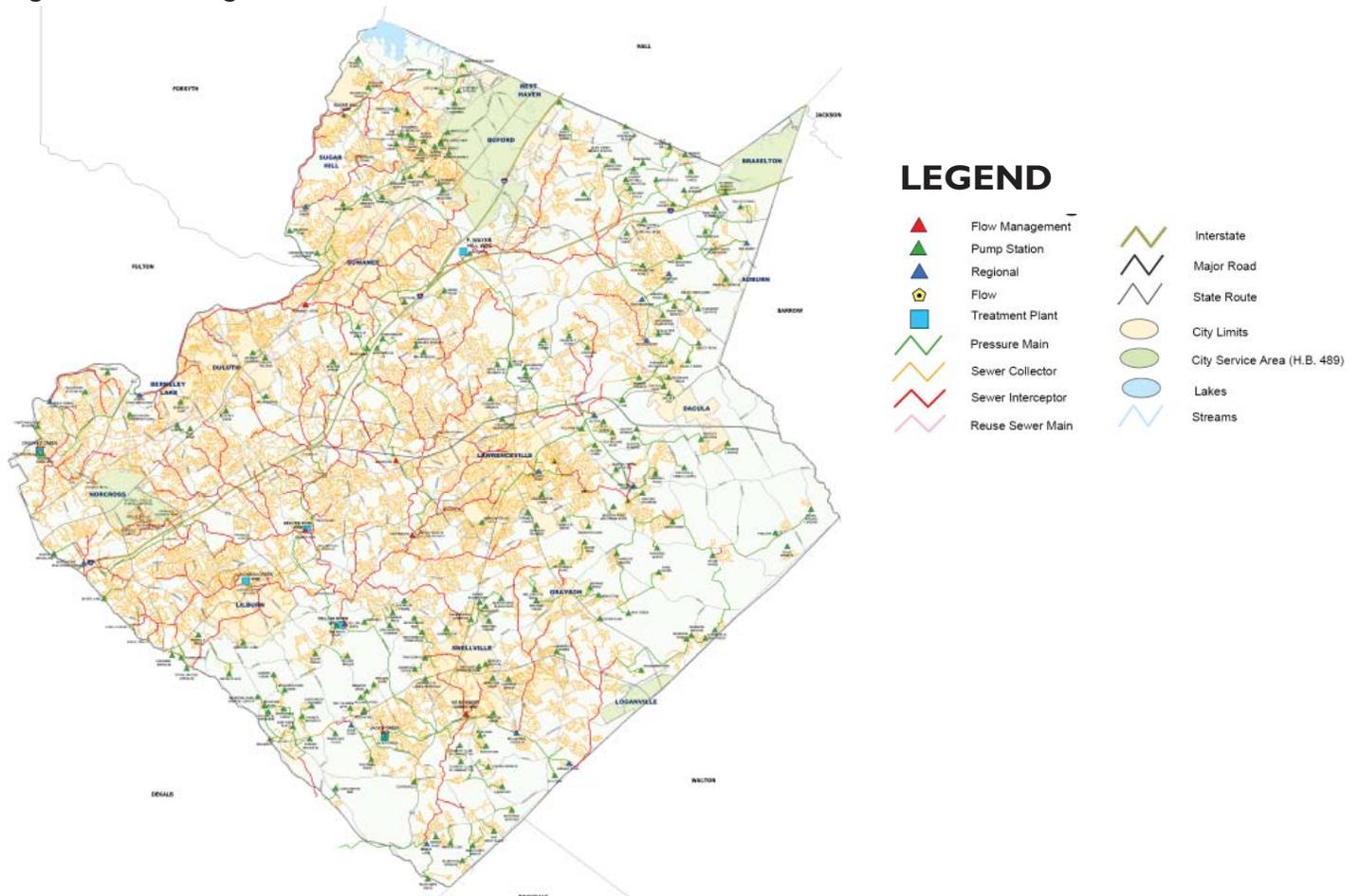
The County currently operates six water reclamation facilities and leases treatment capacity in a facility located in DeKalb County. Over 2,595 miles of sanitary sewers, ranging from six to 72 inches in diameter, collect wastewater that flows by gravity to large-diameter interceptor sewers and then to the water reclamation facilities. Pump stations and force mains are used as necessary whenever topography does not permit gravity flow. The County has 230 wastewater pump stations in service and over 249 miles of force mains, ranging from 2.5 to 48 inches in diameter.

Higher density development has brought significant challenges to ensure that adequate sewer capacity is in place to handle increased flows.

There are several new pump stations currently under construction or in design.

In 2007, Gwinnett County's maximum monthly daily average wastewater flow was 52.8 million gallons per day. The County serves nearly 142,000 sewer customers.

Figure 28: Existing Sewer



Stormwater

The Stormwater Management Division is responsible for providing programs and services to prevent flooding, provide adequate drainage, and protect and enhance water quality in the County's streams and lakes.

In 2005, a Stormwater Utility was created in Gwinnett County in order to more effectively improve drainage problems, fulfill regulatory requirements, and reduce pollution carried to waterways by stormwater. In 2008 the Gwinnett County Board of Commissioners appointed seven members to the Stormwater Authority.

The following is a non-comprehensive list of some of the major ongoing programs within the Stormwater Management Division.

1. Public Education programs to encourage environmentally responsible behavior at home, school, and work. Activities include river cleanups, facility tours, Adopt-a-Stream workshops, storm-drain stenciling, and water quality monitoring.
2. Public Participation programs to encourage citizen input in processes that influence stormwater regulations. These include the Development Advisory Committee, Tree Advisory Committee, Growth Issues Steering Committee and Revitalization Task Force.
3. Water Quality Protection and Post Construction Stormwater Management programs to reduce non-point source pollution.
4. Construction Site Pollution Control to address erosion issues.
5. Watershed Improvement Program to protect and improve water quality and stream conditions. A full assessment and modeling project was completed in 2000, which documented the condition of the watersheds and developed a model to predict pollutant levels based on land use. Capital projects have been developed since that time aimed at watersheds and streams adversely impacted by stormwater runoff.
6. Operation and Maintenance program to ensure a functional, reliable storm sewer system.
7. Flood Study Program to identify existing and future floodplains in the County using modeling based on land use and topography.
8. Watershed Dam Upgrade Program which has brought 9 of the 14 U.S. Department of Agriculture built flood control dams in the County into compliance with state regulations. The remaining 5 are in various stages of design or construction.



9. Water Quality Monitoring Programs for streams.

C.7.2 Driving Forces

Land Use Challenges

Over the years, Gwinnett has developed in typical suburban fashion, with primarily low density, residential subdivisions. Early development was concentrated mainly in the southwestern parts of the County as well as within several small town communities. Much of the earliest development went on private septic systems, but as growth began to dramatically increase in the early 1970s, several small wastewater treatment facilities and large trunk sewers were constructed. This infrastructure was planned, designed and constructed to accommodate that very same pattern of low density residential and retail development.

The past several years have brought higher and higher density development to the southwestern part of the County. This has brought significant challenges to the Department of Water Resources, to ensure that adequate sewer capacity is in place to handle increased flows. Much work has been done to verify infrastructure as-built data and current wastewater flows in order to fully model existing sewers to assess needs. As the County continues to revitalize these areas with the Community Improvement Districts and Major Activity Center classifications, and the prospect of high rise development looms on the horizon, it is expected that significant upgrades will be needed to accommodate wastewater flows from these redeveloped areas. There are several challenges associated with this. Planning, budgeting, designing and constructing sewer upgrades take significant amounts of both time and money. It is also more complicated to reconstruct infrastructure in

highly developed areas where services must be maintained in busy corridors.

Over the years, development spread outward, moving northward and eastward. During much of the 1980s and 1990s, Gwinnett experienced a continuing phenomenal growth rate. This high rate of growth exceeded the fiscal ability of the Department of Water Resources to construct the large gravity sewers to serve the growing populations in the northern and eastern sectors of the County. Development continued with developer installed pump stations and force mains constructed to convey flows relatively long distances to existing sewer infrastructure. Developer-built infrastructure is donated to the County once developments are completed. The infrastructure then becomes the County's responsibility to maintain and operate. With the increased energy costs seen over the past several years, operating costs have increased tremendously.

The Department of Water Resources has limited resources to design and construct the gravity sewers that would be needed to continue development in the eastern part of the County without additional developer installed pump stations and long force mains. If development patterns were to continue as seen prior to this latest economic slowdown, the number of pump stations and long force mains would increase significantly, increasing the operating costs to the Department accordingly.

Fiscal Challenges

The Southeastern United States has been in a serious drought since 2007. The Georgia EPD has issued a Level 4 Drought Response Declaration for 55 north Georgia counties, including Gwinnett, which prohibits or limits

most outdoor water use. Additionally, the Governor has mandated a 10 percent reduction in water use for all public water utilities in the state. While Gwinnett fully supports these water conservation measures, the fiscal impact to the utility is quite significant. Water demands are presently lagging 2007 nearly 20 percent. Decreased water sales obviously mean decreased revenues, although most costs to produce and deliver the water do not decrease proportionally. This, combined with the increased energy costs over the last few years, and the decrease in System Development Charge revenues due to slowed development activity, has led to serious fiscal concerns. The Department has taken several steps to operate as efficiently as possible and cut both operating and capital expenses.

The Gwinnett County water, sewer and stormwater infrastructure systems are relatively young when compared with utility systems in many regions of the United States. However, the Department of Water Resources recognizes the need to begin planning to rehabilitate and replace aging infrastructure. Current capital budgets do include some level of funding for such projects, but a thorough analysis should be performed of the system to determine the most cost effective ways to maintain and renew the system. The Department has undertaken an aggressive Advanced Asset Management approach over the past couple of years to address these issues. Early efforts are concentrating on completing full condition and criticality assessments of all infrastructure so that the systems can be managed in the most cost effective manner while maintaining the desired level of service for customers. Great progress has been made in this continuing program and projects will be prioritized and added to the Capital Improvement budgets annually.

Regulatory Challenges

In 2001 the Georgia General Assembly created the Metropolitan North Georgia Water Planning District (MNGWPD) which is made up of 16 counties and 99 cities within the metropolitan Atlanta area, including Gwinnett County. In September 2003, the Metropolitan North Georgia Water Planning District Board adopted three comprehensive plans to ensure adequate supplies of drinking water; to protect water quality and to minimize the impacts of development on the District's watersheds and downstream water quality. Gwinnett County has and will continue to coordinate with other local governments in implementing the District Plans and the future updates. The Georgia Environmental Protection Division (EPD) is



responsible for issuing all water withdrawal permits and wastewater discharge permits within the state. Adherence to the MNGWPD Plans is mandatory in order for Gwinnett County to receive permits from EPD.

In 2008, the Georgia General Assembly approved the Georgia Comprehensive State-wide Water Management Plan. The purpose of the Plan (which is being managed by the Georgia EPD) is to guide Georgia in managing water resources in a sustainable manner to support the state's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens. Four major water management objectives are being addressed. These include:

1. Minimizing withdrawals of water by increasing conservation, reuse and efficiency.
2. Maximizing returns to river basins by managing interbasin transfers and uses of on-site sewage disposal systems, and land application of treated wastewater where water quantity is limited.
3. Managing in stream/off stream needs for water through surface storage, aquifer management and reducing demands.
4. Protecting water quality by reducing discharges of pollutants to streams and runoff from land, so as not to exceed the assimilative capacity of receiving streams.

The Department of Water Resources actively participates in and monitors activities of the MNGWPD and EPD to ensure fair representation of County interests. Of particular interest is the issue of interbasin transfers and consumptive use. Gwinnett County currently withdraws all of its raw water from the Chattahoochee River Basin. Approximately 25% of the treated wastewater currently discharged is permitted to be discharged outside of the Chattahoochee River Basin, into the Ocmulgee River Basin. The MNGWPD Wastewater Plan indicates that this interbasin transfer will continue to be permitted in this way; however, the Department of Water Resources acknowledges that future additional interbasin transfers will not likely be permitted. Additionally, it is estimated that there are approximately 80,000 septic systems in Gwinnett County. The EPD currently considers septic systems to be 100% consumptive use, meaning that no water from them is returned to the waterways of the state. The Department of Water Resources believes this to be untrue and continues to comment to that effect.



Interstate water lawsuits involving Georgia, Florida and Alabama have been consolidated in the Jacksonville Federal District Court. The Settlement Agreement between the Corps of Engineers, the power customers, and the water suppliers for storage contracts for the water in Lake Lanier was appealed in the Washington, DC, Circuit Court of Appeals. The Appeals Court ruled against the Corps of Engineers. The schedule for trying these consolidated cases is uncertain but expected to occur within the next two or three years. While Gwinnett County will continue to have ample water to supply its customers from Lake Lanier for the next couple of decades, the liability as to what that water will cost continues to be uncertain.

Over the past few years there have also been serious disagreements regarding the Corps of Engineers Water Control Plan for Buford Dam. They have been ordered to prepare a new plan and associated Environmental Impact Statement over the next several years. In the meantime, the Corps of Engineers has revised its Interim Operating Plan to accommodate the severe drought occurring in the Southeastern United States. The Department of Water Resources monitors and comments on these issues regularly to protect the interests of the citizens of Gwinnett.

The Department of Water Resources will complete an update of the Water & Wastewater Master Plan in 2010. The completion of this Master Plan has been timed to allow incorporation of policy recommendations from the Unified Plan to ensure a truly comprehensive planning effort by the County as a whole. During the Master Planning process, future water withdrawal needs and future wastewater discharge options beyond 2030 will be explored.

C.7.3 Issues to Address

- **Need to Replace or Upgrade Older Segments of Sewer Network**

Aging and undersized sewer infrastructure in the southwestern areas of the County which are undergoing redevelopment must be upgraded. These projects will be very expensive and will take considerable time to plan, design and construct. Additionally, because this infrastructure is located in densely developed areas, there will be logistical challenges to keep infrastructure in service during construction and to minimize disruptions to busy corridors.

- **Expensive Extensions of System to Serve Low Density Development**

If typical suburban development continues in the eastern areas of the County, major sewer interceptors must be extended to accommodate this growth and to allow for the decommissioning of several developer built wastewater pump stations with the construction of a few regional pump stations. If not, there will be a significant increase in the number of developer built pump stations and operating costs will continue to rise. These interceptors and regional pump stations will be very expensive and require significant time to plan, design and construct.

- **Loss of Revenue from Decreased Water Sales**

The current drought situation in Georgia has led to increased water conservation and significantly decreased revenues. The expectation is that even once the drought is over, per capita water use may never return to the levels seen prior to the drought. Water conservation will continue to be at the forefront and will likely be further embraced by customers. While rates could be more closely aligned with the cost of service over time, the Department expects fiscal challenges due to decreased water sales in the future.

- **Rising Operating Costs of Water Distribution and Wastewater Treatment**

Producing and distributing water, and collecting, treating and discharging wastewater are all energy and chemical intensive operations. Operating costs have increased significantly over the past several years and are expected to continue to rise. The unpredictability of what that increase will be adds an additional challenge.

- **Lack of Funding for Water and Sewer System Sustainability**

As Gwinnett's water, wastewater and stormwater systems age, there will be an increased need to repair and replace infrastructure. Current capital budgets may not include sufficient dollars to maintain sustainability over time.

- **Potential Barriers to Increasing Water Supply and Discharge Limits**

It is expected that with increased demand for limited water supplies in the region, interbasin transfer issues and consumptive use of water are likely to become more significant over time. These issues could impact the ability of the County to obtain additional water withdrawal and wastewater discharge permits in the future.

- **State and Federal Differences Regarding Water Withdrawals and Costs**

The ongoing interstate water disagreements and the dispute with the Corps of Engineers will most certainly impact future water withdrawals and the cost of that water in the future.

C.8 Environmental Quality and Cultural Resources

This section discusses those features and factors that impact the County residents' quality of life. These include environmental quality, cultural resources, and park and greenways systems.

C.8.1 Trends

Environmental Quality

Gwinnett County has several hydrological features that impact both its development potential and the County's quality of life. Protection of the Chattahoochee and its adjacent lands is provided by the Metropolitan River Protection Act (Georgia Code 12-5-440 et seq.), a state law which was passed in 1973 and created a 2000-foot corridor that runs along both banks of the river between Buford Dam and the downstream boundaries of Fulton and Douglas Counties, including Gwinnett County and its riverfront jurisdictions. All land disturbing activity in the corridor must be reviewed for consistency with the standards of the Chattahoochee Corridor Plan, which was authorized under the Act. The Plan standards include limits on land disturbance and impervious surfaces, an undisturbed 50-foot buffer and a 150-foot impervious surface setback on the river; undisturbed buffers on certain tributaries and requirements in the river floodplain. Gwinnett County has adopted a Chattahoochee tributary buffer ordinance, but it applies to Chattahoochee tributaries outside the 2000-foot corridor. Gwinnett County has nine groundwater recharge areas that cover almost one-fifth of the County. These areas are especially sensitive to hazardous substances, as their pollution could contaminate local drinking water supplies. All of Gwinnett's groundwater recharge areas have low pollution susceptibility and are protected by various restrictions enforced by the Georgia Department of Natural Resources. Gwinnett County has a stream buffer ordinance that provides protection to streams throughout the county and meets or exceeds the requirements of the District Storm Water Ordinance. This ordinance protects the County's natural features through development regulations and landscaping plan specifications.

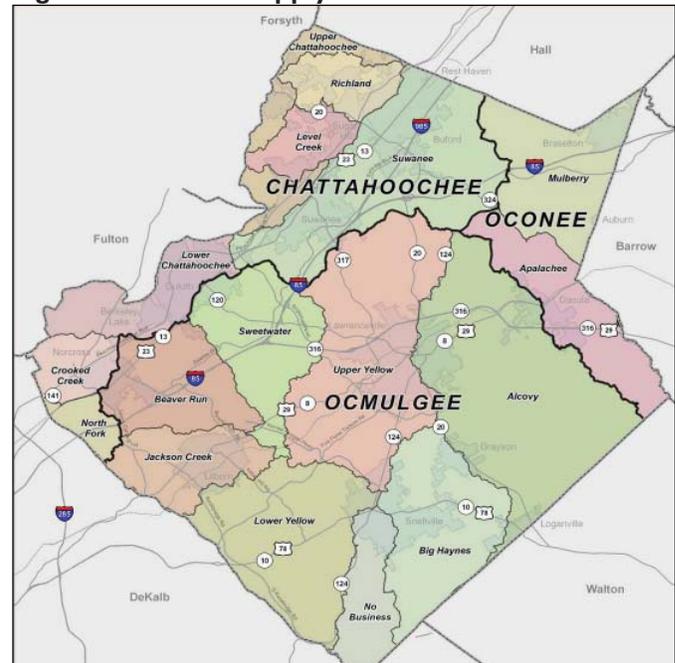
There are several wetlands systems in Gwinnett County, but development patterns and land reclamation threaten their viability. In 2006, Gwinnett County began planning for a Stream and Wetlands Mitigation Bank that would offer developers credits and incentives for improving wetlands

in the County. Restoration and mitigation projects can be used to offset the impact of development near wetlands. The Mitigation Bank proposal is under review with the Army Corps of Engineers.

Figure 29 shows the County's three main water supply watersheds and their subbasins or sub-watersheds. Gwinnett County and 14 cities both inside and outside Gwinnett County get their water from Gwinnett's water supply areas. A number of ordinances protect the County's watersheds and water quality by restricting development and requiring buffers.

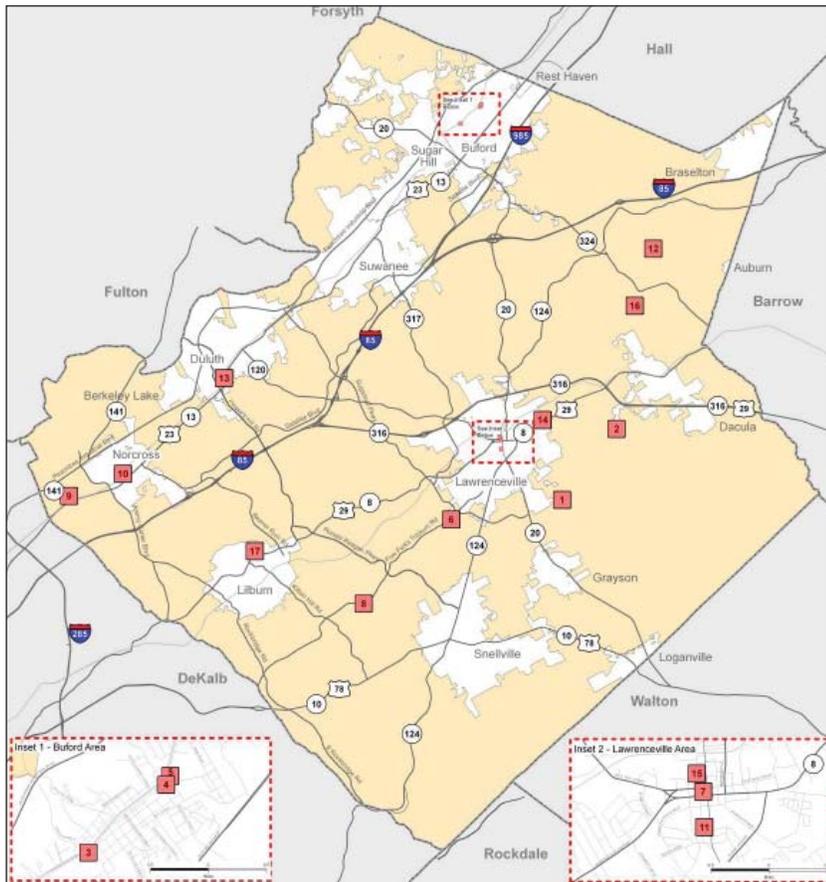
Figure 30 shows the County's lakes and ponds, wetlands, groundwater recharge areas, State protected river, and streams.

Figure 29: Water Supply Watersheds



One hundred year floodplains are any areas susceptible to flooding with at least a one percent probability of flooding in any given year. Approximately 23,000 acres or eight percent of Gwinnett County's lands are within one hundred year floodplains. Construction and development within floodplains is restricted by Ordinance to the following uses: public parks, agriculture, dams, bridges, parking areas, public utility facilities, and outdoor storage. Construction that would change the flood characteristics of the area or create hazardous velocities of water flow is not allowed. The cities of Suwanee, Lilburn, and Buford have significant

Figure 31: Cultural Resources - National Register of Historic Places



- 1 Isaac Adair House
- 2 Alcovy Rd. Grist Mill
- 3 Bona Allen Shoe and Horse Collar Factory
- 4 Bona Allen House
- 5 John Quincy Allen House
- 6 Robert Craig Plantation
- 7 Gwinnett County Courthouse
- 8 Hudson-Nash House and Cemetary
- 9 Mechanicsville School
- 10 Norcross Historic District
- 11 Old Seminary Building (Female Seminary)
- 12 Parks-Strickland Archaeological Complex
- 13 The Superb
- 14 William Terrell Homeplace
- 15 Clarence R. Warehouse
- 16 Elisha Winn House
- 17 Thomas Wynne House

Parks and Recreation



In November 2007, the Gwinnett County Board of Commissioners received the 2007 Update of the Gwinnett County Parks and Recreation Capital Improvement Plan (2007 CIP). The Unified Plan does not provide specific or detailed park and recreation recommendations and recognizes the 2007 CIP as the principal document for information, goals, strategies, and priorities for Parks and Recreation.

The 2007 CIP is an update to the 2004 Comprehensive Park and Recreation Master Plan. The 2007 CIP has three objectives: evaluate the County’s ability to provide park and recreation services, identify service gaps and needs, and propose a prioritized list of capital projects for the period following the 2005 Special Purpose Local Option Sales Tax (SPLOST). This last issue is particularly important because at the end of 2008, Gwinnett’s residents will be asked to vote on whether to extend the SPLOST for another four years.

Gwinnett County Parks and Recreation was a Gold Medal Award winning finalist in the American Academy for Park and Recreation Administration. The Gwinnett County park system currently includes:

- **27 Community Parks totaling 2,930 acres**

The centerpiece of Gwinnett County's park system, Community Parks contain a diverse range of active, passive, team and individual recreation opportunities for all ages. Community Parks can accommodate a large number of users (and vehicles) and intense usage at peak times. New Community Park development should address both the active and passive recreation needs of the area. Larger parks (e.g., greater than 100 acres) should set aside at least one-third of the land area as passive recreation and preserved open space. The degree of development within smaller parks (e.g., less than 100 acres) should be determined on a case-by-case basis, but may exceed 67 percent for active recreation. Community Parks should be located on major roadways and be designed to connect to a County-wide greenway network.

- **8 Special Purpose Parks totaling 60 acres**

Special Purpose Parks and facilities serve special interest recreation or leisure interests and are generally single purpose and located on small sites. They can provide a special emphasis to a nearby community park or be free standing. Consideration should be given to the ability of such facilities to be self-supporting, however, each should be judged on its own merits.

- **2 Special Purpose Neighborhood Parks totaling 50 acres**

Special Purpose Neighborhood Parks are intended to serve densely populated areas that:

- Are deficient in park and recreation opportunities; and
- Do not contain tracts of land large enough for the development of a Passive Community Park; or
- Wish to develop more active recreational uses than permitted by either the Passive Community Park (see below) or Special Purpose Park.

Special Purpose Neighborhood Parks will generally be in the 5 to 20 acre range and may be developed on vacant commercial or industrial/brownfield sites in cases where more suitable options do not exist. Special Purpose Neighborhood Parks generally contain active and passive recreational activity areas.

This park type would serve various age groups with emphasis on youth and should be tailored to fit the existing and anticipated characteristics of the surrounding population. Limited non-organized sport group activities are encouraged. A desirable location is within close proximity to multifamily complexes or higher density single-family detached areas. Park users will be encouraged to walk to Special Purpose Neighborhood Parks, thereby limiting the amount of on-site parking space to be provided.

- **7 Passive Community Parks totaling 500 acres**

In areas that are underserved, densely populated, and land poor, passive Community Parks offer a smaller-scale alternative to Community Parks. They offer a similar complement of facilities as Community Parks, with a blend of active and passive recreation opportunities, however, sport field complexes, large community facilities, or other recreation areas requiring hundreds of parking spaces are not permitted. Approximately 25 percent to 33 percent of a Passive Community Park may be developed with impermeable surfaces. Passive Community Parks should provide both pedestrian access as well as vehicular access to the site. In this regard, they should be located on major roadways and be designed to connect to a County-wide greenway network.

- **12 Open Space Parks totaling 4,800 acres**

Open Space parks are generally large parcels of mostly undeveloped land that embody natural, scenic and cultural values, resources and landscapes. These parks provide passive, non-programmed recreation opportunities in a managed environment. To fulfill their open space preservation and protection roles, Open Space parks typically provide only the minimal amenities needed to provide public access for low intensity and dispersed recreation. Open Space parks are designed for a maximum of 10 to 15 percent impervious surface coverage. Where possible, Open Space Parks should be located along and/or connected to the greenway system.

- **12 Green Space Parks totaling 220 acres and 4 "Other" facilities totaling 410 acres**

Green Space parks and other facilities are informal and less defined categories. They are not part of the County's park classification system. Examples include Alcovy River Corridors, Yellow River

Table 16: National Recreational and Park Association Open Space Standards, 2002

	Component	Use	Service Area	Desirable Size	Acres /1,000 Persons	Desirable Site Characteristics
LOCAL OR CLOSE-TO-HOME SPACE	Mini Park	Specialized facilities that serve a concentrated or limited population or specialized group such as tots or senior citizens	Less than ¼ mile radius	1 acre or less	.25 to .5	Within neighborhoods and close to apartment complexes, townhouse development, or housing for the elderly
	Neighborhood Park/Playground	Area for intense recreational activities such as field games, court games, crafts, skating, and picnicking; also for wading pool and playground apparatus areas	¼ to ½ mile radius to serve a population up to 5,000 (a neighborhood)	15+ acres	1.0 to 2.0	Suited for intense development; easily accessible to neighborhood populations; geographically centered with safe walking and bike access; may be developed as a school park facility
	Community Park	Area of diverse environmental quality; may include areas suited for intense recreational facilities such as athletic complexes, large swimming pools; may be an area of natural quality for outdoor recreation such as walking, viewing, sitting, picnicking; may be any combination of the above depending on the suitability and community need	Several neighborhoods, 1 to 2 mile radius	25+ acres	5.0 to 8.0	May include natural features such as water bodies and areas suited for intense development; easily accessible to neighborhoods served
Total Local or Close-To-Home Space = 6.25 to 10.5 acres per 1,000 population						
REGIONAL SPACE	Regional/Metropolitan Park	Areas of natural quality for outdoor recreation such as picnicking, boating, fishing, swimming, camping, and trail uses; may include play areas	Several communities, 1 hour driving time	200+ acres	5.0 to 10.0	Contiguous to or encompassing natural resources
	Regional Park Reserve	Areas of natural quality for nature-oriented outdoor recreation such as viewing and studying nature, wildlife habitats, conservation, swimming, picnicking, hiking, fishing, boating, camping, and trail uses; may include active play areas; generally 80% of the land is reserved for conservation and natural resource management with less than 20% used for recreation	Several communities, 1 hour driving time	1,000+ acres, sufficient area to encompass the resources to be preserved and managed	Variable	Diverse or unique natural resources such as lakes, streams, marshes, flora, fauna, and topography
Total Regional Space = 15.20 acres per 1,000 population						
LOCAL OR REGIONAL SPACE UNIQUE TO EACH COMMUNITY	Linear Park	Area developed for one or more varying modes of recreational travel such as hiking, biking, snowmobiling, horseback riding, cross country skiing, canoeing, and pleasure driving; may include active play areas (note: any activities included for the preceding components may occur in the linear park.)	No applicable standards	Sufficient width to protect the resources and provide maximum use	Variable	Built on natural corridors such as utility rights-of-way, bluff lines, vegetation patterns, and roads that link other components of the recreation system or community facilities such as schools, libraries, commercial areas, and other park areas
	Special Use	Areas for specialized or single-purpose recreational activities such as golf course, nature centers, marina, zoos, conservatories, arboreta, display gardens, arenas, outdoor theaters, gun ranges, downhill ski areas, or areas that preserve, maintain, and interpret buildings, sites, and objects of archeological significance; also plazas or squares in or near commercial centers, boulevards, and parkways	No applicable standards	Variable depending on desired size	Variable	Within communities
	Conservancy	Protection and management of the natural and cultural environment with recreational use a secondary objective	No applicable standards	Sufficient to protect the resource	Variable	Variable, depending on the resource being protected

Wetlands, Harbins to Palm Creek Connector Trail, BeaverRuin Greenspace, Collins Hill Golf Club, Gwinnett Environmental and Heritage Center, and Vulcan Site.

The County also contains 1,310 acres of city-owned parks and 1,670 acres of Federally-owned parkland.

The National Recreation and Park Association (NRPA) provides guidelines for local or close-to-home recreational and open space and for regional recreational and open space. Table 16 describes NRPA's parkland designations; service areas; and desired size, acres per 1,000 population, and site characteristics. Table 17 compares the NRPA's park and open standards to the amount of park and open space provided within the County. If all parkland is added together, there are 15.4 acres of parkland per 1,000 population (based on 2007 US

Census population estimate). An area where the County is deficient is local or close-to-home space. The NRPA standards recommend between 6.25 and 10.5 acres per

1,000 population. Gwinnett has 2.4 acres. This calculation includes the city-owned parks. If those parks are not included, the County has 0.7 acres per 1,000 population. Gwinnett's provision of close-to-home open space is well below the recommended standards. Gwinnett fares better with providing regional recreational open space. It has 12.2 acres per 1,000 population and the NRPA standards recommend 15.2 acres. If the Federal land is not included, the County has 10.0 acres per 1,000 population.

Table 17: Comparison between NRPA Standards and Gwinnett's Park Provisions

NRPA Park Designation	Gwinnett Park Designation	Total Acres in Gwinnett	Gwinnett's ac/1,000 population	NRPA's ac/1,000 population
LOCAL OR CLOSE-TO-HOME SPACE				
Mini Parks	n/a	0	0	0.25
Neighborhood Park/ Playground	n/a	0	0	1.0 – 2.0
Community Park	Passive Community Parks	500	0.64	5.0 – 8.0
n/a	Special Purpose Neighborhood Parks	50	0.06	n/a
n/a	City Parks	1,310	1.69	n/a
TOTAL LOCAL / CLOSE-TO-HOME SPACE		1,860	2.40	6.25 – 10.5
REGIONAL SPACE				
Regional/Metropolitan Park	Community Parks	2,930	3.77	5.0 – 10.0
Regional Park Reserve	Open Space Parks	4,800	6.18	variable
n/a	Special Purpose Parks	60	.08	n/a
n/a	Federal Parks	1,670	2.15	n/a
TOTAL REGIONAL SPACE		9,460	15.20	12.18
SPACE THAT MAY BE LOCAL OR REGIONAL AND IS UNIQUE TO EACH COMMUNITY				
Linear Park	Green Space and Other	630	Variable	0.81
Special Use	n/a			
Conservancy	n/a			
TOTAL LOCAL/REGIONAL/ UNIQUE SPACE		630	Variable	0.81
TOTAL OPEN SPACE		11,950	15.4	

C.8.2 Driving Forces

The main driving force impacting each of these elements is population growth. As Gwinnett's population grows and its demand for housing, jobs, services, and land increases, increased pressures are placed on the County's natural environment, cultural resources, and park system.

An additional driving force impacting Gwinnett's park system is the County's increasingly diverse population. People from different cultural backgrounds have different preferred recreational activities. An example cited in the 2007 CIP is that the Hispanic community has requested more soccer fields.

C.8.3 Environmental & Cultural Resources Issues to Address

Issues – Environmental Quality

- **Threats to Wetlands**
Wetland viability is threatened by land consumption patterns and land reclamation.
- **Improving Impaired Streams**
Some of Gwinnett County's streams are on Georgia's 303(d) list of impaired streams. Twenty-three streams classified as "not supporting" do not meet the standards for their designated use (e.g., fishing, swimming, recreational use, etc.). A variety of measures to better protect such water bodies have been enacted since 2000, but the Gwinnett County Department of Water Resources needs to continue monitoring the health of its streams.

Issues – Cultural Resources

- **Limited Concern for Historic and Cultural Resources**
Most Gwinnett residents have roots somewhere else and many have arrived here relatively recently. This means appreciation of Gwinnett's remaining historic resources and other cultural landmarks tends to be confined to a small segment of its population. Those who have been working for greater awareness and appreciation of historic and cultural resources have had only a small base of support.
- **Need for Non-Regulatory Historic Preservation Incentives**

As Gwinnett's population grows and its demand for housing, jobs, services, and land increases, increased pressures are placed on the County's natural environment, cultural resources, and park system.

Traditional methods of historic preservation, use of national or locally designated historic districts and regulations, have no broad based constituency. A battery of other approaches backed by a variety of incentives rather than restrictions or requirements may be a more fruitful approach.

Issues – Parks and Recreation

- **Lack of Sufficient Small Locally Accessible Park Space**
At present, most of the County's parks are large regional parks and most residents require an automobile to get to them. Developing parks and open space throughout the County and within a short distance from people's homes will be a major concern as the County moves forward. Additional smaller, neighborhood parks and single purpose facilities such as skate parks, swimming pools, or soccer fields could reduce dependency on the larger parks to meet demand for such activities. This would make many more recreation opportunities directly available to those without ready access to cars and for young people who do not drive.
- **Piecing Together a Continuous System of Greenways**
There is need and interest for the County to provide a county-wide network of greenway trails. Such a network would provide for a more continuous interlinking of large and small green spaces and environmental resources, and improve access of residents to such features.



C.9 Gwinnett Government and Fiscal Capabilities

The discussion of fiscal matters is left to last because it affects and is affected by some of the topics discussed above and because it highlights some of the most serious future challenges the county faces. Despite much of the positive news on income and jobs presented in C.4, an examination of current trends and driving forces raises several important warning flags.

C.9.1 Current Budget Picture

Tables 18 and 19 summarize current (2005) Revenues and Expenditures by major category.

As Table 18 shows, property taxes comprise 39 percent of revenues and sales taxes provide 21 percent of overall revenue. This helps to explain the County's willingness from a fiscal perspective to readily rezone property for retail uses. Although currently, this is not looked at in rezoning staff analysis, most of the remaining categories pale against the revenues generated by property and sales taxes except for the grab-bag of 'Other Revenue' (24.5 percent). Property and sales taxes revenues relate directly to land use decisions made by the County. Income profiles also relate indirectly to these as well.

Table 18: 2005 Revenue by Category

Revenue Categories	2005	Percent of Total
Property Taxes	\$260,282,545	38.6%
Sales Taxes	\$140,971,729	20.9%
Excise and Special Use	\$30,216,872	4.5%
Licenses and Permits	\$25,265,571	3.7%
Charges for Services	\$30,639,128	4.5%
Fines & Forfeitures	\$21,725,217	3.2%
Other Revenue	\$165,511,880	24.5%
Total Revenue	\$674,612,942	100.0%

Source: Gwinnett County Finance Office

On the expenditures side, Public Safety constitutes about a third of the expenditures, as does the General Administrative function. Public Works, which includes local road building derived from SPLOST monies accounts for another 23% of expenditures. Health and Public Assistance currently only constitutes only about 1.5% of expenditures. Clearly crime and related incidents would affect expenditures as would publicly provided social service needs that might be driven by a less affluent and an aging population.

Table 19: 2005 Expenditures by Category

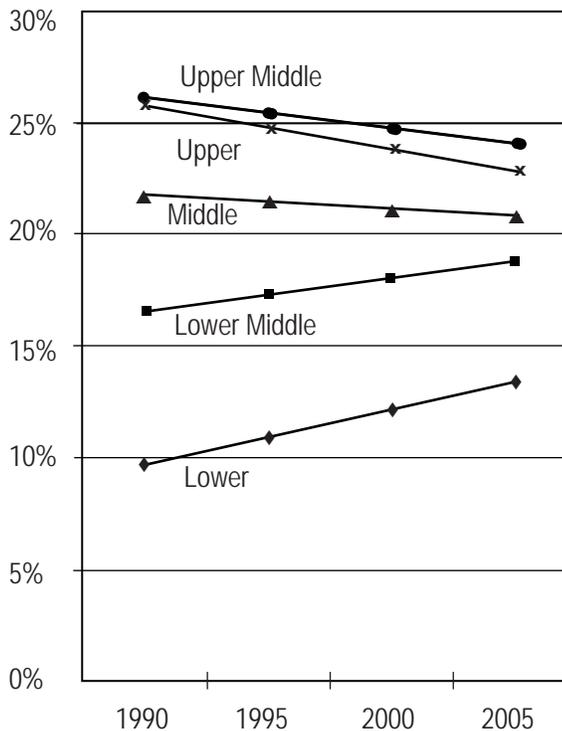
Expenditure Categories	2005	Percent of Total
General Administrative	\$218,901,936	32.4
Public Works	\$152,596,769	22.6
Courts	\$34,190,804	5.1
Public Safety	\$217,179,136	32.2
Health	\$6,011,708	0.9
Public Assistance	\$3,956,138	0.6
Recreation and Library	\$41,144,932	6.1
Other Expenditure	\$631,519	0.1
Debt Service	\$0	0.0
Total Expenditures	\$674,612,942	100.0%

Source: Gwinnett County Finance Office

C.9.2 Trends / Driving Forces

The proportionate size of each income group in Gwinnett has been slowly and steadily converging toward a more equal share of the total population for the past several years, as the graph in Figure 32 shows. Indeed, Gwinnett’s median income is approaching the regional median [or average] income, and, as it continues, this trend has very significant implications for Gwinnett.

Figure 32: Gwinnett County Households in Each Regional Income Quintile as a Percent of Total Gwinnett Households 1990-2005



Source: U.S. Census

Impacts of Income Shifts

One aspect of Gwinnett’s fiscal picture that is tied to income trends is what the County might need to spend on poverty related programs and services. As Table 20 shows, Gwinnett currently spends far less on such programs as a percentage of their budget than neighboring or comparable counties like Cobb. This has implications both for the current level of services that the County is providing (a point reinforced anecdotally in our focus groups with lower income residents) as well as future needs.

Table 20: Poverty Spending as a Percent of General Revenues for FY2005 using Georgia Department of Community Affairs Data

County	Poverty Spending	Difference from Median
Cobb	8.23%	0.12%
DeKalb	7.98%	-0.12%
Fulton	15.15%	7.04%
Gwinnett	4.48%	-3.62%
Median	8.10%	

Table 21: Poverty Rates Range* for 2005 and 2006

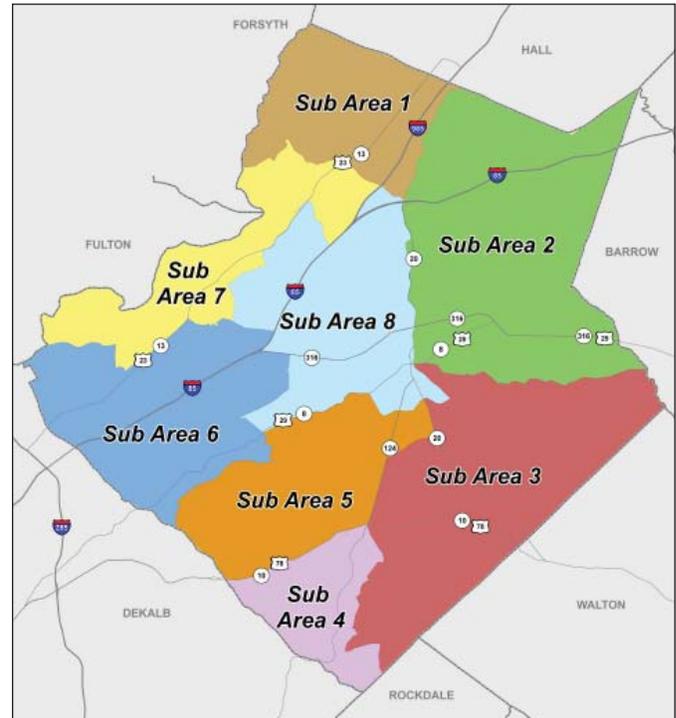
County	2005	2006
Cobb	7.2% - 9.6%	8.6% - 10.4%
DeKalb	14.6% - 17.6%	12.9% - 15.9%
Fulton	14.1% - 16.7%	14.3% - 16.5%
Gwinnett	6.2% - 8.6%	8.0% - 10.4%

* Poverty rates are from the American Community Survey. Ranges are inclusive of the confidence intervals.

All this points to a growing need for Gwinnett to increase its spending on poverty. Our finding in Table 20 above suggests that the poverty rates between Cobb and DeKalb counties should be similar and both Gwinnett and Fulton counties should differ, with Gwinnett County having a lower poverty rate than any of the other counties based on poverty spending. Table 21 shows the poverty rates in 2005 and 2006 for the counties of interest. As shown in Table 21, Gwinnett and Cobb counties had very similar poverty rates in 2006, while DeKalb had a higher poverty rate. Focusing on just the two years offered, in Table 21 we see that both Cobb and Gwinnett counties poverty rates are rising while DeKalb County’s poverty rate is declining. In the future, poverty-related spending will likely equal that percentage spent by Cobb County in 2005, 8.23 percent of general revenue as shown in Table 20.

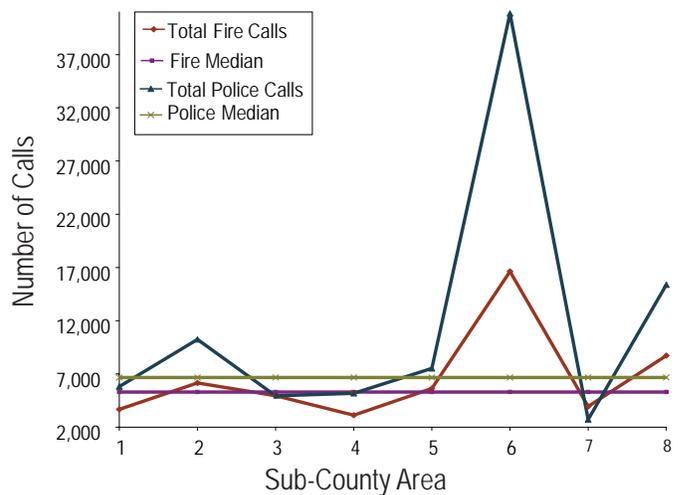


Figure 33: Gwinnett Sub-County Areas



Income is also factor that correlates with demands for public safety. Lower and lower middle income households make more calls for fire and police services. An analysis of calls made by Sub-County Areas(see Figure 33 for the areas) showed the highest call rates in sub-area 6, followed by sub-area 8, then sub-area 2. Figure 34 shows this pattern for 2006 for all Sub-County Areas compared to the median number of calls. To the degree these trends persist, the County will face increasing public safety needs as the proportion of such income groups rises. Indeed Gwinnett, at 0.9 personnel per 1000 persons, is currently well below the minimal staffing guideline for police officers of 1.1 personnel per 1000 people. (DeKalb has about 1.95 per 1000, Fulton 1.8 and Cobb has 1.1 personnel per 1000 people). To plan for better staffing, the fiscal analysis done for this Plan has selected a ratio of 1.3 personnel per 1000 people.

Figure 34: Gwinnett County FY2006 Calls for Service Police and Fire



Source: Gwinnett County Police Department, Gwinnett County Fire and Emergency Services Department

These potential future expenditure adjustments will need to be balanced with the County’s revenue, bearing in mind that there is little potential to generate more revenue from the existing revenue sources. In 2005, Gwinnett County’s economic base was at a healthy 98 percent of revenue capacity. The County also already collects 125 percent of its tax capacity, the highest in the ARC 20-county area.

C.9.3 Issues to Address

- **Need for Greater Fiscal Awareness**

The emerging fiscal challenge has been largely overlooked as the rising tide of rapid growth has made possible the provision of facilities and services with little worry about the County's taxable base, or the need to make hard choices regarding tax rates, debt financing, or other means to raise adequate revenues. Without a change of approach, such good times will not last forever. Consequently, key aspects of this plan and the scenario development and testing that helped define the Unified Plan stem directly from the analysis of the fiscal consequences of different planning choices, including maintaining the status quo.

- **Increasing Fiscal Strains**

The declining average income of the population will provide less resources from property and sales taxes and less social capital as well. As housing and the related retail/service sector job growth slow and build-out is approached, a pro-active plan to maintain job growth in other sectors and stepped up revitalization efforts are needed or Gwinnett County revenues will decline.

Economic development strategies for attracting better paying jobs, to temper this current trend are therefore a priority of the Unified Plan.

- **Rising Operating and Maintenance Costs**

Maintaining roads, the sewer system and recreation and parks facilities will eat up a higher proportion of future County revenues. As the County matures, more and more public resources will need to go into the operations and maintenance of existing facilities and programs and ultimately their replacement. If the fiscal condition of the County deteriorates, such maintenance of the status quo could preempt the funding of new facilities needed to sustain Gwinnett's robust economy and quality of life. Failure to keep revenues in line with needs can lead to a declining quality of life for Gwinnett's residents as declining revenue leads to deferred maintenance or even closing of facilities too expensive to maintain and operate.

The emerging fiscal challenge has been largely overlooked. Without a change of approach, such good times will not last forever.

- **Rising Public Safety Costs**

Public safety issues correlate, as we have seen, with income levels. Consequently, the expected rise in public safety costs associated with an increase of lower income groups will also put pressure on the County's fiscal resources. Even if increased police needs related to shifts in the County's income profile is averted, costs of providing basic public safety such as fire and police will skyrocket as the population increases and continues to spread at low densities over more of the County. Furthermore, if the demographic trends that have been occurring since 1980 continue, an ever growing proportion of the overall population will be increasingly dependent on a variety of social services and health related programs, whose costs are likely to rise.

D. SUMMARY OF ISSUES

The Issues to Address highlighted in the above discussion of trends and driving forces for the various aspects of Gwinnett today set up the main work of Unified Plan development that is summarized in Part 2. The following is a complete list of these issues by general topic.

Demographic and Socio-Economic

- Aging Population
- Continued Pressure on Schools
- Multi-Ethnic Community Needs
- Multiple Impacts of Less Affluent Overall Income Profile
- Rising Proportion of Population Below Poverty Line

Land Use

- Future of Remaining Undeveloped Lands
- Increasing Need to Redevelop Existing Uses
- Location of Potentially Developable Lands in Relation to Transportation Network

Economic

- Promote Shift From Industrial To An Office Dominated Economic Base
- Prevent Future “Over-Retailing” Of Gwinnett
- Develop Strategies To Deal With Redevelopment Needs
- Create New Centers Within Gwinnett

Housing

- Limited Housing Choices
- Limited Supply of Affordable Housing
- Economic Development Impacts of Limited Housing Affordability
- Quality of Housing Stock
- Impact of Foreclosures on Households Losing Their Homes.
- Transportation-Housing Nexus
- Housing and Other Services for Special Needs Populations
- Dealing with “Latch-Key” Child Issues

Transportation

- Congestion Mitigation
- Increase Connectivity in New and Existing Developments
- Lack of Access Management along Many Key Roads
- Increasing Transit Coverage and Ridership
- Finding Adequate Sources of Transportation Funding

Water and Sewer

- Need to Replace or Upgrade Older Segments of Sewer Network
- Expensive Extensions of System to Serve Low Density Development
- Loss of Revenue from Decreased Water Sales
- Rising Operating Costs of Water Distribution and Wastewater Treatment
- Lack of Funding for Water and Sewer System Sustainability
- Potential Barriers to Increasing Water Supply and Discharge Limits
- State and Federal Differences regarding Water Withdrawals and Costs

Environmental Quality, Cultural Resources and Parks and Recreation

Environmental Quality

- Threats to Wetlands
- Improving Impaired Streams
- Tree Conservation

Cultural Resources

- Limited Concern for Historic and Cultural Resources
- Need for Non-Regulatory Historic Preservation Incentives

Parks and Recreation

- Lack of Sufficient Small Locally Accessible Park Space
- Piecing Together a Continuous System of Greenways

Gwinnett Government and Fiscal Responsibilities

- Need for Greater Fiscal Awareness
- Increasing Fiscal Strains
- Rising Operating and Maintenance Costs
- Rising Public Safety Costs

This list of issues constitutes one primary input into the scenario building and testing process described in Sections B and C of Part 2. One of the ways the scenarios differed from each other is in how they addressed many of these issues.

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PART 2: THE PLAN

In response to the issues raised in Part 1, Part 2 narrates how the Unified Plan was developed through a scenario building and testing process and it presents the priorities and policies of the Plan that resulted from that process. Part 2 organizes these results by grouping related issues and policies around five themes. It concludes with the expected outcomes of the Unified Plan in the form of a Composite Policy Map and more detailed maps for each of the five themes.

A. FUTURE ESTIMATES AND PROJECTIONS

A.1 Introduction

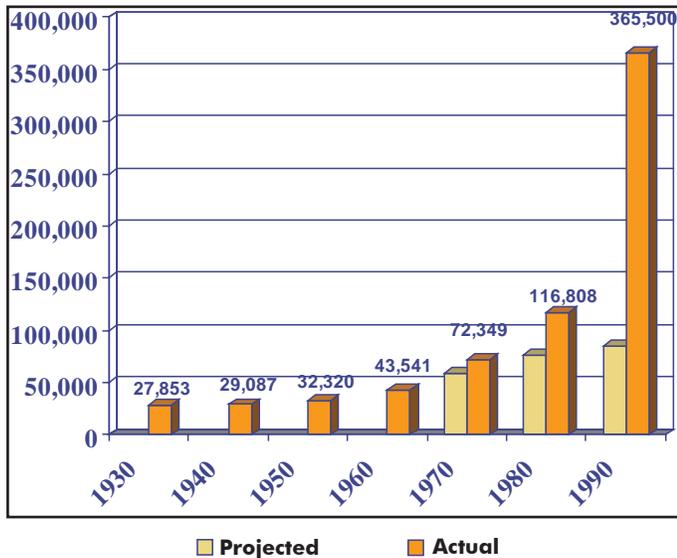
Socioeconomic forecasting was a keystone of the Unified Plan process. Although much of Gwinnett has developed over the past 40 years, much new growth will still occur over the next two decades. Estimating the amount and the nature of this growth was crucial to determining a variety of plan policies and strategies.

The exceedingly rapid and extensive growth of the Atlanta region has made forecasting jobs and households difficult. Previous regional projections that included future growth

Socioeconomic forecasting was a keystone of the Unified Plan process.

numbers for Gwinnett have generally been too small, with projected numbers often exceeded years before the projection's outlying target dates. Figure 35 on the following page illustrates this large gap between projections and actual outcomes. The reasons for this perpetual lag in matching forecasts to local realities include significantly underestimating existing population levels which are used as the current starting point, underestimating future rates of growth, and the sometimes prolonged execution of the models.

Figure 35: Past Projections Compared to Actual Results



Source: Census and ARC

To avoid such lags and underestimates, the Unified Plan process incorporated forecasts based on a methodology developed by Dr. Thomas Hammer that has been applied several times to the Atlanta region. This methodology has yielded more up-to-date forecasting information for the region as a whole as well as for all its constituent local jurisdictions.¹

The following section provides a summary of the key results of this forecasting process. (A full description of the methodology and detailed results of the forecasting is presented in Appendix C of this plan. All tables and other data shown here are from the work of Dr. Thomas Hammer who developed all of the regional and local projections and forecasts used during the plan process.)

A.2 Employment Driven Regional Growth

In keeping with past history where Gwinnett County growth was driven in large part by the changing economic and population trends for the entire Atlanta region, the projections for this Unified Plan began with an analysis of future regional trends. Projections were then developed for Gwinnett as a subset of these regional developments. The Unified Plan forecasting determined that Gwinnett will be part of an economically strong and still rapidly growing Atlanta region, a future that brings with it many significant opportunities as well as some daunting challenges.

Economic growth will be persistent, but not without its fluctuations. Overall, it will proceed at a slower pace than in prior decades. Nevertheless, even with lower rates than pre-2000 growth, these annual rates are all more than twice as large as the expected U.S. employment growth rates and exceed the latter after 2010 by a nearly constant one percent margin. For demographic reasons, the region's employment per capita will hold almost constant after 2015 even though the U.S. position erodes substantially.

The fastest-growing sectors, with percentage gains in the triple digits, are professional and technical services (combined here with corporate management offices for a 119 percent increase); administrative support services (150 percent); educational services (118 percent); and health services and social assistance (135 percent). All of these were among the region's eight sectors that tripled in employment between 1975 and 2005. The others were construction, information, arts-recreation and food services.

Table 22 shows the breakdown of regional economic growth for each of the counties within the Atlanta region, including employment, households, and population.

¹ These applications include: Northern Sub-Area Study for parts of 6 counties north of Atlanta centered on the GA400 corridor and a regional assessment sponsored by the Greater Atlanta Chamber of Commerce.

Table 22: Summary of County-Level Forecasts for the Atlanta Region

	Total Employment				Households				Population			
	2005	2030	Change	% Ch.	2005	2030	Change	% Ch.	2005	2030	Change	% Ch.
Barrow County	16,974	40,824	23,850	141%	20,895	44,129	23,233	111%	59,130	118,760	59,630	101%
Bartow County	38,581	62,549	23,969	62%	31,658	61,296	29,637	94%	88,650	162,939	74,289	84%
Butts County	7,368	17,698	10,330	140%	7,179	18,288	11,109	155%	20,931	50,888	29,958	143%
Carroll County	36,435	61,063	24,628	68%	38,369	74,141	35,772	93%	104,626	193,541	88,915	85%
Cherokee County	47,748	133,851	86,103	180%	63,569	130,831	67,261	106%	181,871	353,359	171,488	94%
Clayton County	115,047	145,553	30,506	27%	91,879	126,940	35,061	38%	267,031	356,181	89,150	33%
Cobb County	321,009	413,356	92,347	29%	245,978	292,662	46,684	19%	661,526	767,649	106,123	16%
Coweta County	34,452	62,182	27,730	80%	38,391	76,784	38,393	100%	108,776	205,222	96,446	89%
Dawson County	7,214	39,480	32,267	447%	7,657	28,910	21,253	278%	19,559	73,118	53,559	274%
DeKalb County	335,543	379,279	43,736	13%	251,853	270,583	18,730	7%	677,053	724,958	47,905	7%
Douglas County	40,085	69,948	29,863	74%	40,509	69,052	28,542	70%	111,341	180,051	68,710	62%
Fayette County	44,355	83,978	39,622	89%	36,189	56,501	20,312	56%	103,486	153,696	50,210	49%
Forsyth County	42,680	173,283	130,603	306%	48,256	130,184	81,928	170%	138,282	346,330	208,048	150%
Fulton N. of I-285	194,846	345,125	150,278	77%	119,321	174,899	55,579	47%	312,177	442,275	130,097	42%
Fulton Central & S	529,437	690,940	161,503	31%	220,461	294,160	73,698	33%	554,937	738,908	183,971	33%
Gwinnett County	315,838	482,890	167,052	53%	246,140	361,827	115,687	47%	719,849	1,019,166	299,317	42%
Hall County	69,041	108,252	39,211	57%	54,999	100,290	45,291	82%	164,525	291,190	126,665	77%
Haralson County	8,200	14,254	6,053	74%	10,917	20,893	9,977	91%	28,245	50,798	22,553	80%
Heard County	2,673	4,334	1,662	62%	4,204	7,976	3,772	90%	11,326	20,335	9,009	80%
Henry County	47,655	118,136	70,481	148%	57,855	131,128	73,273	127%	165,621	355,475	189,855	115%
Jasper County	3,233	7,096	3,864	120%	4,813	12,890	8,076	168%	13,055	32,927	19,873	152%
Lamar County	3,972	5,120	1,148	29%	5,899	9,186	3,287	56%	16,365	24,365	8,000	49%
Meriwether County	6,194	8,873	2,679	43%	8,690	13,564	4,874	56%	22,887	34,116	11,230	49%
Newton County	20,970	53,945	32,975	157%	30,826	69,984	39,158	127%	85,441	186,691	101,250	119%
Paulding County	24,869	66,903	42,034	169%	38,114	84,803	46,688	122%	110,817	230,936	120,119	108%
Pickens County	7,278	30,002	22,724	312%	11,266	32,970	21,703	193%	28,281	80,447	52,166	184%
Pike County	3,370	6,910	3,540	105%	5,608	13,014	7,406	132%	16,018	35,137	19,119	119%
Rockdale County	35,475	57,256	21,781	61%	26,965	37,731	10,766	40%	78,123	106,182	28,059	36%
Spalding County	26,021	32,342	6,321	24%	22,907	29,787	6,880	30%	61,153	76,411	15,258	25%
Walton County	18,631	59,616	40,985	220%	26,372	67,184	40,812	155%	74,746	178,369	103,622	139%
Total Region	2,405,192	3,775,039	1,369,847	57%	1,817,741	2,842,583	1,024,842	56%	5,005,827	7,590,420	2,584,593	52%

Source: ARC; Dr. Tommy Hammer

A.3 Increasing Regional Population and Regional Diversity

As Table 22 shows, the projected strong long-term economic growth of the region will support persistent population growth. The total population of the 29-county Atlanta region is forecasted to increase from just over 5 million persons in 2005 to approximately 7.6 million persons in 2030 and 8.3 million in 2035. As with employment growth, the region's forecasted annual population growth rates are modest by previous metro Atlanta standards, but nevertheless exceed the corresponding U.S. rates by 0.8 percent to 1.0 percent per year, with the gap steadily increasing after 2015. A most notable aspect of this growth is the shifting of various racial or ethnic groups within the overall regional totals.

Table 23 summarizes the Atlanta region's population forecasts in 1990, in 2005 and projected out through 2035 in total and by racial group. Table 24 depicts the varying percentages of each racial group in 1990, in 2005 and projected out through 2035.

Tables 23 and 24 show the demographic transition in the Atlanta region. Until 1990 this mainly involved substitutions of African-American for white inhabitants, but the pattern has since broadened with the rapid influx of Hispanic and Asian migrants to the region. Each of these three groups is expected to continue increasing its share of the overall regional population throughout the life of the Unified Plan with the Hispanic category increasing the most.

Table 24: Forecasted Regional Demographics by Percent

	Percentages of Racial/Ethnic Group				
	White	Black	Asian	Hispanic	Total
1990	71.8%	24.6%	1.6%	2.0%	100.0%
1995	66.4%	26.5%	2.6%	4.5%	100.0%
2000	61.6%	28.2%	3.4%	6.8%	100.0%
2005	56.8%	29.8%	4.2%	9.2%	100.0%
2010	54.4%	30.6%	4.5%	10.5%	100.0%
2015	52.1%	31.4%	4.9%	11.7%	100.0%
2020	49.7%	32.1%	5.2%	12.9%	100.0%
2025	47.4%	32.8%	5.6%	14.2%	100.0%
2030	45.1%	33.4%	6.0%	15.5%	100.0%
2035	42.9%	34.0%	6.3%	16.8%	100.0%

Source: ARC; Dr. Tommy Hammer

The massive growth of Hispanic households is not unique to Gwinnett County or the Atlanta metropolitan area. According to a 2005 study by the Pew Hispanic Center,² the Hispanic population is growing faster in the South than anywhere else in the United States. Across a broad swath of the region, sizeable Hispanic populations have emerged suddenly in communities where Latinos were a sparse presence just a decade or two ago.

What is somewhat unique to Atlanta is the rapid diversification certain areas, including Gwinnett, are experiencing. Furthermore, other ethnic groups are also extensively distributed in the region.

² Hispanic Center, The New Latino South, July 2005

Table 23: Forecasted Regional Population by Racial Group

	Number of Persons by Racial/Ethnic Group					Change Per Year	
	White	Black	Asian	Hispanic	Total	Absolute	Percent
1990	2,271,623	778,212	51,660	63,358	3,164,853	N/A	N/A
1995	2,464,579	984,446	96,309	168,596	3,713,930	109,815	3.25%
2000	2,701,199	1,237,349	151,061	297,649	4,387,258	134,666	3.39%
2005	2,845,548	1,490,731	209,681	459,867	5,005,827	123,714	2.67%
2010	2,964,845	1,665,904	246,068	569,851	5,446,668	88,168	1.70%
2015	3,078,001	1,854,234	288,786	691,776	5,912,797	93,226	1.66%
2020	3,190,468	2,059,530	336,579	830,097	6,416,674	100,775	1.65%
2025	3,305,026	2,285,596	390,867	989,270	6,970,760	110,817	1.67%
2030	3,424,457	2,536,240	453,066	1,173,751	7,587,514	123,351	1.71%
2035	3,551,539	2,815,268	524,596	1,387,995	8,279,398	138,377	1.76%

Source: ARC; Dr. Tommy Hammer

Figures 36 through 39 show the distribution of four different groups and how large concentrations of each have settled in Gwinnett.

Figure 36: Population Born in Mexico

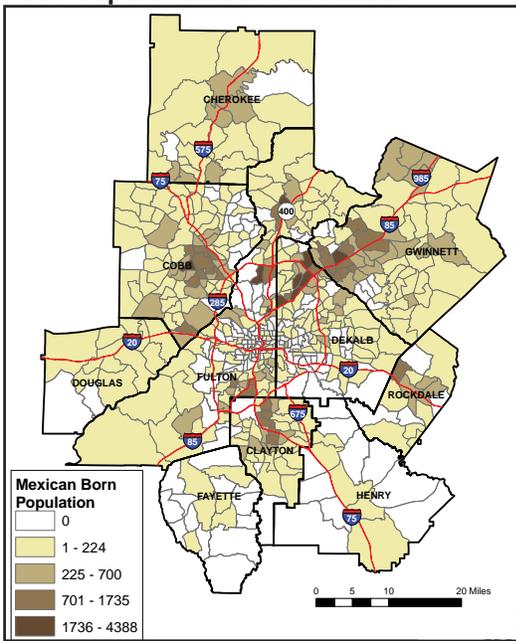


Figure 38: Population Born in Nigeria

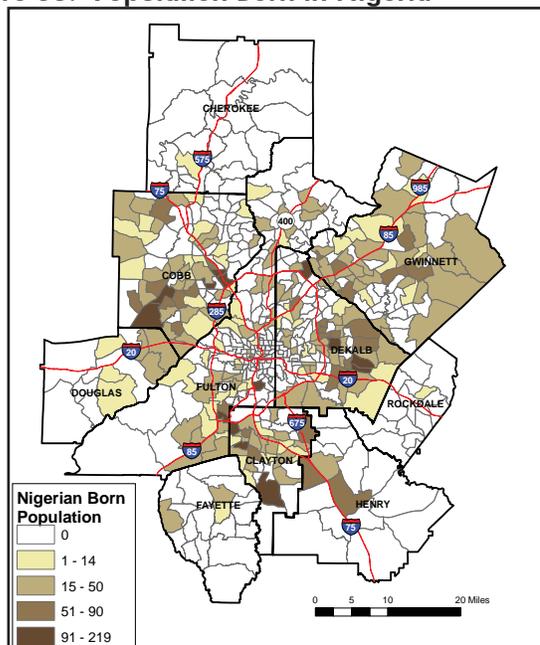


Figure 37: Population Born in India

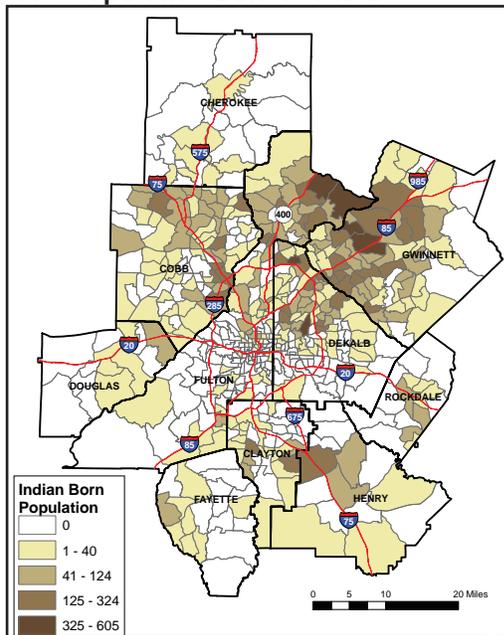
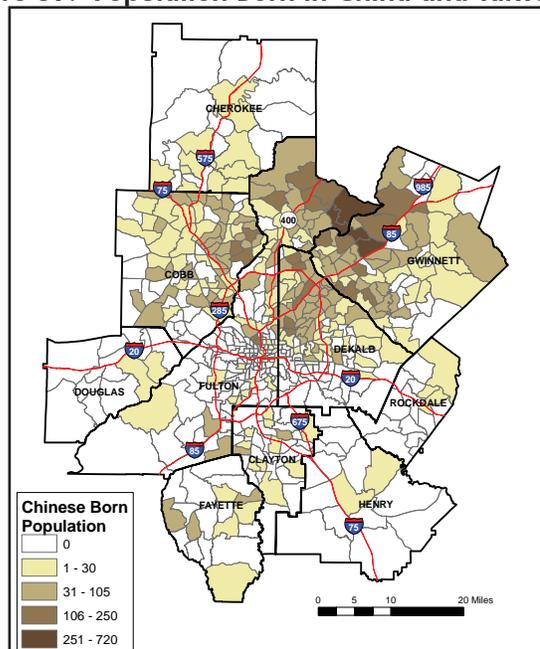


Figure 39: Population Born in China and Taiwan



For Figures 36 - 39, lighter shades indicate smaller concentrations of population and darker shades indicate larger concentrations of populations of people born in the specified countries.

Data Source for the figures is the 2000 Census.

A.4 County-Level Forecasting

Forecasts for Gwinnett County are derived from the regional allocation results and show that Gwinnett will continue to capture a sizeable share of regional employment growth. Table 25 breaks down this forecasted growth by different occupation groups. Gwinnett’s forecasted gains generally follow the pattern for the region. The most notable increases will be in Finance, Insurance and Real Estate (FIRE), professional and management services, administrative support services, educational services and health and social services. All of these will at least double their 2005 levels. The county is also expected to achieve a relatively large gain in arts, entertainment and recreation.

Figure 40 simplifies the data in Table 25 by aggregating them into three broad categories – Industrial, Office and Consumer.

Table 26 shows the County’s expected population growth rates and future number of households in each of five

income levels over 5-year intervals from 2005 to 2030.

As the last row of the table shows, population growth progressively tapers off from 2.0 percent to 0.9 percent per year. Table 26 also gives the actual and expected percentage distributions of households by five income levels. The Gwinnett County figures show declines in the shares of households occupying the upper three quintiles and increases in the two bottom quintile shares. This lowering of the county’s income profile would continue a trend that started in the 1980s. Gwinnett’s combined share in the top two quintiles fell from 55 percent in 1980 to 52 percent in 1990 and fell to 47 percent in 2005. Thus according to this forecast, by 2030 Gwinnett will be a fully middle-class area rather than upper-middle-class area, moving Gwinnett toward the regional average. Note that the population and household totals were modestly revised upwards in the scenario process. The final numbers are shown in Tables 32a through 33.

Table 25: Gwinnett County Employment Forecasts

	2005	2010	2015	2020	2025	2030
Extractive activities	629	527	440	369	313	272
Construction	21,681	23,071	24,175	25,061	25,797	26,454
Durable goods mfg	16,269	16,215	15,481	14,400	13,311	12,548
Nondurable goods mfg	6,625	7,648	8,106	8,189	8,085	7,984
Wholesale trade	32,891	36,126	38,055	39,167	39,952	40,897
Retail trade	42,663	46,464	48,407	49,082	49,082	48,997
Transportation & utilities	6,170	6,512	6,719	6,875	7,066	7,378
Information	10,280	12,395	13,690	14,389	14,716	14,896
Finance, insur'nc & real est	20,407	24,678	27,836	30,192	32,056	33,740
Professional & mgmt serv	28,947	36,591	43,421	49,550	55,091	60,158
Admin support services	31,609	38,669	45,560	52,245	58,688	64,852
Educational services	3,336	4,455	5,675	6,941	8,194	9,379
Health & social services	20,307	25,263	30,177	34,996	39,667	44,134
Arts, entertainment & rec	2,966	4,209	5,058	5,578	5,836	5,895
Accommodations	1,746	1,831	1,873	1,883	1,874	1,859
Food services	22,905	26,036	28,309	29,968	31,261	32,434
Other services incl rental	15,559	17,584	19,089	20,251	21,247	22,256
Fed. & state government	5,325	6,062	6,566	6,920	7,204	7,499
Local government	26,157	29,774	33,045	36,046	38,851	41,538
Total	316,472	364,112	401,682	432,102	458,291	483,169

Figure 40: Gwinnett Employment Growth by Aggregated Sectors

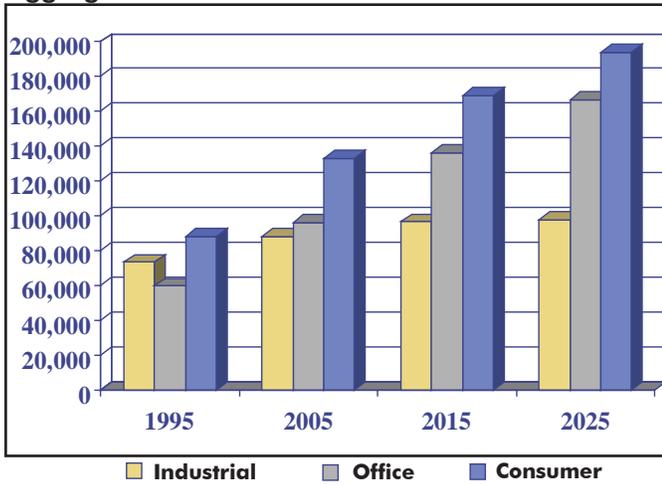


Table 26: Future Population and Household Income Levels by Quintiles

Households by Income	2005	2010	2015	2020	2025	2030
Lower Quintile	33,122	39,213	45,388	51,707	58,231	65,018
Lower-Middle Quintile	46,329	52,961	59,496	65,989	72,496	79,073
Middle Quintile	51,298	56,255	60,438	63,865	66,558	68,535
Upper-Middle Quintile	59,214	64,789	69,427	73,134	75,914	77,774
Upper Quintile	56,177	60,520	64,026	66,886	69,290	71,427
Total Households	246,140	273,738	298,775	321,582	342,489	361,827
Total Population	719,849	795,444	861,985	920,660	972,657	1,019,166
Annual % Change		2.0%	1.6%	1.3%	1.1%	0.9%

The Unified Plan focused on the potential consequences of these significant shifts in employment base, income levels and population characteristics and how they could be mitigated or reversed.

A.5 Implications

The projections cited above are essentially “trends” projections. However, that should not imply that they are inevitable. Without policy intervention, current trends will result in a decline from an upper- to a middle-class area. Indeed, a large part of the process in developing the Unified Plan focused on the potential consequences of these significant shifts in employment base, income levels and population characteristics and how they could be mitigated or reversed.

The employment growth and demographic patterns that the projections indicate have several consequences for the policies and action steps in the Unified Plan. For one, they indicate that there will be increasing demand for land for

office-based employment and a decreased demand for land to support such economic sectors as manufacturing, and warehousing and distribution. Also, the small increase of retail employment when compared to the expected growth of the population supports that Gwinnett today may be “over-retailed.” That is the prime reason many of the County’s commercial areas are undergoing a slow decline.

An increasing population brings with it an increased demand for housing, but the nature of that demand will shift from today’s market which is dominated by single-family housing and relatively high prices. As the population

becomes more middle class and has a significantly higher proportion of the lower and lower-middle income sectors, the types of housing that will be needed and affordable will shift accordingly. This has important implications for future land use demand, as well as what the County will need to do regarding access to housing opportunities and related community services.

The next section shows how a scenario building and testing process addressed these and other implications of the anticipated employment and demographic changes. These concerns include such topics as land use, transportation planning, provision of infrastructure such as water and sewer, public safety needs and the fiscal impacts of various growth levels on the County’s expenditures and revenues.



B. TOWARD GWINNETT 2030: USING SCENARIOS TO DEVELOP THE UNIFIED PLAN

B.1 Beyond Visioning: Why Scenarios Lead to Better Planning

Gwinnett County is a complex place built upon multiple forces that have caused its star to burn brightly since the 1970s. Forecasting Gwinnett County's future is equally complex. There are too many forces at work and too many competing issues in Gwinnett to easily recognize the "right" future and then construct a new Unified Plan around that vision.

A plan to guide the complex decision-making needed in the future requires a deeper understanding of these various forces. Determining which forces Gwinnett can manage through the policies and actions recommended by the Unified Plan and which forces will remain largely immune to such direct intervention was an important part of the planning process. The wide range of stakeholder interests and priorities which further added to the difficulty of drafting a plan that could secure widespread support.

To work through the complexities, the Unified Plan process applied an intensive scenario building and testing approach. Scenario building is a specific procedure for documenting and analyzing different planning alternatives that make the eventual choosing of a preferred plan a well informed and defensible decision. Scenario building and testing is not the same as the more typical "vision" phase of many planning efforts. The differences are crucial.

- Visioning tends to focus on what would be desirable and acceptable. Scenarios also incorporate what is possible and plausible, regardless of how desirable its implications.
- Visioning tends to end with development of a consensus view of what a community desires. Scenarios push the envelope in thinking about future possibilities; primarily through constructing a range of alternative visions that work toward highly contrasting – often polarized – goals or priorities. (This makes scenarios much different from the usual “low, medium, high” growth approach of many plans that only amount to looking at different intensities or pace of change for the same general outcome.)
- Visioning tends to downplay implementation costs and impacts. Scenarios explore what it would take to make a potential future really happen (or avoid a less than desirable outcome), including costs, and how to deal with the likely impacts.

Evaluation and testing of various scenarios was the principle method to determine what combinations of future goals and actions made the most sense for Gwinnett. The County will face a future that is only partially foreseeable. Yet, by evaluating a plausible range of futures and their related policies, Gwinnett has acquired a ready repertoire of responses to inform decision makers if future conditions play out in ways that veer off from the course assumed by the adopted plan. This ability to cope more quickly and more effectively with changing circumstances is one of the major payoffs of engaging in scenario development and testing.

What the Scenarios Were... and What They Were Not

1. Scenarios were possible futures worthy of pondering. They were not inevitable, merely plausible.
2. The original scenarios were never to be recommendations nor plans that might be adopted, but their testing did help define the eventual Comp Plan content.
3. They were not merely “visions.” Instead, these scenarios provoked thinking about the consequences of making different choices.
4. They were not intended to be liked or disliked. Although aspects of each scenario did surface some of the desires and some of the fears of different stakeholder groups, the scenarios made no attempt to either satisfy or to frustrate any particular group.
5. While presented as “stories” about the future, the scenarios incorporated substantial research and analysis of current local and regional trends and Gwinnett’s present and potential strengths and problems.
6. Each scenario played out different ways of coping with such driving forces as the growth or stagnation of the regional economy, the degree that traffic congestion could be managed, or the fiscal capabilities of the County.
7. Each scenario story was translated to County-wide concept maps that showed different possible distributions of potential future development.
8. The initial scenarios did not detail the policies and actions that would need to be funded and implemented to secure desired outcomes or avoid or temper harmful ones. [This is why they were not draft “plans”.] Such “policies” were determined after the initial scenario testing showed what problems were likely to arise.
9. The values and goals of stakeholders eventually came strongly into play as the process developed possible policies for the final round of scenario testing.
10. Plans are results; planning is a process. Scenarios made the process better.
11. Rehearsing the consequences of different choices through scenario testing allows better informed planning decisions and equips Gwinnett County to cope more quickly and more effectively with changing circumstances.

B.2 Main Sources of Scenario Content

A variety of sources contributed to constructing the initial scenarios. An initial source was the Community Assessment (Appendix A). This document highlights many current trends and issues that the Unified Plan needed to address. Much of this information was presented in Part I.C on Trends and Driving Forces. The Community Character and Areas of Special Attention maps that are part of the Community Assessment, done in the early stages of Unified Plan development, were more an anticipation of desired outcomes rather than definitive future designations. Emphasizing or expanding different aspects of the maps (e.g., varying the location and extent of mixed-use centers, redevelopment areas, or rural conservation areas) was one way to distinguish the different scenarios geographically without becoming overly location specific too soon in the process. The data compiled for this document, the Community Character and Areas of Special Attention maps developed as part of the assessment and the extensive list of Local Issues and Opportunities all suggested a variety of topics and concerns that could be combined in different ways to suggest plausible but contrasting future outcomes.

A second source of scenario content was an analysis of potential regional trends that could have a strong bearing on Gwinnett County's own possibilities. Current trends assume an overall expansion of the Atlanta region along the general lines of recent years. The likely result for Gwinnett would be an increase of about 122,000 households and 167,000 jobs. But what if the region's growth slows or major employers fail to show up? Or what if growth accelerates, as it has done several times before, resulting in the regional economy bringing new opportunities to Gwinnett? Either a sharp slowdown or a sharp acceleration of growth would mean that policies and actions suitable for supporting the trend assumptions would have to change accordingly. Similarly, trends in income and immigration patterns could accelerate or stabilize. The scenarios needed to take such possibilities into account and suggest ways to cope with such positive or negative changes of fortune.



The concerns and goals of the various stakeholder groups were important sources of contrasting, sometimes polarized, priorities that the scenarios needed to stand out from each other.³ Discussions with various stakeholder representatives revealed potential conflicts such as keeping taxes low versus the need for more funding of improvements such as roads, rising public safety costs or increased demand for social services. Another contrasting pair of commonly expressed ideas was uneasiness about the increasing social and economic division between the southwest and northeast areas of the County versus the desire to facilitate and speed up minority assimilations.

These concerns and goals were gathered in large part through interviews and extended discussions with a variety of parties that included:

1. Local officials, including the Board of Commissioners
2. Government agency department heads and staff
3. Non-profit groups including those focused on environmental, social service, job training and housing issues
4. Private sector groups such as the Chamber of Commerce
5. Representatives from each of the nine participating municipalities which included Norcross, Lilburn, Berkeley Lake, Duluth, Suwanee, Buford, Dacula, Lawrenceville and Grayson.

³ The overall public outreach process associated with this Plan is summarized in Appendix A

Four groups in particular were very fruitful sources of scenario ideas and subsequent plan policies:

1. The Planning Advisory Committee (PAC) a group of 25 representatives of various local interests, a number of whom were appointed by the Board of Commissioners. Much work with the PAC in early- to mid-2007 focused on defining and refining the scenarios and reviewing the results of the scenario evaluation process.
2. The Technical Advisory Committee (TAC), a group of representatives from various Gwinnett agencies, several of the Cities within Gwinnett, and key planning staff that met on a regular basis throughout the planning process.
3. The results of the Chamber of Commerce sponsored Partnership Gwinnett initiative which raised many of the same concerns as other stakeholders but also offered its own program of recommended actions regarding education, redevelopment and the need for more cultural attractions as part of a more effective economic development strategy.
4. Focus groups representing a variety of Gwinnett's growing minority communities provided insight into the opinions and priorities of segments of the community whose voices are only infrequently heard in Countywide public discussions.

In addition to such stakeholder and committee sources, the scenarios also built upon the findings of Robert Charles Lesser and Company (RCLCo) regarding current and potential economic development opportunities and studies of current and future housing needs by Dan Immergluck of the Georgia Institute of Technology and by Bay Area Economics (BAE).⁴ Another source of scenario ideas was an October 2006 all-day County/ Consultant forum on current growth trends, transportation, housing and infrastructure issues, and the fiscal resources available to the County. The rapid development of scenarios was made possible by the extensive Geographic Information Systems (GIS) database maintained by the County and updated for this Plan.

B.3 Scenario Building and Refinement

B.3.1 Initial Concepts and Detailing

Using and adapting ideas from all these varied sources led to an initial pool of four future alternatives:

- A **Middle of the Pack** scenario that was essentially a playing out of current trends under much the same approach to policies and funding as today.
- A **Regional Slowdown** scenario that played out the consequences of a slowdown of the regional Atlanta economy and the stresses it would likely bring to Gwinnett.
- An **International Gateway** scenario that represented Gwinnett benefiting from an acceleration of regional growth and a shift of the local economy to a more tech based and service based foundation.
- A **Radical Restructuring** scenario that had the same general level of growth as the Middle of the Pack trends alternative but explored the possibilities of Gwinnett's cities – existing as well as several new incorporations – expanding and becoming the dominant centers of growth and economic development.

To put numbers to these scenarios, the scenario building process assigned various estimates of future growth that ranged from approximately 20 percent above to 20 percent below current trends based on the fundamental assumptions of a particular scenario. Nevertheless, this work is not merely a “high, medium or low” variation of current trends regarding jobs and population. These projections also assumed different land use patterns and different mixes of income levels, types of jobs and types of households and infrastructure that were specific to the different assumptions about each of the scenarios. Table 27 on the following page provides a detailed overview of how each of these initial scenarios affected or responded to a variety of “driving forces” and some of the anticipated results.

⁴ Summaries of these studies are appended to this plan.

Table 27: Summary of Driving Forces’ Impacts on Initial Scenarios

	International Gateway	Middle of the Pack	Regional Slowdown
Regional/U.S. economic situation	<ul style="list-style-type: none"> Atlanta is the high-tech hub for the Southeast U.S. economy is strong 	<ul style="list-style-type: none"> Atlanta region continues to prosper 	<ul style="list-style-type: none"> Atlanta region has become less attractive than competing urban centers Existing businesses stop growing and new businesses are locating elsewhere
Gwinnett’s population in 2030	<ul style="list-style-type: none"> 1.2 million people (434,000 households) Represents a 76% increase over today Represents a 20% increase over trend 	<ul style="list-style-type: none"> 1.04 million people (362,000 households) Represents a 47% increase over today Represents no increase over trend 	<ul style="list-style-type: none"> 901,000 people (320,000 households) Represents a 30% increase over today Represents a 12% decrease below trend
Number of jobs in Gwinnett in 2030	<ul style="list-style-type: none"> 650,000 jobs Represents a 106% increase over today Represents a 35% increase over trend 	<ul style="list-style-type: none"> 483,000 jobs Represents a 53% increase over today Represents no increase over trend 	<ul style="list-style-type: none"> 400,000 jobs Represents a 27% increase over today Represents a 17% decrease below trend
Jobs/Housing balance	<ul style="list-style-type: none"> 1.5 jobs per household Limited workforce housing In-commuting from north and west 	<ul style="list-style-type: none"> 1.32 jobs per household Better jobs/household balance than 2005 (1.29) but regional job growth increases out-commuting 	<ul style="list-style-type: none"> 1.25 jobs per household As more and more affluent residents move out, housing prices stagnate. Gwinnett increasingly the “affordable” choice of workers priced out of Atlanta and other suburbs
Employer and workforce composition	<ul style="list-style-type: none"> High-tech, information workers Young professionals and the “creative class” International and multicultural 	<ul style="list-style-type: none"> Many of the traditional light industrial and warehouse and distribution employers have left Gwinnett in search of cheaper land and less congestion Construction industry businesses have moved on as well Not able to attract critical mass of high-tech workers or entrepreneurs 	<ul style="list-style-type: none"> Accelerating out migration of the professional middle classes (all races and ethnicities) Average incomes become lower and lower
Countywide Vision/Policy	<ul style="list-style-type: none"> Use public sector resources to make Gwinnett a “preferred place” to attract new businesses and residents (includes improved schools, cultural amenities, greenways, public wi-fi network, etc.) 	<ul style="list-style-type: none"> Ongoing reluctance to borrow money and a persistent aversion by the active citizenry to most forms of tax increases. County cuts discretionary spending for parks, recreation, open space acquisition, environmental restoration, and cultural events. 	<ul style="list-style-type: none"> Increased economic stresses eats away at the cooperation formed in happier times between elected officials wedded to “little government” attitudes and the business community that increasingly supports a more interventionist approach.
Quality of public K-12 education	<ul style="list-style-type: none"> Actively worked to improve High tech skills best in State 	<ul style="list-style-type: none"> Schools built in the 1980s and 1990s are in need of extensive upgrades Schools are no longer the magnet to residents and business that they once were 	<ul style="list-style-type: none"> Declining test scores Unequal performance among different schools undermines general confidence in overall school system
Impact of Gwinnett College	<ul style="list-style-type: none"> College’s MBA and public policy program attracts graduate students from surrounding countries 	<ul style="list-style-type: none"> Moderate success, but does not attract spin-off businesses or large number of students 	<ul style="list-style-type: none"> Stagnant; has failed to develop as hub of high powered spin-offs.

	International Gateway	Middle of the Pack	Regional Slowdown
Congestion mitigation measures	<ul style="list-style-type: none"> Regional congestion pricing Dedicated truck lanes /facilities Increased number travel options (e.g., transit) 15 percent telecommuting rate 	<ul style="list-style-type: none"> Congestion pricing Intersection redesign Counter flow lanes 	<ul style="list-style-type: none"> Metered ramps on I-85 but little else.
New roads	<ul style="list-style-type: none"> Improved Chattahoochee crossings Sugarloaf Parkway extension constructed 	<ul style="list-style-type: none"> Sugarloaf Parkway extension constructed but only reaches GA316 east of Lawrenceville by 2015, to PIB by 2030. Second extension a toll facility because of limited funds. 	<ul style="list-style-type: none"> New Roads: Few or None Upgrading and maintenance of existing network constantly lags need Transit only buses in mixed traffic
New transit options	<ul style="list-style-type: none"> Transit extended to Dacula along proposed “Brain Train” right of way New rail transit service along NS rail line connecting Norcross, Duluth, Suwanee, Sugar Hill, Buford to downtown Atlanta 	<ul style="list-style-type: none"> Transit extends into Norcross and up I-85 corridor to Duluth 	<ul style="list-style-type: none"> Norcross underwrites bus rapid transit (BRT) to Doraville MARTA station
Impact of ethnic diversity	<ul style="list-style-type: none"> Capitalize on the diversity for access to world and international markets Asia and Latin America provide new sources of capital and entrepreneurship 	<ul style="list-style-type: none"> Truly diverse community, no majority group Differences between more affluent northeast Gwinnett and poorer southwest and southeast Gwinnett become more pronounced 	<ul style="list-style-type: none"> Some ethnic coalitions succeed locally, but no bigger alliances with ability to affect County-wide policies
Redevelopment opportunities	<ul style="list-style-type: none"> Well-targeted redevelopment incentives County steps up CID planning 	<ul style="list-style-type: none"> More resources for revitalization Much higher density development and redevelopment fueled by Asian entrepreneurs 	<ul style="list-style-type: none"> Redevelopment efforts are not successful
Crime and social problems	<ul style="list-style-type: none"> Crime “hotspots” diminished and overall crime rates in line with the region’s other jurisdictions Improved social services for “at risk” segments of population 	<ul style="list-style-type: none"> County policies increasing proactive housing and social services 	<ul style="list-style-type: none"> Higher proportion of less affluent households raises demand for social services Private sector funding for nonprofits dries up County must step in to cover costs
Sewer expansion policies	<ul style="list-style-type: none"> Upgrade existing sewer to support I-85 area intensifications Limited extensions into northeast and southeast Gwinnett Reduce reliance on inter-basin transfers and pump stations 	<ul style="list-style-type: none"> Sewer covers the entire county 	<ul style="list-style-type: none"> Maintenance of complex system and construction of new treatment plant is very, very expensive

Initial rounds of review and discussions with such groups as the TAC and the PAC led to dropping the Radical Restructuring alternative, in large part because of its many complications and the degree to which many of its assumptions – e.g., that a number of cities would pursue very expansionist annexation policies and several new cities would incorporate – seemed less plausible than those of the other scenarios. The other three scenarios received further detailing and refinement, including highly generalized depictions of their geographic implications. (See Figures 41 through 43).

Beyond the descriptions, overall numbers and concepts associated with the scenarios, generalized depictions of their spatial patterns were developed. Figures 41 through 43 capture the land use concepts for the three surviving scenarios.

Figure 41: Regional Slowdown Scenario

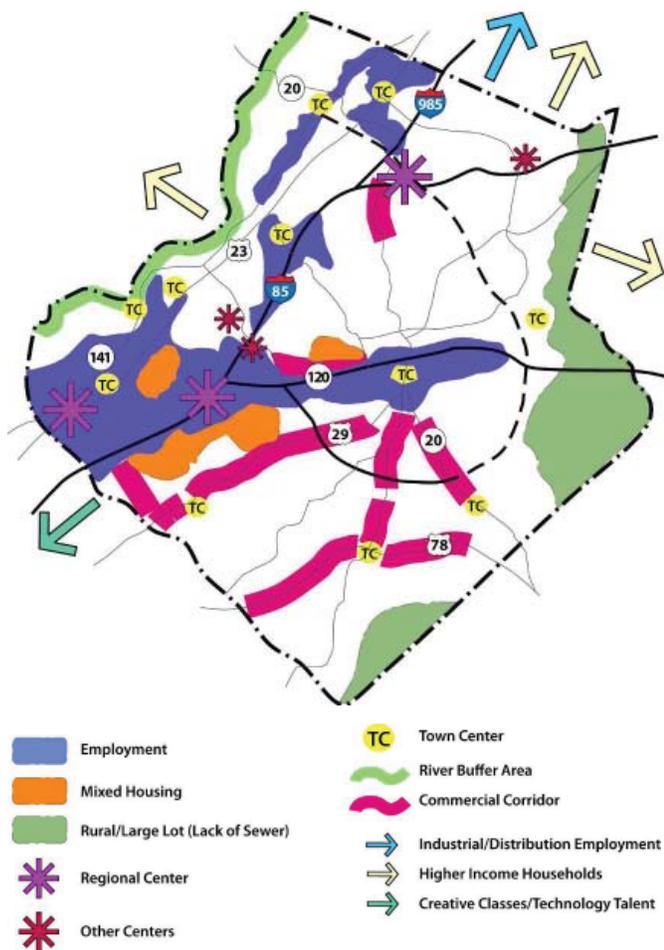


Figure 42: Middle of the Pack Scenario

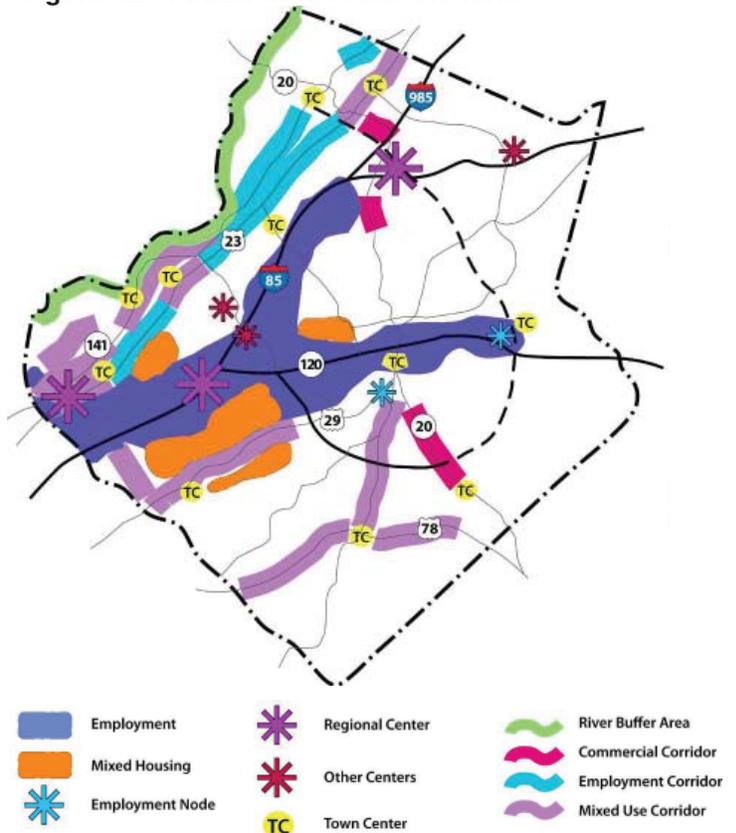
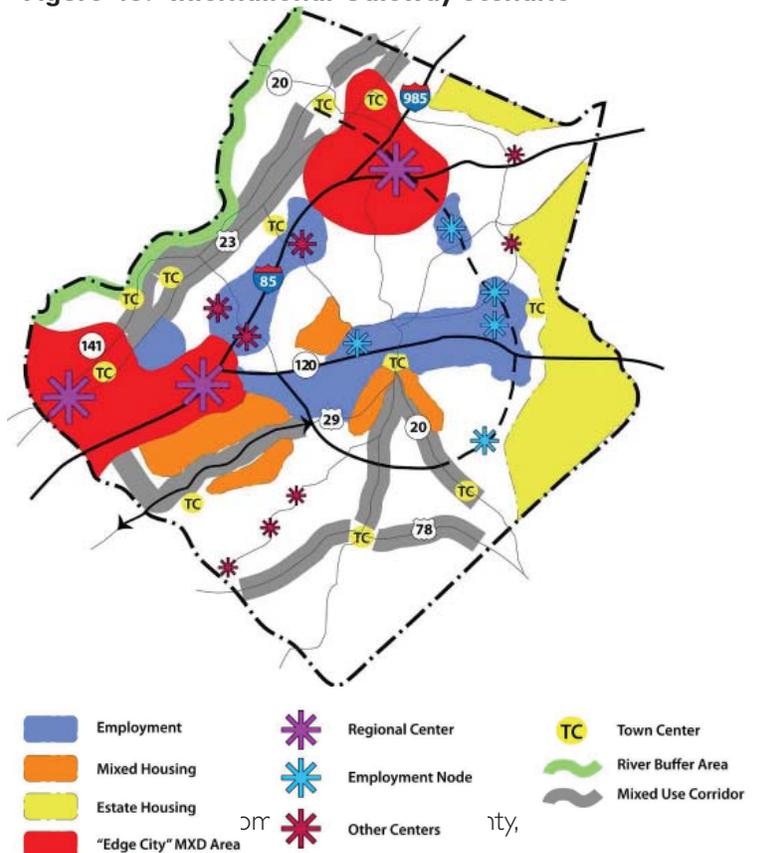


Figure 43: International Gateway Scenario

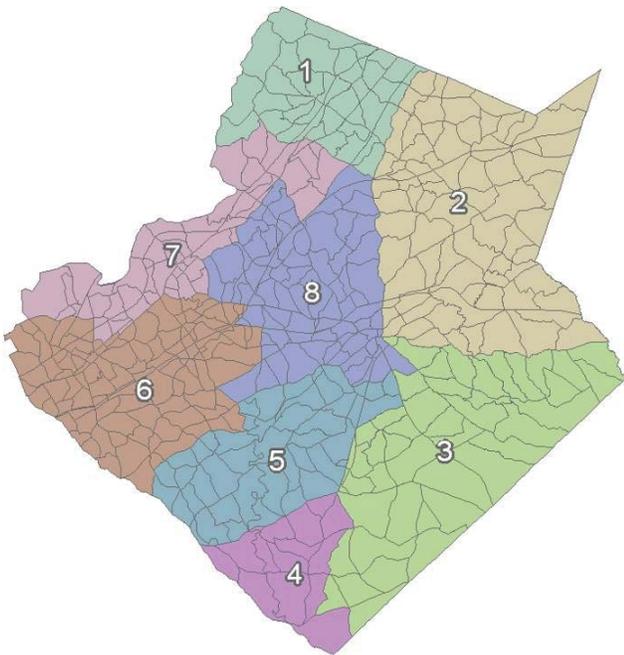


the general concepts represented by the above sketches to a more specific and concrete allocation of land uses was a significant effort that required a modeling or simulation process. Because the distribution of future land uses is at the heart of the Unified Plan, it is very important to clearly understand the method used to develop these allocations. The next section describes the approach and methodology used to allocate land uses so the scenarios could be tested for their impacts and become the basis for determining needed policies and actions to counter such impacts or better promote the goals of the particular scenario. Appendix C presents more detail on the methodology.

B.3.2 Converting Scenario Concepts into Land Use Allocations

The land use allocations were a two step process, mixing modeling with expert judgment, starting at a coarser geography of 8 Sub-County Areas or SCAs and proceeding to a finer grain of Traffic Analysis Zones or TAZs that are used to model transportation demand (see Figure 44). This in turn is based on a parcel level database in the county's GIS. These processes are each described in turn below.

Figure 44: Statistical Analysis Sub-County Areas Showing TAZs within Them



Sub-County Areas

To better portray such local variations in the allocations for each scenario, Gwinnett County was subdivided into eight sub-county areas (SCAs) to which future jobs and households were allocated.

The plan alternatives were developed and quantified in an extended process spanning more than a year. The first step, described earlier, consisted of developing a “market-driven” forecast that described probable conditions through 2030 in the absence of any major policy changes. This scenario was quantified in terms of economic and demographic variables for Gwinnett County and the eight SCAs using a county and sub county level allocation model described in the Appendix. The model results were then subjected to a multistage review process in which the consultant team and county staff assessed the physical feasibility and probable market acceptance of the new development forecasted for each SCA. This coarse level of allocation sufficed for initial reviews. The resulting consensus forecast was dubbed the “Middle of the Pack” scenario and held unchanged thereafter.

The various scenarios described in the previous section were initially quantified by drawing upon the Middle of the Pack forecast and a description of build-out conditions under present zoning rather than by reusing the allocation model. Starting with pre-specified population and employment totals, the high-growth International Gateway scenario was fleshed out in several versions involving different assumptions about residential settlement patterns, dwelling types, income distributions and employment levels. Regional Slowdown became a scaled-down version of the Middle of the Pack alternative with more adverse income trends.

Transportation Analysis Zones (TAZs)

The conversion of the SCA level forecasts, treated as control totals, down to the finer geography of TAZs was accomplished through an allocation model. This model converted projected growth in population, households and jobs to needed acreages for various use categories and was then used a set of allocation rules to distribute such acreages to appropriate locations throughout the county.

To convert employment and household projections to acreages, densities of future growth were established with

the guidance of RCLCo, the Plan’s market analysts. Tables 28 and 29 give these densities (or intensities expressed as Floor Area Ratios or FARs) for non-residential and residential land uses. (More detail on these conversions and on other related assumptions can be found in Appendix D).

Table 28: Non-Residential Intensities (expressed as Floor Area Ratios)

Land Use Type	Major Activity Center (MAC)	County
CR (Commercial Retail)	0.5	0.25
OP (Office Professional)	0.5	0.25
IP (Institutional Public)	0.5	0.25
Light Industry	0.25	0.25
Heavy Industry	0.13	0.13
MUR (Mixed Use in MAC only)	1	N/A
MU (Mixed Use)	0.5	0.5

To distribute these projected land use acreages to various locations, a broad set of 12 influencing factors was applied to rate the relative attractiveness of land for development (see Table 30 for the 12 land use categories used). These 12 factors are common sense in nature, but the weight given them in influencing land use allocation was an initial judgment that was refined numerous times by the team and County for their outcomes and plausibility. Table 31 reflects the final weightings used.

Additional features of the allocation process warrant mention. These addressed exclusions, conversion difficulty and overlays.

Table 30: Land Uses Allocated

Commercial
CR (Commercial retail)
OP (Office Professional)
IP (Institutional Public)
LI (Light Industry)
HI (Heavy Industry)
Residential
EST (Estate)
SF (Single Family)
TH (Townhouse)
HDR (high density residential)
UHDR (Ultra high density)
Combined
MU (Mixed Use)

MUR (Mixed Use only in Major Activity Center)*
 * “Major Activity Centers” are retail/service centers expected to exceed 1 million square feet of floor space by 2020.

Exclusions: Some parcels are entirely inappropriate for certain types of development, whether due to their physical character (such as a farm on a parcel which is nothing but bedrock) or policy nature (historic sites are not available for office development). As a result, a large modifier is added to these parcels to ensure that they are not developed for a given use. Appendix C provides these details.

Conversion Difficulty: Conversion difficulty captures the difficulty (as opposed to the categorical exclusion) of converting from one land use to another. For example, it may be very easy to change land use from a low intensity residential estate land use to another use but more difficult

Table 29: Residential Density (Households per Acre)

Land Use Type	Middle of the Pack		International Gateway				
	Major Activity Center	County	MXD	Rural	SCA 6, 7, 8	Major Activity Center	County
SF (Single Family)	3	3	6	0.5	4	3	3
TH (Townhouse)	10	10	10	10	14	10	10
HDR (High Density Residential)	18	18	18	18	22	18	18
UHDR (Ultra High Density Residential)	25	25	25	25	32	25	25
MU Res (Mixed Use Residential Part)	10	10	10	10	10	10	10
MUR Res (Mixed Use Res. Part in MAC only)	30	N/A	N/A	N/A	N/A	30	N/A

to change very dense multifamily development to single-family types.

Overlays: Certain land uses may be allocated as a policy “given” rather than be subject to the more free-for-all aspects of a market-simulating allocation model. For example a deliberate policy choice to designate an area Ultra High Density residential or as an Estate area would override the allocation mechanism of the model.

The sequence in which land uses are allocated is crucial since the first categories allocated have a much larger set of options than the last uses allocated. The logic of the allocation priority used in the modeling was that the Overlays should go first, followed by the “highest and best” uses that would outbid lesser uses to gain their preferred locations. Table 32 shows the sequence used in the model.

Multiple iterations of each scenario and many tweaks to the model were needed before the team was satisfied that the land use patterns and outcomes were persuasive enough for testing. The land use outcomes are reported at the TAZ level (Appendix C). Planning Sector boundaries incorporate numerous TAZs so that the summation by District is simple.

The actual allocation in the model is done at the parcel level but this is an illustrative and hypothetical allocation.

Table 32: Land Use Allocation Sequence

1	Ultra High Density Residential (UHDR)
2	Estate Residential (EST)
3	Institutional (IP)
4	Office Professional (OP)
5	Mixed Use (MU)
6	Commercial Retail (CR)
7	High Density Residential (HDR)
8	Townhouse (TH)
9	Single Family Residential (SF)
10	Light Industrial (LI)
11	Heavy Industrial (HI)

While the model knows if land is vacant, it is entirely unaware of whether a particular parcel is actually available for development or constrained. This is not a problem when the results are summed into the TAZ level since each TAZ has many parcels and the errors of detailed allocation that inevitably accompany such modeling “come out in the wash.” Consequently, no reporting occurs at the parcel level.

Figures 45 and 46 use a dot matrix technique to highlight the overall differences in distribution of jobs and households and their varying intensities between the Middle of the Pack and the International Gateway scenarios.

Table 31: Land Use Category Weightings

	CR	OP	IP ¹	LI	HI	MUR ²	MU ²	EST ³	SF	TH	HDR	UHDR ²
Cluster of Similar use		1		2	2				3	4	4	
Proximity to Hwy Interchange		4		4	4							4
Proximity to Principal Arterials						2	2			3		
Proximity to Roads									5			
Proximity to City Center		3										
Proximity to Commercial Center		4				2						3
Proximity to Park									2	1		2
Proximity to School												
Parcel Size				1	1							
Proximity to Employment Center										2		2
Proximity to Executive Housing									3			
Traffic Count		5										

1 Allocated along with OP

2 Had overlay layers

3 No New Estate was expected in the model, except that all remaining agriculture land use was changed into estate in the International Gateway scenario

Figure 45: Households & Employment in 2030 - Middle of the Pack

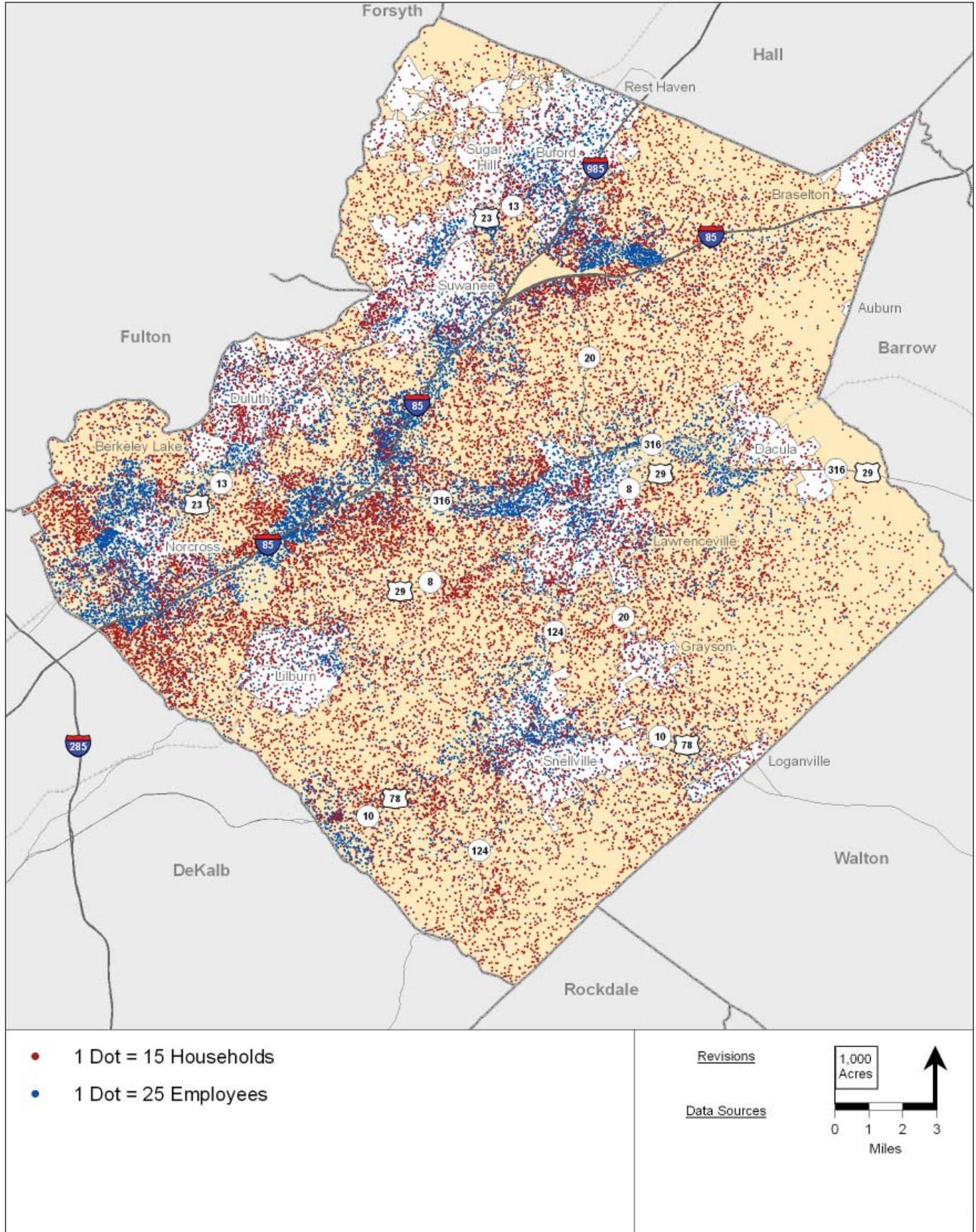
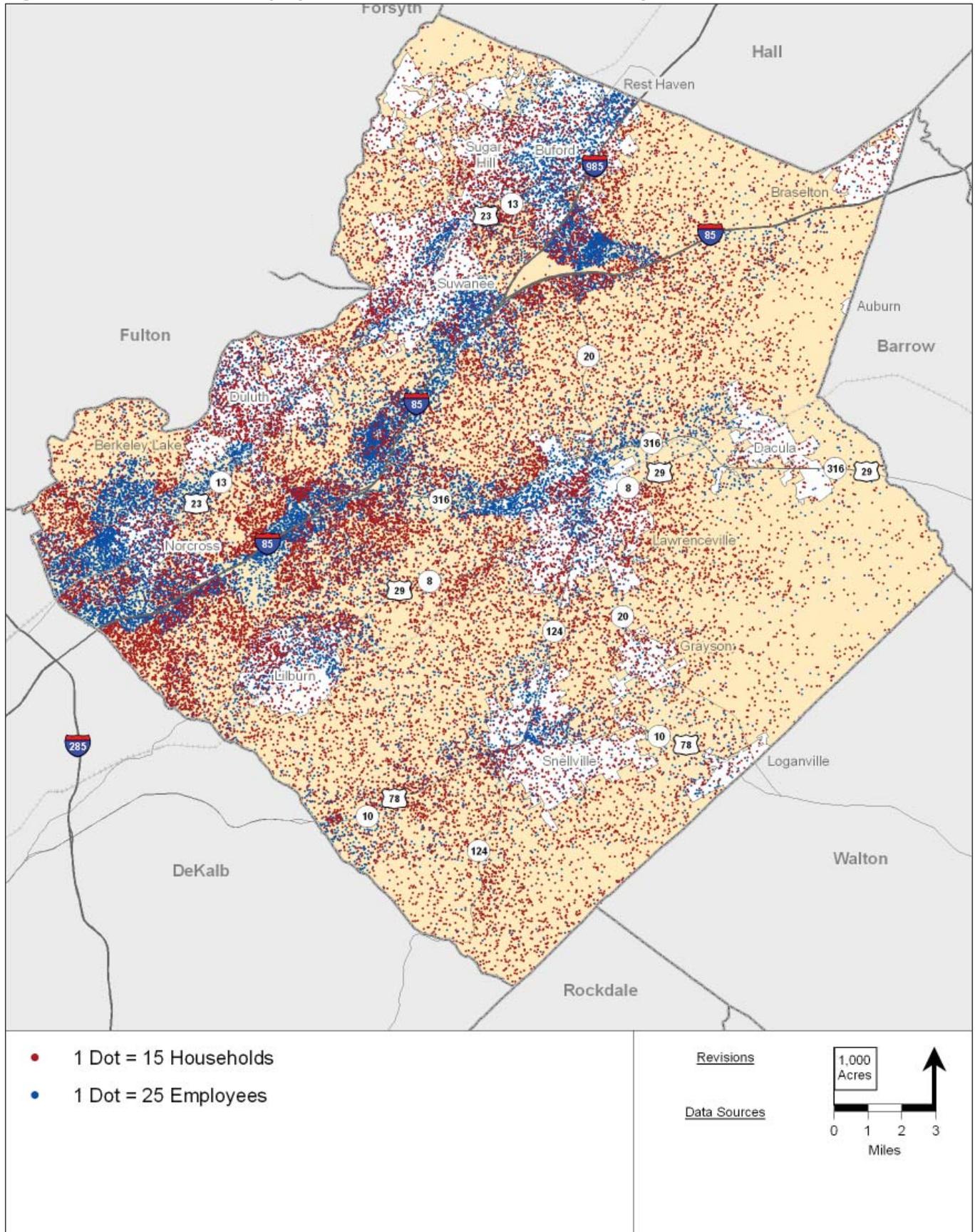


Figure 46: Households & Employment in 2030 - International Gateway



B.3.3 Final Refinements

Following initial impact modeling and fiscal evaluations, several significant adjustments occurred. The most important was a decision to drop further consideration of the Regional Slowdown scenario. This was done because the consensus was that in response to a major slowing of regional growth Gwinnett would not remain passive, but would actively try to reposition itself. Furthermore, the Middle of the Pack scenario already showed aspects of a loss of momentum and challenges, such as expansion of areas needing redevelopment, impacts on the tax revenue base, loss of higher income families and difficulties in attracting new economic sectors to replace declining ones.

Another important decision was to reconceptualize key aspects of the International Gateway scenario. First, to make the scenario more plausible, the overall levels of growth were reduced approximately 5%. More important was a shift in the overall geography of the original version. The original version had future employment more dispersed and much residential growth as suburban low and medium density in the northeast and southeast areas of the County. In contrast, the revised International Gateway (henceforth simply called the International Gateway scenario) variation concentrated more employment and residential growth in the area between the I-85 corridor and the Chattahoochee River boundary of the County.

This shift in the land use patterns was partly in response to on-going efforts to create a new county to Gwinnett's west. Under this proposal much of north Fulton County would detach itself from the remainder of Fulton and become an independent Milton County. Even if not formed, due to its concentration of wealth and power along Georgia Highway 400, this area is poised to become the leading economic development center of the region. By improving roadway connections to Georgia 400 and concentrating jobs near Gwinnett's western boundary, Gwinnett will better position itself to shift its own employment profile to a more service and technology oriented base. Another highlight of this scenario is making the GA 316 corridor near Lawrenceville a biomedical and technology employment corridor. But the main economic development needs of Gwinnett would be obtaining a greater share of the region's office employment market by aligning itself more closely to the economic centers along the Georgia 400 corridor, even if Milton County never materializes.

Increased mixed-use development and provisions for large areas of "preferred office development" are the key policies to make this aspect of the scenario work.

Another important reason for the International Gateway shift of land uses and intensities to the area between the I-85 corridor and the Chattahoochee was the physical and cost efficiencies of upgrading public utilities, especially the sewer system, to serve significant redevelopment within this area as opposed to expanding and upgrading sewer mains and related infrastructure throughout the County. The Department of Water Resources (DWR) has determined that the sewage treatment network in the area between the I-85 corridor and the Chattahoochee will need major upgrades under any future scenario. DWR determined that the scale of such upgrades can be increased to meet the needs of the International Gateway scenario at less cost than having to do some lesser level of upgrade and install extensive new infrastructure throughout the eastern portion of Gwinnett that is not served by public sewer.

This revised pattern of future economic development will require redevelopment of many single-use commercial or light industrial areas into higher density mixed-use centers. Furthermore, average densities for different residential categories were raised and the mix of housing types was tilted a bit more toward attached and multifamily units in the I-85 and SR 316 corridors, as well as along key arterials, especially west of I-85. Concurrent with such increased densities is the need to better disperse townhouse and multi-family developments in the County rather than concentrate them in only a relatively few areas as under past land use and zoning practices. This scenario also envisioned redeveloping such aging concentrations of multifamily housing and replacing them with a more diverse mix of housing types.

Such shifts would allow Gwinnett to maintain a relatively low development density in the northeast and eastern area of Gwinnett, in large part through limiting sewer system extensions. This aspect of the International Gateway scenario stemmed in part from the desire of some stakeholders to retain aspects of Gwinnett's "rural" landscape and better provide for the anticipated market for large lot "executive housing" that the International Gateway economic development goals will generate. However, as borne out by the fiscal modeling, the main benefit to the County is to significantly reduce future



costs of servicing wall-to-wall, more costly suburban development by concentrating more future growth in other parts of the County where infrastructure improvements will be required to support higher intensity commercial and employment growth. Without this shift in development intensity from east to west, the growth and economic prosperity envisioned for the International Gateway scenario will never be achieved.

A third source of International Gateway revisions were the results of preliminary traffic model runs on all three of the scenarios that emerged from the scenario development work of late winter and early spring 2007. By spreading higher levels of future growth throughout the County, the original International Gateway land use allocations resulted in also spreading high levels of future traffic congestion and traffic delays throughout the County. Furthermore, such dispersal also diminished the ability of any reasonably designed transit system to help alleviate such problems. Concentrating more future growth in the area between the I-85 corridor and the Chattahoochee was felt to limit the spread of congestion across the County and to enable needed road network improvements to be focused on a fewer number of key arterials. More effectively concentrating jobs and households in fewer corridors would make it easier for transit to more effectively serve potential transit ridership.

(The Economic Development and Fiscal Responsibility theme map in Section D.2 shows the primary geographic results of the changes made for the International Gateway scenario.)

B.4 Scenario Forecasts

The Countywide forecast described in Part 2, Section A provided overall totals for jobs, population and incomes. Nevertheless, these figures also hide how different parts of Gwinnett have often highly contrasting economic and demographic characteristics and how these contrasts were even more accentuated by the premises of the two main scenarios.

Tables 33a through 34e summarize sub-area data for both the Middle of the Pack and International Gateway scenarios based on the sub-areas used for the land use allocations described on pages 78-79.⁵ A map of the SCAs can be found on page 77. The highlighted rows of Tables 34a, b and e show the differences of the Gateway scenario from those of the Middle of the Pack. The overall totals in the tables reflect minor adjustments made in the course of the scenario work in Part 2, Section A.

Comparing these two sets of data further emphasizes the differences between the two scenarios and shows how they are not simply a variation on the “low, medium, or high” approach to the same basic outcome. The International Gateway scenario has much higher employment in SCAs 1 and 6, more moderate increases in SCAs 7 and 8, and substantially lower employment elsewhere. The shift of future development from east to west that helps differentiate the International Gateway scenario from Middle of the Pack scenario is seen in how SCAs 2 and 3 have lower households and population in the International Gateway alternative than the Middle of the Pack scenario. The differences in the two scenarios are not just in number of jobs or households or where they are located. The International Gateway scenario contains a significantly higher overall income profile (measured as the sum of differences for the two upper income groups). The income gaps between the two scenarios are especially large for SCAs 4, 5, 7 and 8. Only SCA 1 – which would have much more employment and housing of higher-density types in the International Gateway scenario – has a lower income profile in the International Gateway than the Middle of the Pack scenario.

⁵ Income is now described using a four-way classification to fit the classifications that the transportation model used to generate future travel demand requires

Table 33a: Characteristics of Middle of the Pack Scenario - 2030 Employment

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Construction	2,942	6,146	5,485	1,421	3,126	4,498	3,649	5,637	32,905
Manufacturing	1,796	4,846	1,198	610	1,219	8,664	3,418	6,959	28,710
TCU	1,132	2,443	621	409	865	6,482	3,368	4,543	19,863
Wholesale Trade	3,702	6,022	1,167	1,019	1,712	15,596	5,794	12,514	47,525
Retail trade	6,258	13,433	7,705	3,003	7,348	27,135	8,181	14,977	88,039
FIRE	2,850	5,229	3,451	956	2,039	9,799	4,774	8,590	37,687
Services	11,719	19,473	12,415	6,006	15,351	53,097	22,828	40,068	180,958
Government	4,097	7,531	6,262	1,920	4,795	10,250	5,091	12,086	52,031
Total	34,496	65,124	38,304	15,343	36,455	135,520	57,104	105,374	487,719

Table 33b: Characteristics of Middle of the Pack Scenario - 2030 Households by Relative Income

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Bottom 14.3%	2,863	3,996	3,841	2,392	4,171	14,225	4,086	7,498	43,073
Next 31.94%	7,836	15,645	16,967	7,793	12,498	33,880	10,592	18,735	123,947
Next 35.22%	10,927	29,054	25,310	7,165	15,155	22,025	13,253	18,388	141,277
Top 18.54%	4,165	12,110	8,312	2,477	7,904	7,218	9,755	8,931	60,871
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168

Table 33c: Characteristics of Middle of the Pack Scenario - 2030 Households by Units in Structure

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
SF Detached	19,422	51,014	46,921	14,209	31,082	29,575	24,761	34,650	251,633
SFA & duplex	2,233	4,360	3,936	1,780	3,654	7,426	3,049	6,103	32,540
3 to 9	1,712	2,668	1,843	2,058	2,847	15,370	4,061	5,096	35,655
10 or more	2,284	2,702	1,662	1,695	2,119	24,876	5,794	7,640	48,773
Mobile home	141	61	69	86	25	101	21	62	567
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168

Table 33d: Characteristics of Middle of the Pack Scenario - 2030 Households by Persons in Household

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
1 person	5,735	11,742	9,825	3,858	6,914	20,830	8,492	11,042	78,438
2 persons	7,890	17,864	16,443	5,549	11,300	21,450	11,245	14,324	106,066
3 persons	5,036	12,648	11,471	4,193	8,678	13,929	7,490	11,222	74,666
4 persons	4,409	11,945	10,424	3,807	8,078	10,040	6,884	10,435	66,023
5 persons	1,701	4,336	4,317	1,592	3,217	5,650	2,451	4,218	27,482
6 persons	589	1,576	1,323	535	1,052	2,867	766	1,507	10,215
7+ persons	430	692	626	294	489	2,581	361	804	6,277
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168

Table 33e: Characteristics of Middle of the Pack Scenario - 2030 Population by Household Status

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
In households	69,752	169,756	153,290	56,278	114,069	212,447	100,691	151,597	1,027,880
In group quarters	231	7,363	325	223	241	3,533	210	1,374	13,500
Total population	69,983	177,120	153,615	56,501	114,310	215,980	100,901	152,972	1,041,380

PART 1
PART 2
PART 3

Table 34a: Characteristics of International Gateway Scenario - 2030 Employment

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Construction	5,849	6,520	4,161	1,435	2,871	8,864	5,182	7,464	42,344
Manufacturing	2,304	3,827	669	451	778	10,209	3,530	7,407	29,175
TCU	2,058	2,079	355	264	508	10,048	4,309	5,448	25,069
Wholesale Trade	6,573	4,282	672	726	964	20,410	7,429	15,007	56,063
Retail trade	9,066	12,322	4,584	2,597	6,231	36,760	8,722	15,648	95,929
FIRE	5,237	4,556	2,151	836	1,697	18,440	6,250	10,195	49,363
Services	24,411	17,964	7,581	4,324	10,471	90,270	33,184	51,985	240,190
Government	6,971	6,319	3,889	1,397	3,548	15,633	5,896	13,165	56,818
Total	62,471	57,867	24,061	12,030	27,068	210,632	74,501	126,319	594,950
% Above MOP	81%	-11%	-37%	-22%	-26%	55%	30%	20%	22%

Table 34b: Characteristics of International Gateway Scenario - 2030 Households by Relative Income

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Bottom 14.3%	4,566	2,758	2,596	1,647	2,563	14,782	3,111	6,172	38,196
Next 31.94%	11,474	12,495	13,061	6,539	9,547	44,932	9,541	17,597	125,186
Next 35.22%	15,292	25,869	21,466	8,830	18,418	37,997	17,691	25,397	170,961
Top 18.54%	5,602	12,227	8,020	3,502	10,509	8,987	14,798	12,391	76,036
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378
% Above MOP	43%	-12%	-17%	3%	3%	38%	20%	15%	11%

Table 34c: Characteristics of International Gateway Scenario - 2030 Households by Units in Structure

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
SF Detached	22,305	42,668	38,910	14,054	31,041	37,884	26,577	37,550	250,988
SFA & duplex	5,361	4,599	3,151	2,035	4,126	11,713	5,161	6,985	43,130
3 to 9	3,652	2,969	1,535	2,323	3,242	21,028	5,543	7,123	47,415
10 or more	5,369	3,051	1,465	1,969	2,575	35,888	7,818	9,767	67,903
Mobile home	247	63	81	139	53	184	43	132	942
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378

Table 34d: Characteristics of International Gateway Scenario - 2030 Households by Persons in Household

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
1 person	8,226	10,391	8,210	4,005	7,268	29,163	10,449	12,895	90,608
2 persons	11,295	15,648	13,619	5,739	11,643	29,472	13,376	16,421	117,212
3 persons	7,211	11,095	9,510	4,338	8,959	19,123	8,957	12,891	82,083
4 persons	6,309	10,443	8,622	3,934	8,290	13,762	8,135	11,906	71,402
5 persons	2,435	3,791	3,569	1,645	3,299	7,730	2,894	4,809	30,171
6 persons	844	1,379	1,095	553	1,080	3,941	907	1,722	11,521
7+ persons	616	604	517	304	500	3,507	423	912	7,382
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378

Table 34e: Characteristics of International Gateway Scenario - 2030 Population by Household Status

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
In households	99,854	148,699	126,964	58,201	117,458	291,782	119,876	173,643	1,136,476
In group quarters	231	7,378	326	223	241	3,539	210	1,376	13,524
Total population	100,085	156,076	127,289	58,424	117,700	295,321	120,086	175,019	1,150,000
% Above MOP	43%	-12%	-17%	3%	3%	37%	19%	14%	10%

B.5 Scenario Policies

A final step in constructing the scenarios was the development and application of various policies to make the scenarios more achievable or to diminish some of their potential negative impacts. Because the International Gateway scenario is a marked change from today's status quo, most of the policies developed in response to the needs of the scenarios applied to the International Gateway. In contrast, the Middle of the Pack alternative is largely a market driven trends alternative that requires fewer new purposeful initiatives to be fulfilled.

The final list of 33 policies developed for the scenarios emerged from a pool of 90 potential policies that represented a variety of viewpoints and approaches – e.g., TAC and PAC priorities, the priorities of other stakeholder groups, the need to address issues of concern to members of the Board of Commissioners and the consultants' experience dealing with similar issues in other jurisdictions. For each policy, the team determined the relative cost, level of difficulty, and short-, medium-, and long-term impact. The team also evaluated how well each policy met various transportation, fiscal, land use, preferred place, and housing goals. Stakeholder interest or potential support for each policy was also evaluated.

To assist with the policy prioritization process, the various evaluation criteria results were compiled and the policies were sorted by how well they met different criteria sets. With this information in hand, numerous reviews and discussions with the TAC, the PAC, and agency heads led to a culling of the list based on lack of significance, excessive costs versus likely outcomes, legal considerations, and in some cases, a merger of policies that were very similar in intent and approach.

These policies continued to be refined through the drafting of the final version of the plan. Section D.2 describes the five themes used to organize the Unified Plan recommendations and sorts this final list of policies in relation to the theme to which each policy directly relates.

B.6 Why the Plan Retains Two Alternatives

Because this plan process sought to avoid a single state endpoint and give the County a good deal of flexibility in addressing future circumstances, neither of the final two scenarios became a “final choice.” One, International Gateway, is the “preferred” alternative, and the Unified Plan builds most of its recommendations around this preference. At the same time, the Unified Plan recognizes that a more trends-based outcome is possible and that this is a less desirable outcome.

Gwinnett County is today at a turning point. If current trends are allowed to continue, the County's slow decline along the Middle of the Pack lines seems inevitable. This may result in the eventual loss of the regional leadership position the County has assumed in recent decades. Unfortunately, taking the steps required to arrest the decline and strike a new path toward excellence and renewed economic prosperity will not be easy. The policies laid out in the next chapter on themes will require sustained effort well beyond the terms of the current sitting Board. Furthermore, the projected regional growth that fueled this scenario may not materialize. The next chapter focuses on a desired future, the general outcome stemming from the International Gateway scenario, that the County should strive to bring about. Nevertheless, the County will need to be prepared for a different outcome if it cannot (or chooses not) to take the actions required to secure this desired future.

Gwinnett County is today at a turning point. If current trends are allowed to continue, the County's slow decline along the Middle of the Pack lines seems inevitable.

Key Scenario Characteristics

MIDDLE OF THE PACK SCENARIO

- Atlanta region continues to prosper: Gwinnett continues to benefit but remains a modest draw economically.
- Population and Employment
 1. 1.04 million people (369,000 households)
 - a. 47% increase over today
 2. 487,000 jobs
 - a. 53% increase over today
- County's median income levels decline to more resemble that of the region as a whole.
- Despite some leveling of proportions of well off and less well off, economic differences between the more affluent Northeast and the more modest, more multicultural southwest and southeast remain noticeable.
- Construction industry, light industrial, warehouse, and distribution employers have mostly left by about 2025 due to congestion, rising land costs and approach of buildout.
- Congestion improvement measures limited to those with little cost and little risk to implement ; relief is marginal and congestion limits growth of higher end economic segments
- Development pattern doesn't change much from today. The scale of development remains fairly low-density over much of the County with pockets of increased density at key activity centers. Sewer (in one form or another) eventually serves the entire county.
- Emphasis shifts from growth to maintenance of quality and revitalization of older areas.
- Increased percentage of County's budget goes toward maintaining existing facilities and operations rather than new capital improvements.
- More incentives for redevelopment. This includes new zoning code provisions, tax breaks, density bonuses, and fast track approvals, but minimal public sector investments.
- County policies rely on CIDs which are fairly successful in preventing widespread disinvestment and inspire additional corridor-based CIDs.
- County policies become increasing proactive on housing issues—upkeep of established neighborhoods, work force housing and affordability.
- Sugarloaf Parkway extension constructed but only reaches GA316 east of Lawrenceville by 2015, extended to PIB as toll facility by 2030.
- County continues to rely on non-profits to address many human service and cultural needs.

INTERNATIONAL GATEWAY SCENARIO

- U.S. economy is strong and Atlanta is the high-tech hub for the Southeast.
- Very substantial job growth attracted to the region
- Much of Gwinnett's economic vitality pivots off proximity to North Fulton County, the region's economic center.
- Public sector resources invested in facilities and programs and "quality of life" resources that make Gwinnett a "preferred place" for new businesses and residents.
- Wider use of public – private partnerships to plan and build needed infrastructure and implement qualitative visions of Partnership Gwinnett; e.g. better education,
- Counties and Cities coordinate efforts to attract "quality" growth and locate "quality of life" features.
- Population and Employment
 1. 1.15 million people (410,300 households)
 - a. 67% increase over today
 - b. 11% increase over Middle of the Pack scenario
 2. 594,950 jobs
 - a. 89% increase over today
 - b. 22% increase over Middle of the Pack scenario
- Transportation, Infrastructure and Land Use policies are coordinated to protect and enhance the economic development primacy of Gwinnett between the I-85 corridor and north Fulton County.
- Major economic development and redevelopment investments in selected arterial corridors.
- Additional and improved river crossing to improve access to and from the Georgia 400 corridor and future Fulton County and Forsyth County centers
- Primary jobs promoted are academic, scientific, financial services.
- GA 316 corridor becomes a focus for County's R and D businesses. International and multicultural components of workforce grow as do international and multicultural components of employment base and sources of investment.
- Less dense, "rural" patterns prevail over much of northeast and eastern Gwinnett.
- Other countries also provide tourism revenue (for example, the visitors of the new Hindu temple which has been constructed in Lilburn).

C. TESTING AND EVALUATION

C.I Final Results

One way the Unified Plan differs from many plans is in the extensive testing and analysis of the various possibilities represented by the different scenarios. Once a final round of detailing of both the International Gateway and the Middle of the Pack scenarios was completed, these final versions then underwent further evaluation using various models that projected likely impacts and linked the results to enable determination of how varying specific aspects of the scenario (e.g., land use densities or transit levels) affected other factors

The evaluation of the scenarios focused on three areas that have a profound influence on future land use and economic development potential and the ability of the County to fund and operate those facilities, infrastructure and services needed to fully implement the Unified Plan. These were the:

1. Transportation Network
2. Sewage Treatment System
3. Fiscal Capabilities of County

We will review these in turn.

Three areas that have a profound influence on future land use and economic development potential: transportation, sewage treatment and the fiscal capabilities of the County.

C.I.I Transportation

In Part I.C, Section 6, the existing transportation network and traffic conditions were reviewed and issues identified. In this section the results of analyzing the two land use/ transportation scenarios, in which levels of growth and transportation improvements are matched, are presented. The results of implementing the land use changes without corresponding transportation improvements are also explored. Transit options are also analyzed.

This section differs from the Comprehensive Transportation Plan (CTP) in that the CTP addressed and tested one final scenario – the Middle of the Pack – and a limited transportation network, all in line with the guidelines for such documents. The Unified Plan, however, also tackles more ambitious and extensive scenarios and compares them to the CTP analysis.

Overall Changes in Trip Making

An important factor driving Gwinnett’s future congestion is growth in work-related trips because they occur at peak hour. Table 35 shows that the number of daily Gwinnett-based work trips is expected to increase over the planning period. In addition, there will be growth in intra-Gwinnett work trips. However, as a percentage of total work trips, the intra-county work trips are forecast to decrease over the planning period, despite the large growth in local jobs assumed in the International Gateway scenario. This is likely because the region overall is seeing an increase in jobs in the International Gateway scenario and more Gwinnett residents will travel outside the county to these.

Table 35: Changes in Trip Generation: 2005-2030

	2005	2030 Middle of the Pack Scenario	2030 International Gateway Scenario
All Gwinnett Based Work Trips	575,500	696,600	791,200
Intra-Gwinnett Work Trips	390,600	406,000	475,000
Percent Intra-Gwinnett Work Trips	68%	58%	60%

The Travel Model and its Application

The ARC travel demand model, as enhanced by the study team, was used to examine present and future year travel demand and congestion in Gwinnett County. Enhancements included further subdividing the County's existing 306 traffic analysis zones (TAZs) by adding another 176 zones. This 58 percent increase results in a much finer grain analysis of development impacts on travel. Furthermore, collector roads that were absent from the original ARC highway network were added. The highway, transit, and socioeconomic data files associated with the zone structure changes were also modified. (Appendix J presents a full description of the model enhancements and refinements.)

Present day analysis used year 2005 household and employment data from ARC to test the performance of the 2005 roadway network (discussed in Part I of this Plan). The 2030 socioeconomic data developed for the Gwinnett County Unified Plan was used to test the performance of the 2030 transportation network. Three transportation futures were modeled:

- Middle of the Pack socioeconomic and land use data on the Middle of the Pack transportation network,
- International Gateway socioeconomic and land use data on the International Gateway transportation network, and
- International Gateway socioeconomic and land use data on the Middle of the Pack transportation network.

This final hybrid shows how the transportation system would perform if the population and job increases forecast for the International Gateway scenario are realized, but associated transportation investments

are not. This provides important feedback to decision makers when approving projects in relation to transportation improvements.

Transportation Networks

The two scenarios have different transportation networks which were judged to be roughly appropriate to the level of growth envisaged in the scenarios. Tables 36 and 37 summarize the assumptions in each network, and Figures 47 and 48 show the tested networks and indicate the greater breadth of the International Gateway network.

Table 36: Key Features of the Alternative Networks

	2005	2030 Middle of Pack Scenario	2030 International Gateway Scenario
Lane miles of road (per model)	2,662	2,953	3,549
Heavy rail stations	0	0	3
Commuter rail stations	0	0	6
Regional bus routes in Gwinnett County	3	9	19

The travel model classifies roads by function and reports results by these categories. Note that these are not the same functional classes used for the County's Major Thoroughfare Map (Figure 79) referenced in Part 3.D. Also, note that local road miles in 2005 are greater than in 2030. There are a couple of explanations for this. One is that some of the committed projects may be conversions of local roads to arterials. Another is that ARC may have revised the roadway classification coding between the 2005 13-County model and the 2030 20-County model. This anomaly affects the roadway classification based results and means that those results should not be compared to the

Table 37: Roadway Functional Classification in the Travel Demand Model

	2005	Percent of Total	2030 Middle of Pack Scenario	Percent of Total	2030 International Gateway Scenario	Percent of Total
Total Lane miles of road (per model)	2,662		2,953		3,549	
Freeways	385.7	14.5%	537.6	18.2%	683.0	19.2%
Arterials	1691.8	63.5%	1940.2	65.7%	2392.7	67.4%
Local Road*	584.9	22.0%	475.1	16.1%	473.2	13.3%

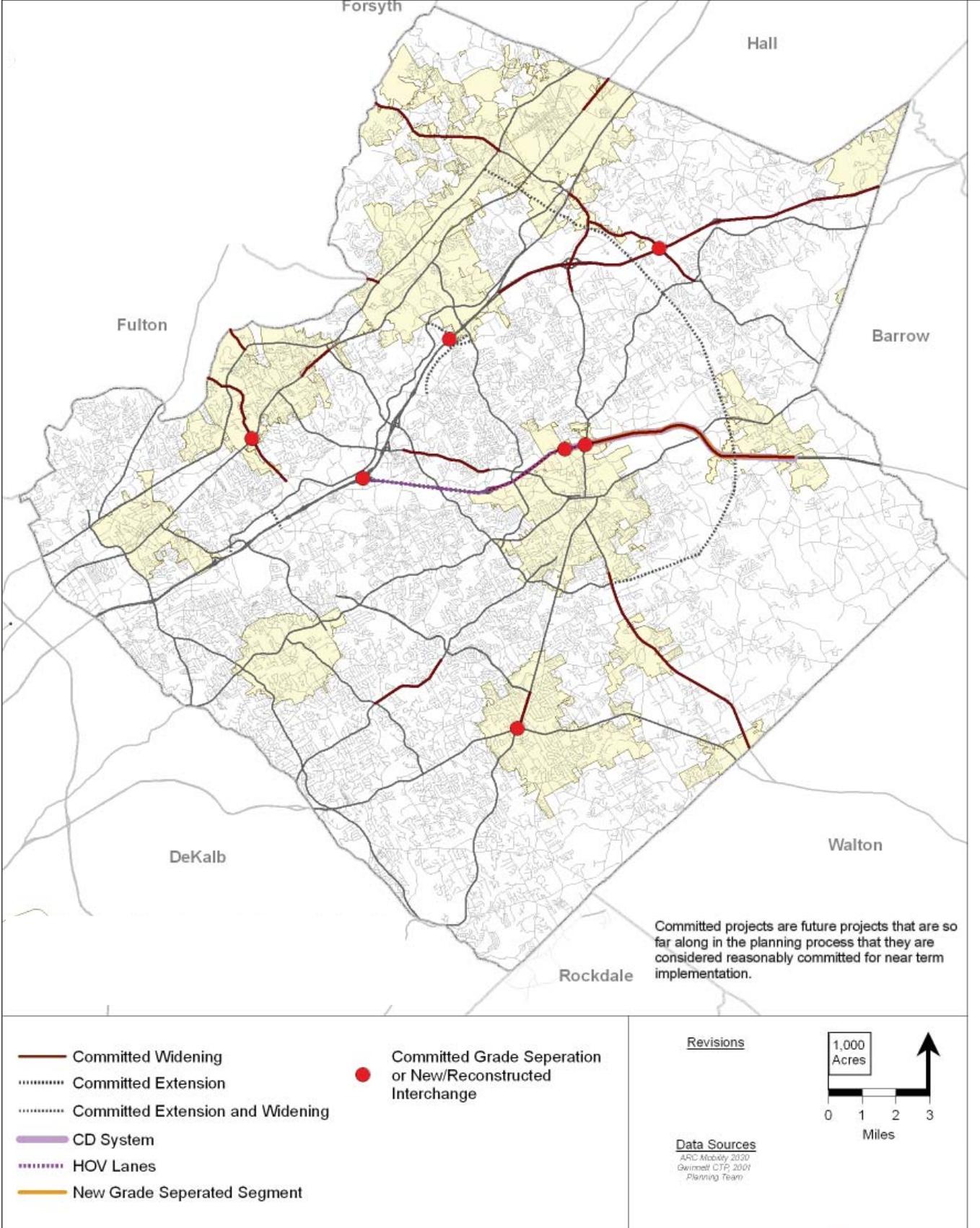
* Local Road includes Major and Minor Collectors and other local roads

Table 38: Key Improvements of Middle of the Pack Network

Project Name	Description	Project Limits
I-85	Build Interchange	at SR 324
SR 316 HOV	Build Managed Lanes	I-85 to SR 20
SR 120	Widen to 4 lanes	State Bridge (Fulton) to PIB
McGinnis Fy. Rd. Bridge	Widen to 4 lanes	Over Chattahoochee River
State Bridge Rd.	Widen to 6 lanes	SR 141 (Fulton) to PIB
McGinnis Fy. Rd.	Widen to 4 lanes	Sargent Rd. (Fulton) to PIB
Five Forks Trickum Rd.	Widen to 4 lanes	Oak Rd. to Killian Hill Rd.
SR 20	Widen to 6 lanes	I-985 to SR 324
SR 20	Widen to 8 lanes	SR 324 to I-85
SR 20	Widen to 8 lanes	I-85 to Rock Springs Rd.
SR 20 Loganville Hwy.	Widen to 4 lanes	Plantation to Ozora
SR 20 Loganville Hwy.	Widen to 4 lanes	Ozora to SR 81 (Walton)
SR 20	Widen to 4 lanes	Burgess Rd. (Forsyth) to PIB
SR 120	Widen to 4/6 lanes	Atkinson to Riverside
SR 13 Buford Hwy.	Widen to 4 lanes	Old P'tree. to Sugarloaf Pkwy.
SR 23 Buford Hwy.	Widen to 4 lanes	Thompson Mill Rd. to Friendship Rd. (Hall)
McGinnis Fy. Rd. Ext.	Build 4 lanes	Satellite Blvd. to L'ville.-Suwanee
SR 324 Gravel Spr Rd.	Widen to 4 lanes	SR 20 to I-85 N
SR 324 Gravel Spr Rd.	Widen to 4 lanes	I-85 N to SR 124
SR 124 Scenic Hwy.	Widen to 6 lanes	U.S. 78 to Ronald Reagan
Pleasant Hill Rd.	Widen to 6 lanes	Old Norcross to Chatt. River/PIB
Five Forks Trickum Rd.	Widen bridge to 4 lanes	Yellow River
SR 20 Bridge	Widen to 4 lanes	Over Chattahoochee River
SR 324 Bridge	Widen to 4 lanes	Over I-85
Sugarloaf Pkwy. Ext.	Build 4 lanes	SR 20 Grayson Hwy. to SR 316
East X-County Conn.	Build 4 lanes	SR 316 to SR 20 Buford Dr.
East X-County Conn.	Build 4 lanes	SR 20 Buford Dr. to PIB
W. Liddell/Club Conn.	Build 4 lanes	Satellite Blvd. to Shackelford Rd.
I-85 Bridge	Build 4 lanes	at W. Liddell/Club Conn.
I-85	Widen to 6 lanes	I-985 to Hamilton Mill Rd.
I-85	Widen to 6 lanes	Hamilton Mill Rd. to SR 211
SR 316	Widen to 6 lanes, Gr Sep, and CDs	Cedars Rd. to Drowning Creek Rd.
SR 316	Widen to 6 lanes, Gr Sep, and CDs	E. of Walther Blvd. to E. of SR 20
SR 316	Widen to 6 lanes	Riverside Pkwy. to Walther Blvd.
SR 316	Widen to 6 lanes	E. of SR 20 to W. of Progress Ctr. Ave.
I-85	Build Interchange	at McGinnis Fy. Rd. Ext.
I-85	Interchange Reconstruction	at SR 316
I-85 Bridge	Build 4 lanes	at Hillcrest/Satellite Conn.
N'brook Pkwy/Old P'tree	Widen/Build 4 lanes	Old P'tree/N. Brown Rds to L'ville-Suwanee Rd/Horizon Dr
Pleasant Hill Rd.	Grade Separation	at Buford Hwy. and NS RR

Source: Gwinnett County Comprehensive Transportation Plan, April 2008

Figure 47: Middle of the Pack Transportation Network (2030)



2005 results, but should rather be compared across future scenarios or within the individual scenario. (This is only an issue on Table 40: LOS by Roadway Classification.)

The Middle of the Pack transportation network is a fiscally-constrained transportation alternative. It only includes existing roads and transit routes and committed projects. Committed projects are those that are so far along in the planning and funding process that they are considered highly likely to occur during the planning time frame. Table 38 on the following page lists the new transportation projects included in the Middle of the Pack Scenario.

The CTP estimates that construction of the projects shown on the following page will cost approximately \$1.6 billion. Figure 47 shows the 2030 Middle of the Pack network. This is also the network used for the 2008 Comprehensive Transportation Plan together with the socio-economic/land use inputs from the Middle of the Pack scenario.

The International Gateway transportation network is much more aggressive than the Middle of the Pack. Not only does it include the committed projects noted previously, it also includes the additional projects shown in Table 39.

The substantial transit investments identified in the International Gateway scenario are entirely consistent with the Transit Planning Board (TPB) Concept Plan 3. Both plans include the extension of transit rail into Gwinnett with possible stations at Norcross, Indian Trail, and Gwinnett Place Mall. Both plans also include the construction of two commuter rail lines, with four stations on the “Brain Train” (a proposed commuter rail line between Atlanta and Athens), and two stations along the Norfolk Southern Railroad lines that run parallel to I-85. It should be noted that even though only two station locations were tested in the travel demand model for the I-85 corridor commuter rail line (one station between Buford and Sugar Hill and another in Duluth), the plan is not suggesting that other cities along the line (e.g., Norcross or Suwanee) are not candidates for stations. There is also an increase in regional bus service including bus rapid transit (BRT) service between Dacula and downtown Atlanta and between the Mall of Georgia and Perimeter Center, and the Mall of Georgia and Alpharetta. Aggressive service characteristics are also assumed for these evaluations. For example, bus rapid

transit service had 20 to 30 minute headways in the peak period and had comparable service levels to MARTA.

The CTP estimated the cost of the additional International Gateway scenario roadway improvements at **\$1.4 billion**, making for a total of **\$3 billion** worth of improvements, an increase of 89% over the CTP. There are no cost estimates for the transit improvements whose capital funding would be a complex mix of Federal, State and local dollars. Figure 48 portrays the 2030 International Gateway network. Figures 49 and 50 show the transit improvements.



Table 39: Key Improvements of International Gateway Network beyond Middle of the Pack

Project Name	Description	Project Limits
I-85 HOV	Build HOV Lanes	SR 316 to Hamilton Mill Rd.
SR 316 HOV	Build HOV Lanes	SR 20 to Drowning Creek Rd.
Beaver Ruin Rd	Widen to 6 lanes	Reagan Pkwy. Ext. (West Fork) to I-85
U.S. 78/SR 10	Widen to 6 lanes	SR 124 to SR 84
U.S. 78/SR 10	Widen to 6 lanes	SR 84 to SR 81
SR 23 Buford Hwy.	Widen to 4 lanes	Sugarloaf Pkwy. To SR 20
SR 316	Widen to 6 lanes	W. of Progress Ctr. Ave. to E. of Cedars Rd.
Hillcrest Rd/Tech Dr	Widen to 4 lanes	Willow Trail Pkwy to Singleton Rd
Hillcrest/Satellite Connector	Build 4 lanes	Willow Trail Pkwy to Beaver Ruin Road
Oakbrook Pkwy Ext.	Widen/Build 4 lanes	Indian Brook Way to Hillcrest Rd
Reagan Pkwy Ext.	Build 4 lanes	Pleasant Hill Road to Beaver Ruin Road
Reagan/Club Connector	Build 4 lanes	Reagan Pkwy. Ext. (North Fork) to Club Dr at Shackelford
S. Bogan Rd.	Upgrade	Hamilton Mill Rd to SR 20
Satellite/Old Peachtree Connector	Build 4 lanes	Smithtown/Sawmill Rds to Horizon Dr/Old Peachtree Rd
SR 120	Widen to 6 lanes	Lawrenceville-Suwanee Rd to Langley Dr
SR 124	Widen to 4 lanes	East of Hamilton Mill Rd to Spout Springs Rd
SR 124	Widen to 4 lanes	SR 20 to e. of Hamilton Mill Rd
SR 20	Widen to 6 lanes	SR 124 to Hurricane Shoals Rd
SR 324	Widen to 4 lanes	SR 124 to Dacula Rd
Thompson Mill Rd	Widen to 4 lanes	Buford Hwy (SR13) to N. Bogan Rd
Willow Trail Pkwy Extension	Build 2 lanes (1-way?)	Hillcrest Rd to Beaver Ruin Rd
I-85 North CD Lane	Add 1 CD lane (NB only)	I-985 to SR 20
Peachtree Pkwy Widening	Widen to 6 lanes	PIB to Fulton County
Abbotts Bridge Rd Widening	Widen to 6 lanes	PIB to Medlock Bridge Road
Five Fork Trickum Widening	Widen to 4 lanes	Oak Rd. to Sugarloaf Parkway
Ronald Reagan Pkwy Extension	Build 4 lanes	SR 124 to U.S. 78
Beaver Ruin Rd/Langford Rd Connector	Build 2 lanes	Beaver Ruin Rd to Langford Rd
Beaver Ruin Rd Extension	Build 4 lanes	Buford Hwy to PIB
PIB CD System and Grade Separation	Build 4 CD lanes	Peachtree Pkwy to Sugarloaf Pkwy
Reagan Pkwy Ext.	Build 4 lanes	Pleasant Hill Road to Beaver Ruin Road
PIB CD System and Grade Separation	Build 4 CD lanes	
Toll mainline	Peachtree Pkwy to Sugarloaf Pkwy	
Satellite Blvd Super-arterial	Build 2 CD lanes	
Make Satellite Blvd limited access roadway	Pleasant Hill Road to SR 20	
Dacula Rd/Harbins Rd/New Hope Rd Widening	Widen to 4 lanes	From Auburn Rd to Loganville Hwy
Hamilton Mill Rd Widening	Widen to 4 lanes	From Buford Hwy to SR 124
Satellite Blvd Extension	Build 4 lanes	From Buford Dr (SR 20) to Thompson Mill Rd
Collins Industrial Way/Hillcrest Green Dr Connection	Build 2 lanes	Collins Industrial Way to Hillcrest Green Dr
Satellite Blvd/Indian Trail Rd Connection	Build 4 lanes	From Satellite Blvd to Indian Trail Road

Source: Gwinnett County Comprehensive Transportation Plan, April 2008

Figure 48: International Gateway Transportation Network (2030)

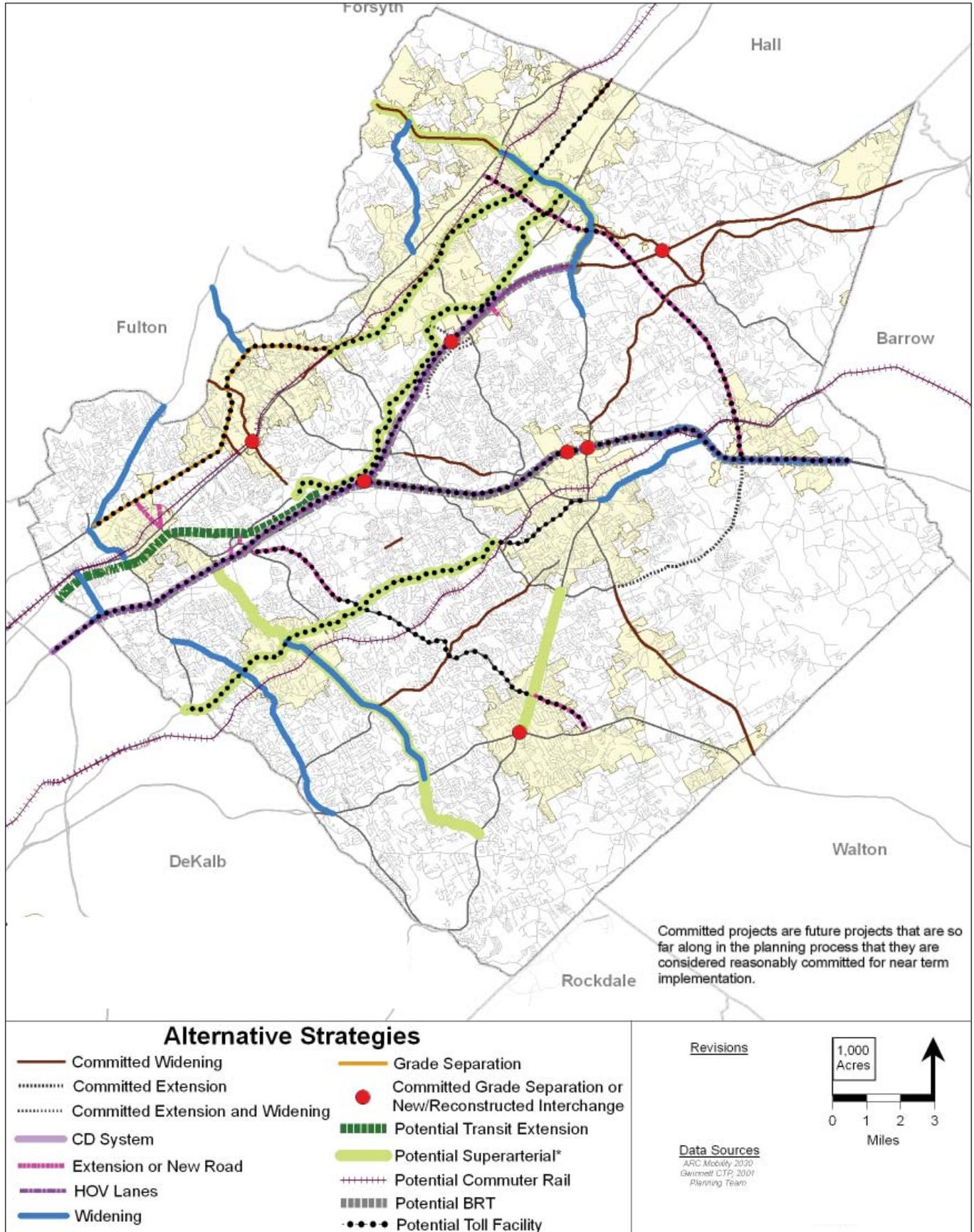


Figure 49: Potential 2030 Transportation Network - Commuter Rail

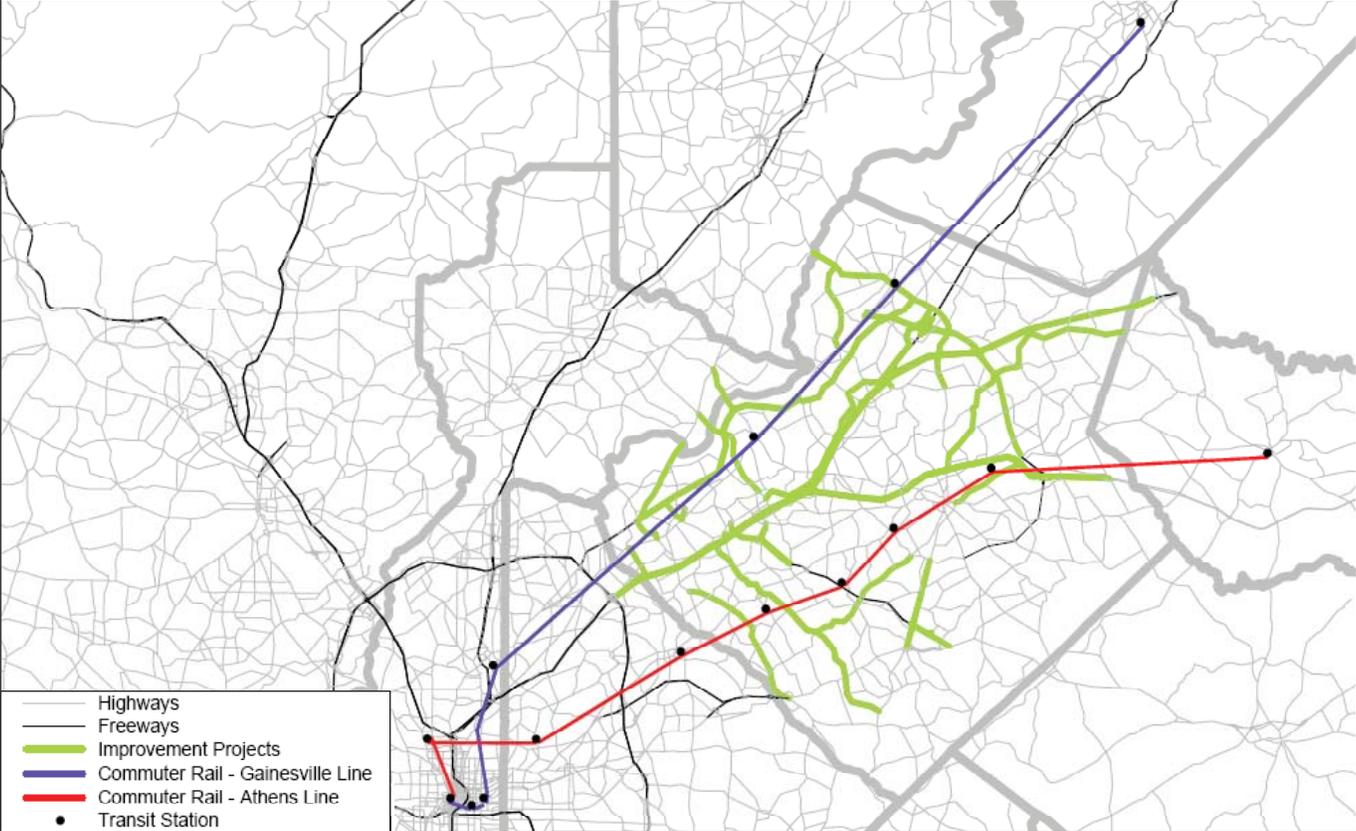
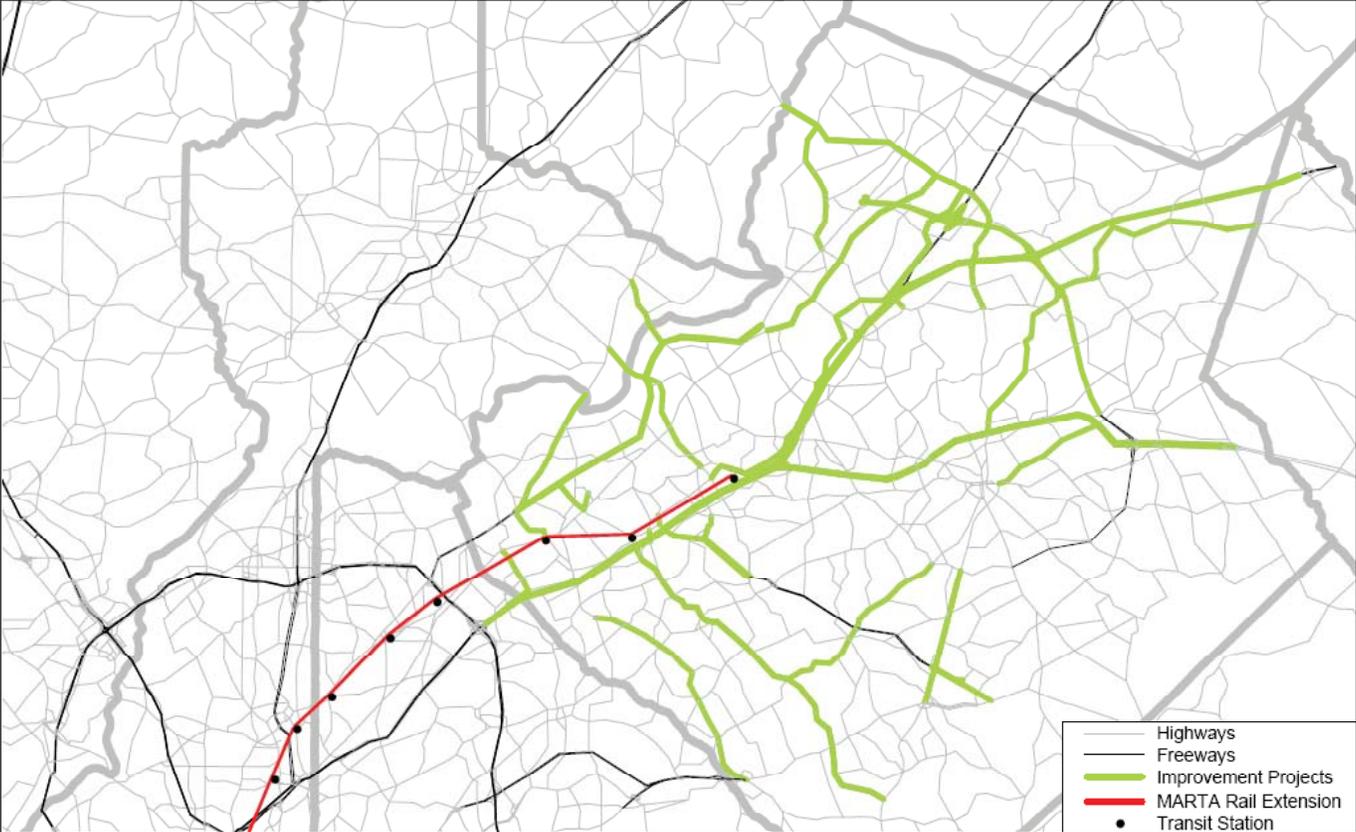


Figure 50: Potential 2030 Transportation Network - MARTA Rail Extension



Indicators

This study uses several indicators or Measures of Effectiveness (MOEs) to synthesize the results of the travel demand model runs. The indicators show how the networks perform under the different scenarios. The key indicators presented here are for Level of Service, Duration of Congestion, Vehicle Hours of Delay, Accessibility, and Travel by Mode.

Overall, the indicators show a significant increase in congestion between 2005 and 2030 under all scenarios. Much of this increase appears in the southwestern part of the County, which is already congested. Areas in less densely developed parts of Gwinnett also show worsening congestion over the 25-year period.

Level of Service

Level of service (LOS) is a measure of how severe congestion is during the peak period. Traffic ranges from free flowing traffic to standstill. There are six levels of service ranges (LOS A through LOS F) typically used to evaluate traffic conditions. The Transportation Planning Handbook prepared by the Institute of Transportation Engineers defines the different levels of service as follows:

LOS A: Free flow with individual users virtually unaffected by the presence of others in the traffic stream.

LOS B: Stable flow with a high degree of freedom to select speed and operating conditions but with some influence from others.

LOS C: Restricted flow which remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.

LOS D: High-density flow in which speed and freedom to maneuver are severely restricted and comfort and convenience have declined even though flow remains stable.

LOS E: Unstable flow at or near capacity levels with poor levels of comfort and convenience.

LOS F: Forced flow in which the amount of traffic approaching a point exceeds the amount that can be served, and queues form, characterized by stop-and-go waves, poor travel times, low comfort and convenience, and increased accident exposure. It is important to note that in the context of a regional travel demand model, LOS F also refers to a situation where the forecast demand exceeds the amount that can be served.

Figures 51 through 54 show the levels of service in 2005 and under the three 2030 alternatives during the PM peak period. The six LOS categories have been collapsed into three: free flow to high density flow (LOS A through D), near capacity (LOS E), and at capacity/stop and go (LOS F). Table 40 on page 98 lists the number of lane miles and percentage of the total network that falls into the different LOS categories. The table has been broken into three roadway classifications: freeway, arterial, and local. It should be noted that the local category includes collectors and local streets.

Overall, the table shows that massive investment in roadway improvements in the International Gateway scenario manages to maintain and, in some cases, even improve the performance of the road system compared to Middle of the Pack and even the 2005 situation. The effects of the International Gateway land use growth without the network improvements reflect severe deterioration throughout (last two columns of table).

Figure 51: 2005 PM Rush Hour LOS

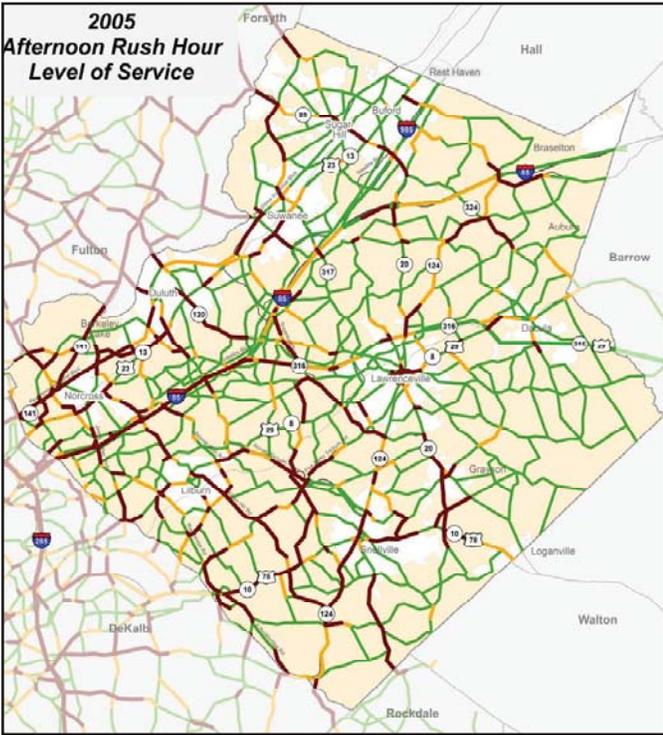


Figure 53: 2030 PM Rush Hour LOS - International Gateway

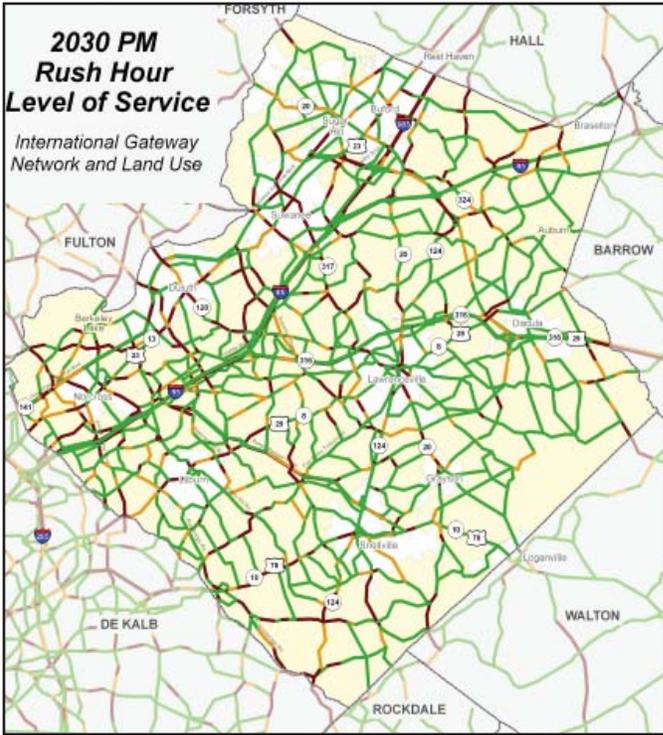


Figure 52: 2030 PM Rush Hour LOS - MOP

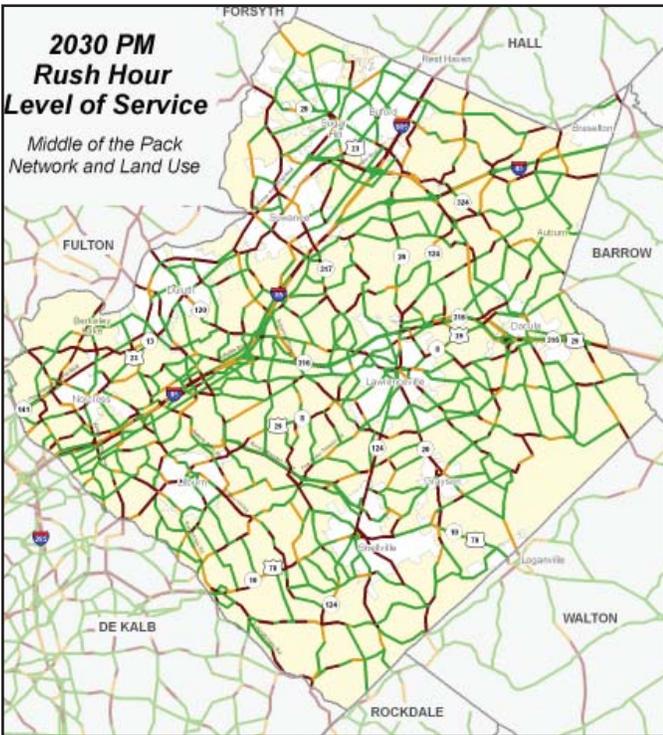
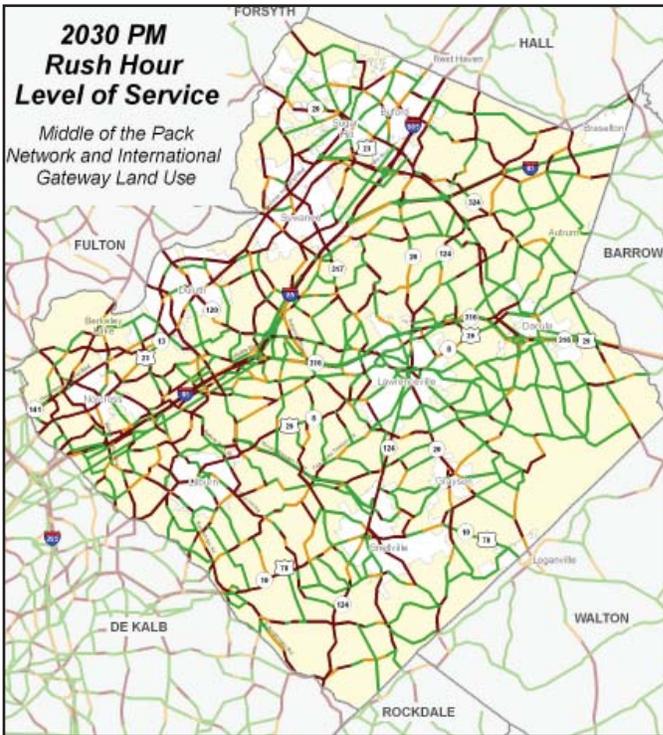
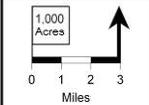


Figure 54: 2030 Rush Hour LOS - MOP and International Gateway



2030 PM Peak Hour Level of Service (LOS)

- Uninterrupted flow (LOS A through D)
- Near capacity (LOS E)
- At capacity/congested (LOS F)



In the Middle of the Pack and International Gateway scenarios LOS improves in the freeway category – a greater percentage of lane miles are LOS D or greater and a smaller percentage is LOS F. There is a slight increase in segments operating at LOS E. The International Gateway land use Middle of the Pack Transportation network alternative has slightly worse percentages for LOS D or better than 2005, and many more segments operating at LOS E and F. In general, arterials operate better in the International Gateway Scenario and much worse in the International Gateway land use Middle of the Pack Transportation network alternative. Local roads appear to fare better in 2005 than in the future scenarios (based on the percentage of local roads at LOS D or better); however, this is due to the greater number of local roads in the 2005 network (as mentioned at the beginning of this section). The percentages for LOS E and F are very similar between 2005 and the Middle of the Pack and the International

Gateway scenarios. The International Gateway land use Middle of the Pack Transportation network alternative is much worse.

Duration of Congestion

Duration of Congestion shows how long the congestion lasts by lane miles. The duration of congestion maps (Figures 55 - 58) and Table 41 show, as with level of service, that the investment in the system associated with the International Gateway scenario produces congestion periods that are somewhat worse than 2005 but better than in the Middle of the Pack scenario. Overall, the duration of congestion is increasing – especially in the International Gateway land use-Middle of the Pack Transportation network alternative, where the duration is considerably worse than 2005 conditions.

Table 40: Level of Service by Roadway Classification in Lane-Miles

	2005	Percent of Total	Middle of the Pack Scenario	Percent of Total	International Gateway Scenario	Percent of Total	2030 IG LU/MoP Network Alternative	Percent of Total
Freeway								
LOS D or better	280.7	10.5%	400.0	13.5%	534.9	15.1%	322.9	10.9%
LOS E	24.9	0.9%	51.3	1.7%	68.9	1.9%	93.3	3.2%
LOS F	80.1	3.0%	86.3	2.9%	79.3	2.2%	121.4	4.1%
Arterial								
LOS D or better	1321.8	49.6%	1,412.2	47.8%	1,855.0	52.3%	1,189.4	40.3%
LOS E	133.0	5.0%	201.4	6.8%	210.5	5.9%	227.0	7.7%
LOS F	237.0	8.9%	326.5	11.1%	327.2	9.2%	523.8	17.7%
Local								
LOS D or better	571.9	21.5%	462.9	15.7%	457.9	12.9%	441.1	14.9%
LOS E	7.1	0.3%	7.8	0.3%	10.7	0.3%	19.2	0.7%

Table 41: Duration of Congestion

Duration	2005	Percent of Total	Middle of the Pack Scenario	Percent of Total	International Gateway Scenario	Percent of Total	2030 IG LU/MoP Network Alternative	Percent of Total
< 2 hours	2135.6	80.2%	2166.7	73.4%	2724.7	76.8%	1862.1	63.1%
2 - 6 hours	471.8	17.7%	675.9	22.9%	714.1	20.1%	820.4	27.8%
6 - 10 hours	49.1	1.8%	107.8	3.7%	103.6	2.9%	251.8	8.5%
> 10 hours	5.9	0.2%	2.4	0.1%	6.5	0.2%	18.7	0.6%
Total Lane Miles	2,662		2,953		3,549		2,953	

Figure 55: 2005 Duration of Congestion

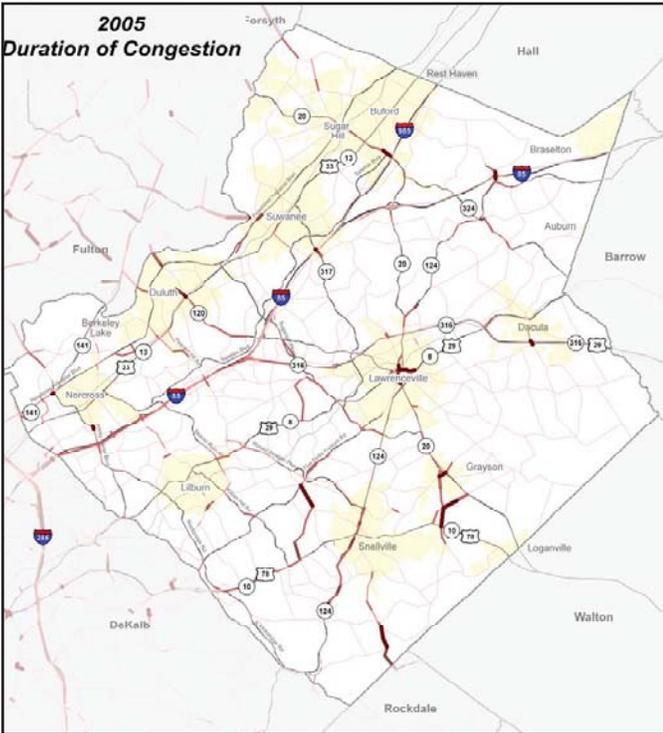


Figure 57: 2030 Duration of Congestion - International Gateway

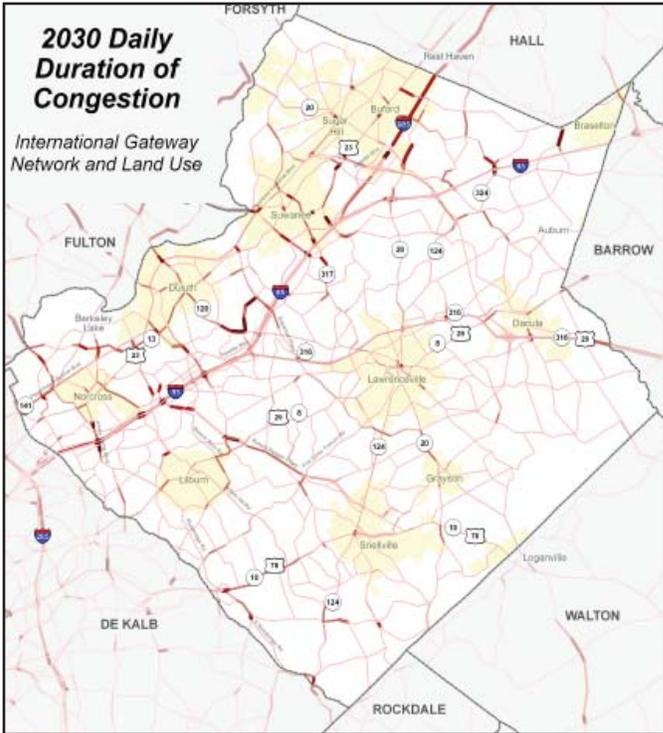


Figure 56: 2030 Duration of Congestion - MOP

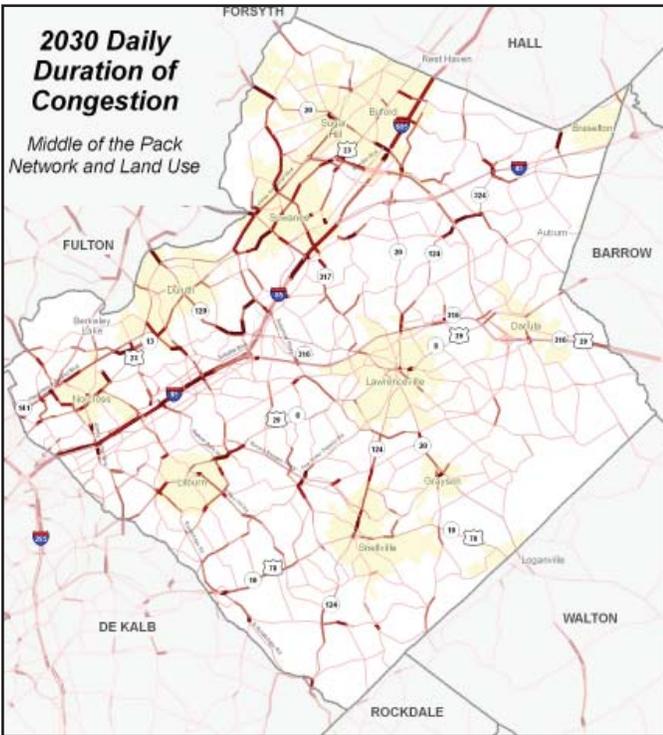
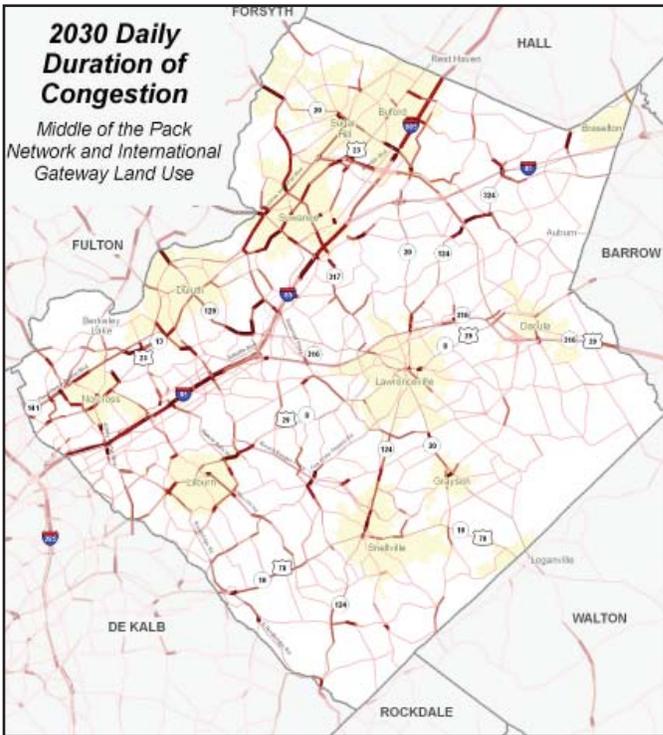
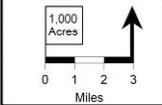


Figure 58: 2030 Duration of Congestion - MOP and International Gateway



Daily Duration of Congestion, 2030

- Less than 2 hours
- 2 - 4 hours
- 4 - 6 hours
- 6 - 8 hours
- Greater than 8 hours



Vehicle Hours of Delay

Vehicle hours of delay is a measure of the extent of congestion. It calculates how many vehicles are delayed and for how long. The table below shows the total hours of vehicle delay during the weekday AM and PM peak periods. As the table below indicates, the PM peak has more hours of vehicle delay than the AM peak in 2005 and under all 2030 scenarios. The AM peak tends to have fewer vehicle hours of delay because people are more able to spread out their morning trips (for example, leave for work earlier) and typically are not making many stops along the way. During the PM peak period, people tend to leave at similar times and also make multiple stops on the way home (for example, running errands or shuttling children to different activities). In addition, the AM peak period is dominated by work trips while there are more non-work trips (for example, shopping trips) in the PM peak period.

The increased delay associated with the International Gateway Scenario is likely related to the fact that there are many more work trips in the International Gateway Scenario than in the Middle of the Pack Scenario. Again the effects of accommodating the development of International Gateway without supporting infrastructure are very negative.

Table 42: Hours of Delay (Peak Hour Work Trips)

	2005	2030 Middle of the Pack Scenario	2030 International Gateway Scenario	2030 IG LU/MoP Network Alternative
AM Peak	62,100	93,100	100,100	152,300
PM Peak	82,200	201,800	206,500	344,900

Figures 59 through 62 show the differences between the scenarios quantified in Table 42. However, because so many of the roads have such high levels of delay, it is difficult to easily discern variations between them.

Accessibility

Another indicator measuring the transportation network’s effectiveness is accessibility, the relative ability to get where one wants to go. This measure uniquely addresses the land use/transportation nexus. The two components of accessibility are mobility (the speed or time of travel between two points) and proximity (the distance between two points). The more workplaces a person can access within a given period of time from their home, for example, the better the accessibility. Better accessibility means more opportunities. The travel demand model calculated the relative accessibility of each TAZ with regard to how many jobs can be reached from the TAZ. Figures 63 through 65 show the number of jobs that can be reached within 30 minutes from each TAZ. The model takes congestion into account when calculating accessibility.

Not surprisingly the areas along the I-85 and GA Hwy 316 transportation corridors show the highest level of accessibility while the areas further away from the corridors show less accessibility. The International Gateway Scenario, which includes a greater number of jobs, shows many more accessible TAZs than the Middle of the Pack Scenario and some more accessible TAZs in the International Gateway land use Middle of the Pack network alternative. In addition, the TAZs with the highest levels of accessibility are clustered in the southwest part of the County. Redevelopment of this area is a key element of the International Gateway land use. Despite congestion, in other words, the co-location of more jobs and housing has significant accessibility benefits.

Figure 59: 2005 Afternoon Vehicle Hours of Delay

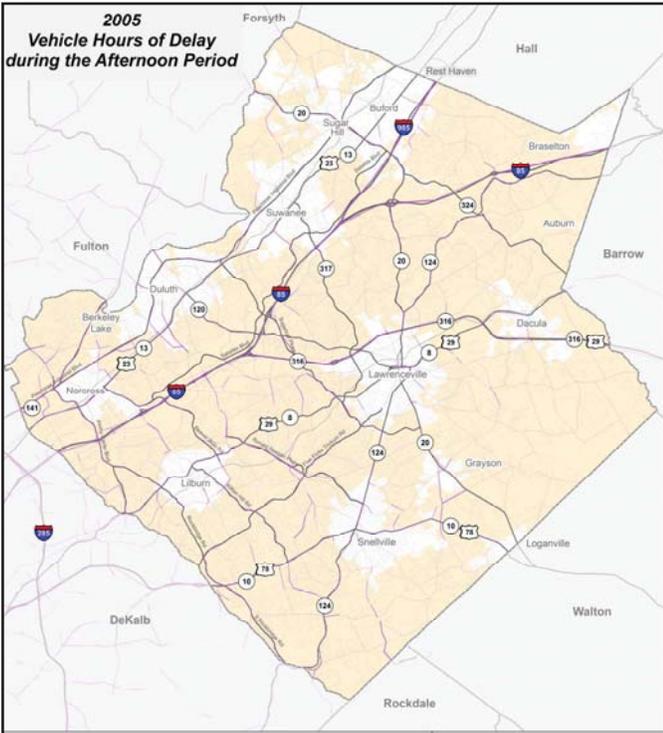


Figure 60: 2030 Afternoon Vehicle Hours of Delay - MOP

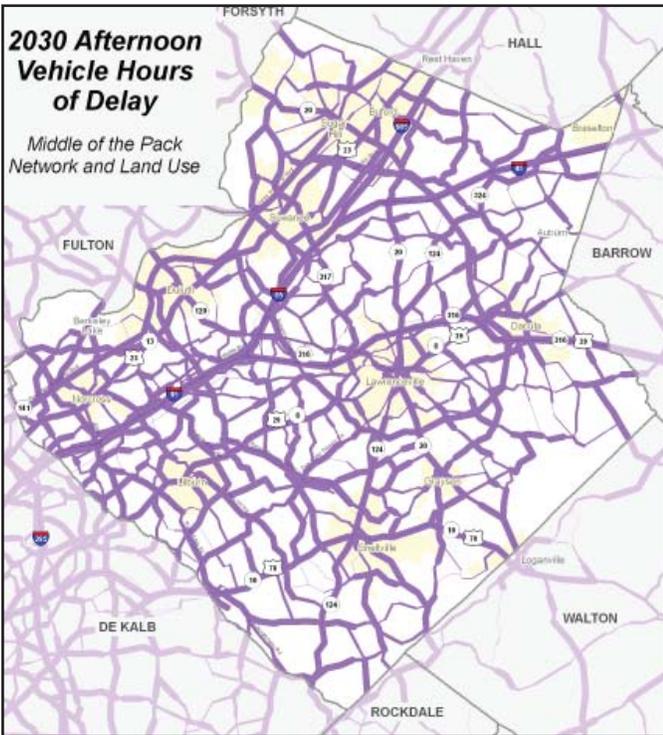


Figure 61: 2030 Afternoon Vehicle Hours of Delay - International Gateway

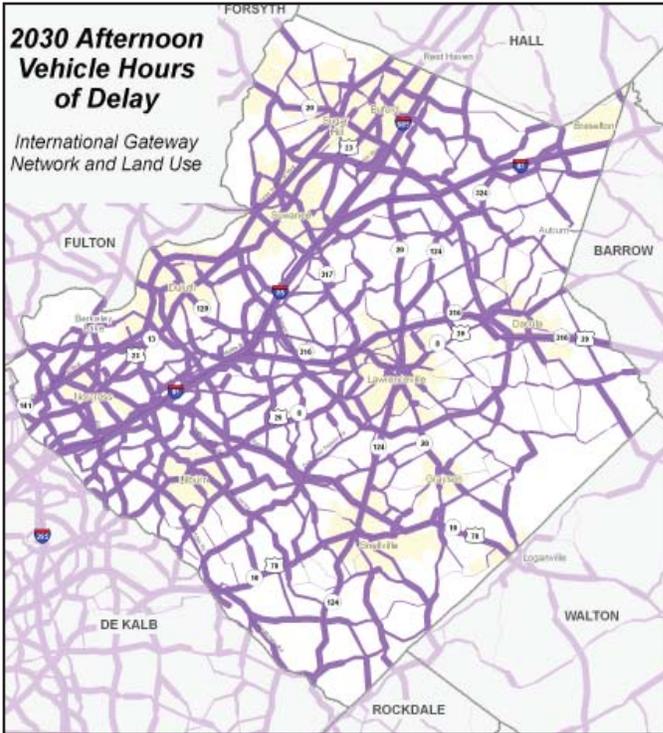
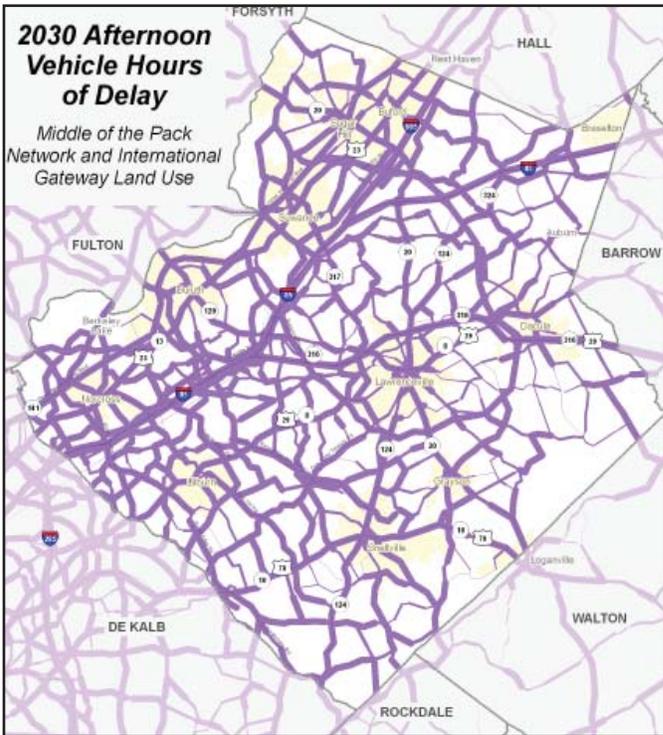


Figure 62: 2030 Afternoon Vehicle Hours of Delay - MOP and International Gateway



Vehicle Hours of Delay

- 10 or less
- 11 - 25
- 26 - 50

- 51 - 150
- 151 - 300

- 301 - 500
- 501 or more

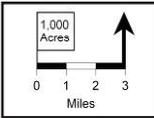


Figure 63: 2030 Accessibility - MOP

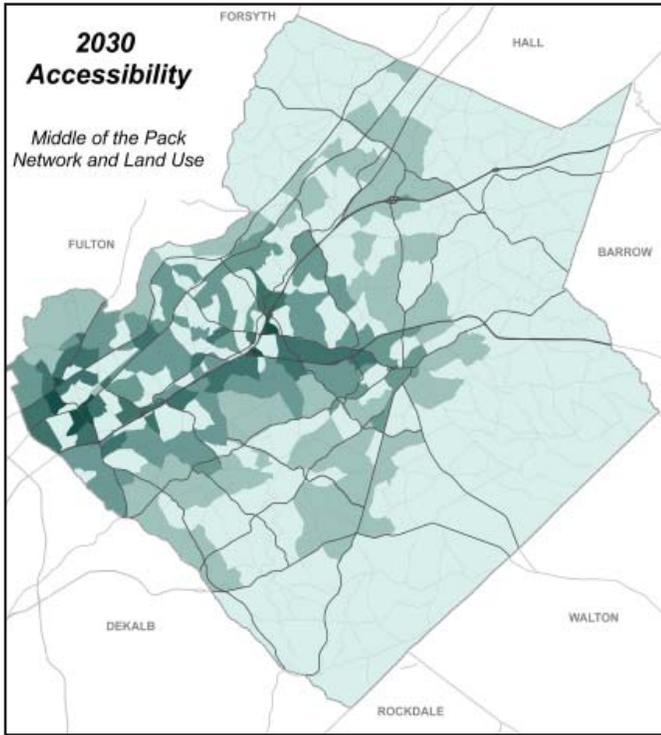


Figure 65: 2030 Accessibility - MOP and International Gateway

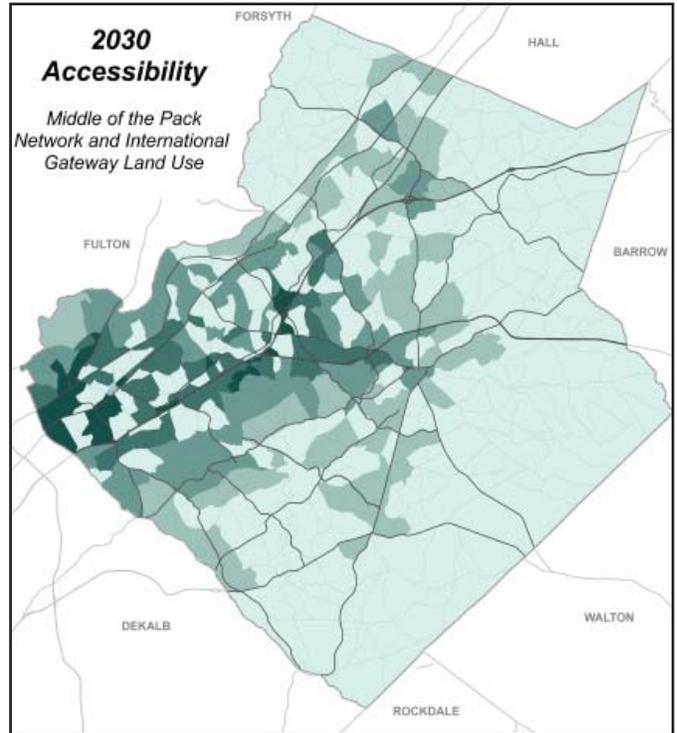
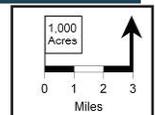
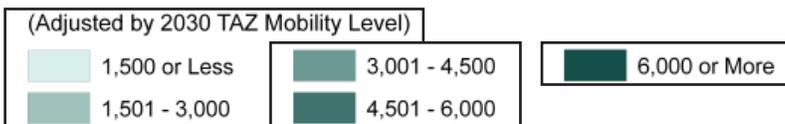
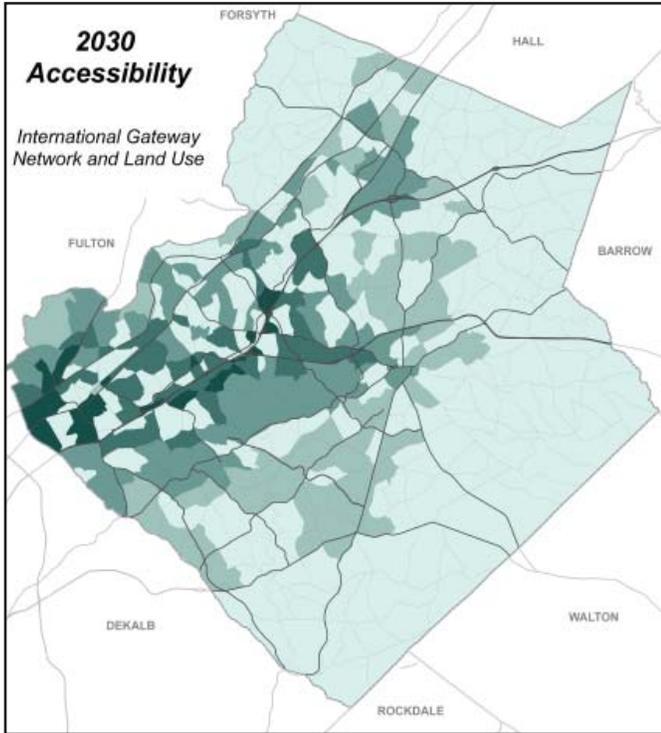


Figure 64: 2030 Accessibility - International Gateway



Travel by Mode

The transportation model generates statistics about the modes of travel that are used for Gwinnett-based work trips. It provides information on the number of drive alone trips, carpool trips, and transit trips. It should be noted that the model is based on gasoline prices from several years ago and does not reflect the most recent increases, which have begun to spark increased transit use and carpooling. The information presented in this section should, therefore, be viewed not as absolutes, but as information on comparisons between scenarios.

As the following two tables show, the model indicates that in 2030 between 81.2 percent and 85.5 percent of trips will be drive alone, between 13.1 percent and 15.5 percent will be carpool, and between 1.4 percent and 3.5 percent will be by transit. In 2005, the percentages were 86.1 percent drive alone, 13 percent carpool, and 0.9 percent by transit. Not surprisingly, the International Gateway Scenario, which has a very aggressive transit network, shows the highest transit mode split.

For reference, the U.S. Census's 2006 American Community Survey indicates the following mode splits for the Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area: 77 percent drive alone, 11 percent carpool, 4 percent public transportation, 1 percent walk, 2 percent other, and 5 percent work at home.

Mode split statistics were also calculated for each sub-county area. A table showing the number of trips, mode split, and since 2005 for each SCA can be found in the Appendix. For convenience, the SCA Map is reproduced on page 77. Below are some highlights:

Transit Usage

- SCA 6, in the southwest part of the County, has the highest transit usage under all conditions – current and future. In 2005, it had a 2.8 percent transit share. The Middle of the Pack Scenario has a 4.2 percent transit share. The International Gateway Scenario has a 9 percent share. The International Gateway land use with Middle of the Pack network Alternative has a 4.7 percent transit share. This is not unexpected. This area is near the existing MARTA stop in Doraville and will have increased transit service in the future scenarios. It is also an area that currently has and is expected to continue to have higher density housing and lower car ownership.
- The second highest transit rates are not uniform. In 2005, SCA 8 had the second highest transit rate at 0.9 percent. This could be because of the many commuter bus lines that go through the area. With the two Middle of the Pack transportation network alternatives, SCA 4 had the second highest rates at 1.7 percent for the Middle of the Pack land use and transportation Scenario

Table 43: Number of Gwinnett-Based Work Trips

	2005	2030 Middle of the Pack Scenario	2030 International Gateway Scenario	2030 IG LU/MoP Network Alternative
Gwinnett-Based Work Trips – Total Trips	575,500	694,100	788,900	788,700
Gwinnett-Based Work Trips – Drive Alone	495,200	593,600	640,900	653,500
Gwinnett-Based Work Trips – Carpool	75,000	91,100	120,400	122,100
Gwinnett-Based Work Trips – Transit	5,300	9,400	27,600	13,100

Table 44: Percentage of Gwinnett-Based Work Trips

	2005	2030 Middle of the Pack Scenario	2030 International Gateway Scenario	2030 IG LU/MoP Network Alternative
Gwinnett-Based Work Trips – Total Trips	100.0%	100.0%	100.0%	100.0%
Gwinnett-Based Work Trips – Drive Alone	86.1%	85.5%	81.2%	82.8%
Gwinnett-Based Work Trips – Carpool	13.0%	13.1%	15.3%	15.5%
Gwinnett-Based Work Trips – Transit	0.9%	1.4%	3.5%	1.7%

and 1.5 percent for the International Gateways land use and Middle of the Pack transportation network alternative. In the International Gateway Scenario, SCA 7 had the second highest transit usage rate at 3.0 percent. This could be associated with the high increase in services going along the I-85 corridor.

- SCA 3, in the southeastern part of the County, has the lowest transit usage. Zero in 2005, 0.2 percent in the Middle of the Pack Scenario, 0.6 percent in the International Gateway Scenario, and 0.3 percent in the International Gateway land use with Middle of the Pack network Alternative.
- SCAs 1 and 2 also have very low transit usage rates (between 0.1 percent in 2005 and 1.0 percent under the International Gateway Scenario).

Carpool Rates

- In the future scenarios, SCA 6 also has the highest carpool rates: 18 percent in the Middle of the Pack Scenario, 22.2 percent in the International Gateway Scenario, and 23.1 percent in the International Gateway land use with Middle of the Pack network Alternative. In 2005, SCA 4 had the highest carpool rate at 14.5 percent (SCA 6 was second with 14 percent).
- In the future scenarios, SCA 8 has the second highest carpool rates – 14.6 percent in the Middle of the Pack Scenario, 16.5 percent in the International Gateway Scenario, and 16.4 percent in the International Gateway land use with Middle of the Pack network Alternative.
- The lowest carpool rates are found in SCA 7 in 2005 (11.3%) and in SCA 3 in all future scenarios (10.0 percent in the Middle of the Pack Scenario, 10.1 percent in the International Gateway Scenario, and 9.9 percent in the International Gateway land use with Middle of the Pack network alternative).
- The second lowest carpool rates are in SCA 8 in 2005 (12.6 percent), SCAs 1 and 2 (11.4 percent) in the Middle of the Pack Scenario, SCA 4 in the International Gateway Scenario (11 percent) and in the International Gateway land use and Middle of the Pack transportation network (11.3 percent).

- In SCAs 2 through 5, carpool rates decreased in all future scenarios over 2005 rates. In SCAs 6 through 8 carpool rates increase in all future scenarios over 2005. In SCA 1, it goes down in the Middle of the Pack scenario, but increases in the others.
- Of the four SCAs that see increases in carpooling in the future scenarios, SCAs 6 and 7 see the greatest increase in the International Gateway land use Middle of the Pack transportation network alternative and SCAs 1 and 8 saw the greatest increase in the International Gateway Scenario.

Drive Alone Rates

- In 2005, the highest drive alone rates were in SCA 7 at 87.0 percent. In the future conditions, SCA 3 has the highest percentages: 89.8 percent in the Middle of the Pack Scenario, 89.3 percent in the International Gateway Scenario, and 89.8 percent in the International Gateway land use with Middle of the Pack network Alternative.
- SCA 6 also has the lowest drive alone percentages in all conditions: 83.3 percent in 2005, 77.8 percent in the Middle of the Pack Scenario, 68.8 percent in the International Gateway Scenario, and 72.2 percent in the International Gateway land use with Middle of the Pack network Alternative.

Comparing the Different Transit Modes

Even though the CTP’s transit network is modest, as part of the analysis conducted for the CTP, five different transit mode scenarios were tested: 1) the Gainesville Commuter Rail Line; 2) the Athens Commuter Rail Line; 3) Light Rail Transit (LRT) along Satellite Boulevard, Indian Trail Road, Buford Highway, ending at the Doraville MARTA station; 4) Transit rail extension to Gwinnett Arena/Chamber of Commerce; and 5) three additional express bus lines that go from Mall of Georgia to Windward Parkway in Alpharetta, Mall of Georgia to Perimeter (GA 400/I-285), and Dacula (near Old Freeman Mill Road at SR 316) to Downtown Atlanta. That analysis provides interesting information about what the ridership would be if each project were the only transit improvement made. The analysis also shows the impact of different headways (or frequencies) on ridership. This information can help decision makers think about what transit projects to move forward since it will be difficult and cost prohibitive to do them all. The information shown in Table 45 is for the Middle

of the Pack land use scenario only. This analysis was not performed on the International Gateway land use scenario.

Not surprisingly, the results show that increased frequency results in more riders. This is true for all five alternatives. The transit rail extension provides the greatest increase in riders, significantly higher than provided by LRT, which provided the second highest number of riders. Express bus with 5 to 10 minute headways attracted more riders than the two commuter rail lines combined with similar headways. However, ridership on express bus drops off significantly once headways increase.

It is important to note that the ridership figures are not cumulative. That is, if the County were to implement all of the transit projects, the projected ridership would not be the sum of the individual projects' ridership. This is because some of the projects serve similar areas and populations so building both would cause riders to choose between the alternatives.

Conclusions

- It will be difficult for the County to simply build its way out of congestion. The \$1.6 billion of roadway improvements shown in the Middle of the Pack scenario and the additional \$1.4 billion of roadway improvements do not reduce congestion compared to today. They do, to various degrees, reduce the rate at which congestion worsens. However, it is clear that if Gwinnett continues to grow its population and job base and does not make various roadway improvements, then traffic congestion will become much worse. It should be noted that traffic will likely never get as bad as forecasted because people will change their travel behaviors in response to worsening congestion. They may change their travel routes, arrive at work earlier or later, telecommute more, carpool, move closer to their jobs, or the jobs themselves may relocate within the County.

It will be difficult for the County to simply build its way out of congestion. It should be noted that traffic will likely never get as bad as forecasted, because people will change their travel behaviors in response to worsening congestion.

- It will also be difficult for the County to rely on transit to build its way out of congestion. The percentage increases in transit ridership are large in the International Gateway scenario, however, in absolute numbers, the gains are quite modest – only 27,000 daily transit trips in the transit-heavy International Gateway scenario. For the investment required to implement the projects, the results are very modest. However, if gas prices continue to rise and more commuters ride transit, the situation may change.
- The sensitivity analysis prepared for the CTP shows that a MARTA extension to Gwinnett Place Mall has the greatest potential to attract riders. However, this extension would be very expensive, especially in light of the number of potential riders. Implementing a high service level bus rapid transit system will incur lower costs and is an incremental way to attract drivers out of their private vehicles and into transit. In order for transit service to attract riders who have travel

Table 45: Ridership Benefits of Different Transit Improvements

Transit Alternative	Gainesville Commuter Rail			Athens Commuter Rail			Light Rail Transit			Transit Rail Extension			Express Bus		
	5	15	40	5	15	40	5/10	10/15	15/30	5/10	10/15	20/30	5/10	15/30	30/60
Headway	5	15	40	5	15	40	5/10	10/15	15/30	5/10	10/15	20/30	5/10	15/30	30/60
Ridership	4,400	2,800	1,100	2,700	2,200	1,200	17,100	12,800	7,600	42,300	34,900	20,100	7,900	1,500	900

choices, it will need to provide customers with quality services. That is, the trips need to be fast and frequent; the ride needs to be clean, comfortable, and safe; and the experience needs to be positive.

- Overall, given the very high capital cost of commuter rail service, this analysis raises questions about the cost effectiveness of commuter rail. It is important to note, however, that the Middle of the Pack scenario land use has significantly fewer jobs than the International Gateway scenario and a lesser concentration of jobs and housing in the I-85 and GA Hwy 316 corridors. Additional analysis, therefore, beyond that done for this plan is needed to resolve the transit mode question.
- The analysis indicates that implementing land use policy changes that concentrate jobs and housing in key areas can help reduce the growth in congestion and improve transit and carpooling usage. While these measures will not eliminate congestion, they do appear to allow the County to accept some additional growth without causing dramatic increases in congestion and delay.
- Gwinnett (and the Atlanta region) will likely need to look at congestion pricing to alleviate peak hour gridlock and increase the viability of transit. This kind of solution, now implemented internationally in several countries and being piloted in several U.S. cities, seems the way of the future. High-occupancy toll (HOT) lanes are one form of congestion pricing⁶ but a much more comprehensive, electronically-based approach will need to be contemplated. While the full benefits of congestion pricing will only be realized on a regional scale, Gwinnett can realize some benefits from pricing policies within the County from a carefully constructed local program.

Land use policy changes that concentrate jobs and housing in key areas can help reduce congestion and improve transit and carpooling usage.

C.1.2 Sewer Infrastructure Testing

Sewer capacity is seen as one of the major infrastructure challenges for the timeframe of this Plan. The current system and challenges it presents were described in Part I, Section C.7 of this document.

The County has been divided into 60 sewer sub-basins for planning purposes. These sub-basins, largely coinciding with drainage areas, allow us to consider the impact of wastewater flows in localized areas. Flow projections for each scenario have been calculated by the Gwinnett County Department of Water Resources (DWR) based on population and employment forecasts provided by the consultant team to the Department of Planning and Development.

The Department of Water Resources has created a set of five maps to help demonstrate the differences in wastewater flows resulting from the two primary scenarios considered in the Unified Plan – Middle of the Pack and International Gateway. Four of the maps compare the historical flows from 2007 with the projected flows for 2030; one map directly compares the difference in the 2030 flow projections for the two scenarios.

A short description for each map follows:

⁶ HOTlanes allow buses and private vehicles with a certain number of passengers a free ride in a designated lane, while vehicles that do not meet the minimum passenger requirement can use the lane for a fee.

Figure 66: Increase in Flows from 2007 Actual – 2030 MOP

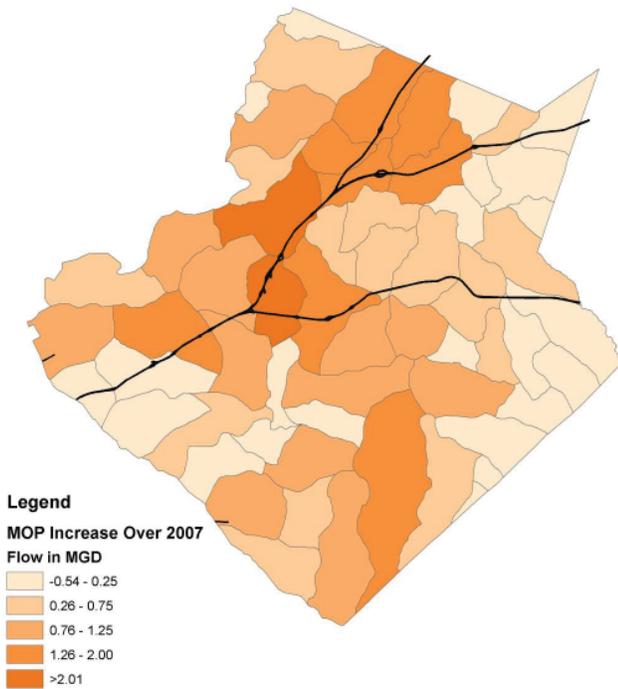
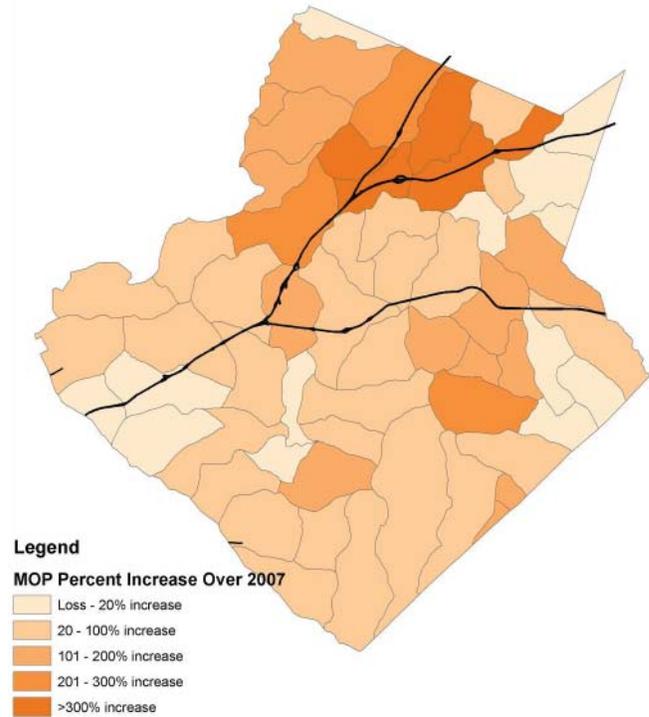


Figure 66 illustrates the increase in wastewater flows from 2007 projected for the Middle of the Pack scenario. This change in wastewater flows has been divided into five categories. The lightest shade represents the most stable flow, while the increasingly darker shades represent greater flow increases.

Figure 67: Percent Increase in Flows from 2007 Actual – 2030 MOP



While knowing the actual increase in flow is important, the percent of increase sheds more light on the impact of the change to the County. Figure 67 illustrates the percent of change from today based on the Middle of the Pack scenario. The smaller the percentage increase the less impact those flows will have on infrastructure needed to support the flows; the darker shades represent potential areas of major infrastructure improvements.

Figure 68: Increase in Flows from 2007 Actual – 2030 Gateway

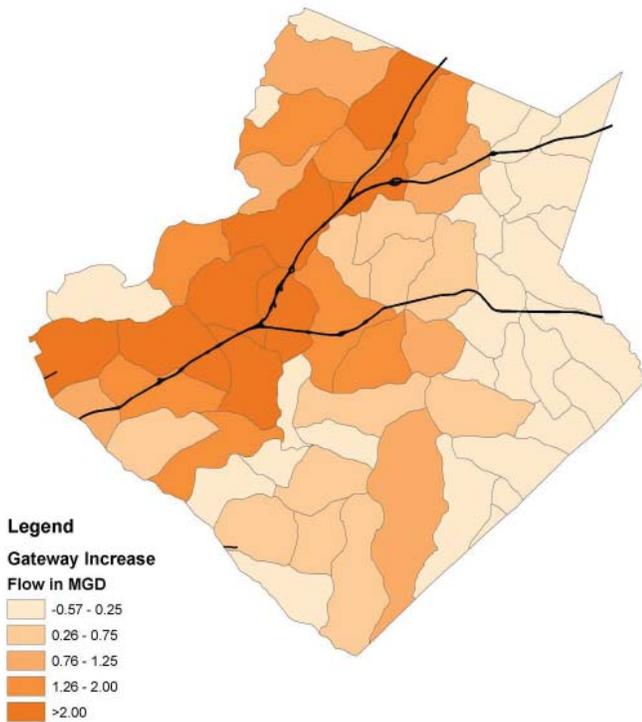


Figure 68 illustrates the increase in wastewater flows from 2007 based on the International Gateway scenario. This change in flow has been divided into five categories. The lightest shade represents the most stable flows, while the darker shades represent greater flow increases.

Figure 69: Percent Increase in Flows from 2007 Actual – 2030 Gateway

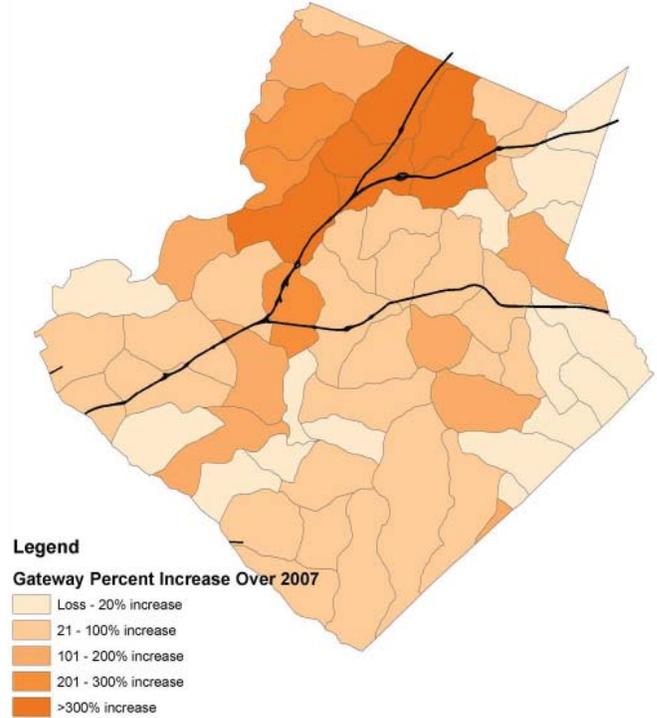


Figure 69 illustrates the percent of change from today based on the 2030 International Gateway scenario. The smaller the percentage increase the less impact those flows will have on infrastructure needed to support the flows; the darker shades represent potential areas of major infrastructure improvements.

Concentrating more growth presents a challenge, but that challenge would, for the most part, be quite predictable, focused, and planned for appropriately.

Figure 70: 2030 Flow Gateway vs. MOP

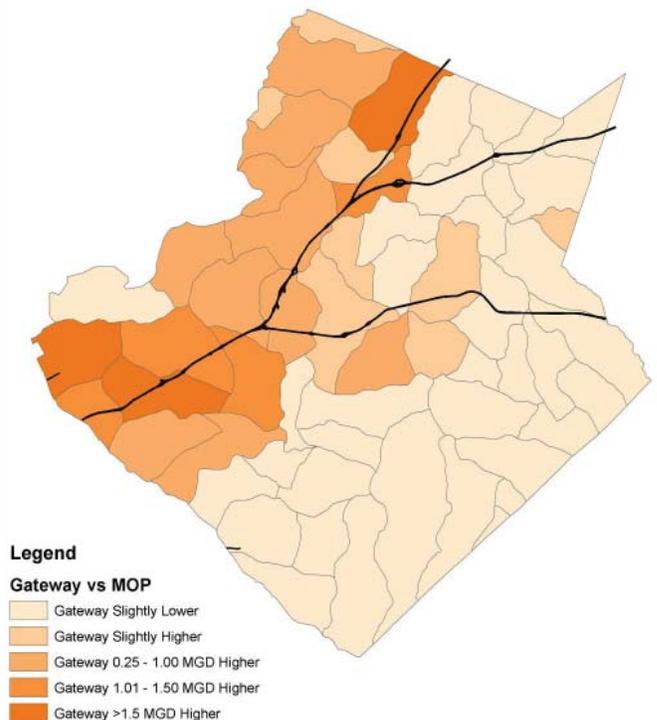


Figure 70 illustrates the difference in the wastewater flows between the two scenarios for each of the sewer sub basins. The light shades indicate areas where the impact is nearly the same for both scenarios and the darker shades indicate areas where the Gateway scenario creates significantly more flow than the Middle of the Pack scenario. As you would expect, the largest difference is seen along the I-85 corridor.

These projected wastewater flows translate directly to major future investment needs. For the most part, these infrastructure needs occur in areas which have previously been shown to experience capacity constraints and already have identified infrastructure improvement needs such as replacement or parallel interceptors. Concentrating more growth in these areas presents a challenge, but that challenge would for the most part be quite predictable, focused, and planned for appropriately. Additionally, a policy decision to not extend sewer into the now-rural eastern area of the County, as in the International Gateway scenario, would allow capital dollars to be focused to improve areas in the western part of the County along the highway corridors. This would further support the revitalization and economic development initiatives in this plan. Ensuring that the sewer system is upgraded and expanded in key locations is one of the most important measures Gwinnett can take to protect its economic development potential.

C.1.3 Fiscal Consequences

This section is derived from the detailed fiscal analysis included as Appendix H in the Volume 3 Appendices to this Plan. Readers seeking a full understanding of this important work should review that Report authored by Dr. Robert Eger, formerly of Georgia State University.

Overview of Approach and Key Assumptions

Gwinnett County annually provides the Georgia Department of Community Affairs (DCA) operating expenses and revenue data along with capital costs. Enterprise funds, such as the water and sewer fund in Gwinnett County are not part of the data supplied to the State. Some of the data was presented earlier in Part I Section C.9 of the Plan. Using the data provided to DCA, estimated expenses and revenues for Gwinnett County were projected for the year 2030 using a fiscal forecasting program developed by the Georgia Institute of Technology

called WebFIT™. Using this model, 2030 estimates of expenditures and revenues were developed for all three scenarios.

Only the estimate for the Slowdown scenario resulted in a budgetary surplus using the WebFIT™ Model. This counterintuitive outcome was analyzed and plausible explanations were developed to account for the unexpected results.

- First, the WebFIT™ outcomes do not take into consideration any direct changes in services based on the changing socio-economic conditions proposed in the scenario. This is a well-documented limitation of this model.
- The second explanation is that changes in the capital investment required in maintaining the county infrastructure is based on FY2005 spending and therefore does not consider any infrastructure needs beyond FY2005 spending levels although the SPLOST revenues are included.
- Third, WebFIT™ estimates do not address the varying stages of development that currently exist and that will exist within the county in 2030. Instead, WebFIT™ treats all areas in Gwinnett County as identical in terms of service needs.

To address the limitations inherent in the WebFIT™ estimates, an Alternative model was derived. The Alternative model uses the fiscal operating base as reported in the County's financial reports. This fiscal base is composed of all operating expenses and revenues including the enterprise fund for water and sewer. Since the water and sewer facilities and services are wholly owned by the County, they are considered an integral part of County operations and are treated as operating for purposes of this modeling effort.

The removal of capital costs renders the analyses independent of each other; although the revisions result in the loss of direct comparability between the analyses, the Alternative model is able to focus on operating expenses and revenues, by far the largest component of the budget. The Alternative analysis also eliminates two other known limitations of the WebFIT™, the inability to address changes in socio-demographic conditions and the treatment of all County areas as equal in service requirements. This ability to relax some of the assumptions of the WebFIT™ model provides a more accurate analysis of potential operating

Table 46: Poverty Estimates for 2030 by Sub-County Area (SCA)

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	County
July 1, 2005 est.	6.85%	3.11%	3.21%	5.26%	3.78%	14.82%	4.94%	7.26%	7.44%
Gateway 2030	7.23%	3.33%	3.42%	5.56%	4.03%	15.50%	5.27%	7.69%	7.86%
Middle 2030	6.50%	4.23%	4.20%	8.36%	6.77%	20.57%	8.29%	10.73%	9.62%
Slowdown 2030	8.21%	5.51%	5.37%	10.17%	8.51%	24.20%	10.51%	13.17%	12.10%

expenses and revenues.

Alternative Model Estimates

Table 46 provides poverty estimates by sub-county area and scenario. These estimates were developed using the July 2005 American Community Survey as the base, which is the identical base used in the estimates provided by Dr. Thomas Hammer. These estimates suggest that by 2030 poverty will increase in Gwinnett County in the Middle and Slowdown scenarios. The most dramatic change is in the Slowdown scenario, while in the International Gateway Scenario poverty levels are similar to those in 2005.

Table 47: Population Estimates for 2030

Scenario	Population Estimate
Gateway 2030	1,136,476
Middle 2030	1,027,880
Slowdown 2030	887,847

Alternative Model Results for Each Scenario

Using the poverty change and the population estimates (Table 47), the 2030 operational expenses and revenues are projected for each of the scenarios.

The Slowdown scenario results are shown in Table 48. This low growth scenario shows the largest change in total expenditures of the scenarios. Revenue of \$913 million is projected resulting in a deficit in the range of \$109 million to \$259 million. This leads to low and high operational expenses which are noted as an operational expenses range. This deficit is in the range of 11.9 percent to 28.4 percent of total estimated revenues. Driving this outcome is the large change in poverty forecasted for Gwinnett causing a large rise in the costs of services, particularly in police and fire services.

Table 48: Summary Expenditure and Revenue Estimates for Regional Slowdown Scenario

Scenario	Estimates
Slowdown Revenue	\$913 million
Slowdown Expenditure	\$1,022 to \$1,172 million

The Middle scenario results are shown in Table 49. This steady-state scenario shows the low range of total expenditures identical to that of the Gateway scenario. Revenue is estimated at \$1,025 million realizing a deficit in the range of \$3 million and \$84 million. This deficit is in the range of 0.3% and 8.2% of total estimated revenues. At the low estimate of expenditures this is a breakeven scenario and at the high end of expenditures there is a deficit. This steady state scenario may leave Gwinnett County at breakeven in the year 2030 or has a potential revenue shortfall of about 8% in 2030.

Table 49: Summary Expenditure and Revenue Estimates for Middle of the Pack Scenario

Scenario	Estimated Range
Middle Revenue	\$1,025 million
Middle Expenditure	\$1,028 to \$1,109 million

The Gateway scenario results are shown in Table 50. In this scenario the police and fire expenses in 2030 are higher than the Middle scenario on the low range but lower on the upper range. This scenario assumes limited suburbanization on the east side of Gwinnett County, which will directly affect the operational expenditures. Sensitivity analysis of the scenarios suggest that the savings resulting from a lower density east side are on the order of \$27 million in 2030. This assumption was not made for either the Slowdown or Middle scenarios. Expenditures overall have a much smaller range than either the Slowdown scenario or the Middle scenario. Revenue is estimated at \$1,090 million, realizing a surplus in the range of \$45

A Dilemma: Funding Transportation Improvements

Congestion mitigation, transit allocation, and project costs are common impediments when growth is forecasted in a long range fiscal estimation. What options do local governments have to address the funding shortfalls revealed? This discussion draws from the fiscal analysis conducted for the Unified Plan which is contained in Appendix ___.

Current Funding Sources and Patterns

A limiting factor for local governments, such as Gwinnett County, is the intergovernmental complexity of surface transportation financing. The Georgia Department of Transportation (GDOT) assistance for local government streets and roads primarily is provided through two programs, the Local Assistance Road Program (LARP) which is designated exclusively for resurfacing, and State Aid contracts, which cities and counties can use for any type of road or bridge work.

The LARP funding for Gwinnett County, with its large population within the unincorporated areas, shows it is receiving a larger amount of funding than its comparable counties and both the state average and median over the past 2 years. Funding through state aid, however, is uneven when compared to LARP funding. These two years of funding are important since they represent a change in funding by the GDOT. Gwinnett County's unincorporated areas received a total of \$4.3 million for resurfacing and \$2.5 million for road and bridge for the two year time period. If we assumed, for example, that the road and bridge funding would be available continuously in this amount, the Ronald Reagan Parkway extension, at a projected cost of \$48.2 million, will be substantially underfunded.

Structural Challenges

Gwinnett County, like most local governments, raises highway funds almost entirely from own source revenues, property taxes and the general fund. This is in contrast to state governments which raise about 75 per cent of revenues for highways and transit from gas taxes and vehicle fees. Even when local officials are willing to take a chance by imposing additional or new taxes for transportation, a state may not allow change. So what can local governments, like Gwinnett County, do to provide needed infrastructure without changing state law?

Other Options

There are limited resources in federal aid for municipal and county governments, but that makes up only about 2% of the total funds used for road construction. Other sources that have been used are income tax, state aid, property tax, sales tax, and other revenue. Currently, SPLOST, property tax, and other tax revenue sources such as TAD and CIDs are the limited sources local governments have to provide local roads and bridges. As noted earlier, State Aid and LARP are minor sources of revenues for large projects. Debt financing as either pay-as-you-go or general obligation bonds are an additional option. Currently, Georgia law does not allow for a local option gasoline tax as found in Florida.

Georgia law does allow for public-private partnerships, however the sale of a road to a private corporation as a basis for revenue as found in toll fees has not yet been accomplished in Georgia. Several states, such as Virginia, have used public-private partnerships, such as the Pocahontas Parkway project in 1998. Projects that meet the regional importance criteria can apply to the Transportation Infrastructure Finance and Innovation Act (TIFIA) for financial aid. This federal program makes credit available in the form of secured loans, loan guarantees, and standby lines of credit for projects; however this program does not alleviate the need to raise revenues.

The bottom line is that in Georgia local governments have a limited ability to raise revenues outside of general fund revenues and debt financing. Given that state aid to local roads is limited, choices such as public-private partnerships may provide options under Georgia Law. The use of a local option gasoline tax, currently not allowed under Georgia Law, but currently in use in Florida, could provide local governments with additional choices for funding projects.

million to \$62 million. This surplus is in the range of 4.1 percent to 5.7 percent of total estimated revenues. This is the only scenario that produces a potential budgetary surplus result.

Table 50: Summary Expenditure and Revenue Estimates for International Gateway Scenario

Scenario	Estimated Range
Gateway Revenue	\$1,090 million
Gateway Expenditure	\$1,028 to \$1,045 million

Alternative Model Outcomes

Overall the three scenarios result in very different fiscal outcomes. When poverty and cost allocation are taken into account, the Alternative model, which incorporated a series of socioeconomic issues, provides a very intuitive outcome. In an economic slowdown, as forecasted with the Slowdown scenario, Gwinnett County's operating budget is projected to have a deficit throughout the expenditure range. In the Middle scenario, a steady state based on FY2005, Gwinnett County is projected to have two potential outcomes based on the expenditure range and those results are breakeven or deficit. Throughout the expenditure range of the Middle scenario, the County never produces a fiscal surplus. In the Gateway Scenario, revenues exceed expenditures throughout the expenditure range, providing the County with a fiscal surplus.

The effects of the Evaluation Results on Plan Policies and Priorities can be summarized as follows:

- Maximize policies that maintain current income levels and attract new higher income residents.
- Maximize policies that will facilitate new jobs in high wage economic sectors.
- Minimize major expansions of new suburban development in under- serviced areas.
- Strongly promote new sources of funding for infrastructure.

Continuing a “business as usual” policy will not generate sufficient revenue to fund ambitious initiatives such as new roads, major infrastructure upgrades, or major transit initiatives that could support more significant changes in Gwinnett’s future.

Conclusion

The results of the evaluation became the basis for developing or adjusting the various components of the theme based plan features and policies that Part 2, Section D describes.

This evaluation process revealed both areas of opportunity and areas of deep concern. The results of the evaluation process were a prime factor in the development of specific plan policies and actions to underpin the many opportunities for Gwinnett's continued prosperity and well being, and actions needed to mitigate or avert the more troubling aspects of potential future events.

The fiscal analysis of the scenarios demonstrated that continuing a “business as usual” policy which reinforces the current trends (Middle of the Pack Scenario) will not generate sufficient revenue to fund ambitious initiatives such as new roads, major infrastructure upgrades, or major transit initiatives that could support more significant changes in Gwinnett's future.

D. THE CENTRAL THEMES

D.1 Overview

The organization of the Plan around themes rather than traditional “elements” is the most apparent thing that makes this Gwinnett Unified Plan different from the typical comprehensive plan

The themes are organizing concepts expressed as the major challenges that Gwinnett must meet to help make the Gwinnett of 2030 a stable, attractive and prosperous place in which to live and work. Using themes enables different threads of the overall story to be woven together and even the more complex interrelationships of different issues to be clearly shown (e.g., how economic development requires good transportation planning and a sound approach to housing choices).

The themes that this Unified Plan uses to present its major recommendations are:

1. Maintain Economic Development and Fiscal Health
2. Foster Redevelopment
3. Enhance Mobility and Accessibility
4. Provide More Housing Choices
5. Keep Gwinnett a “Preferred Place”

The following section provides an overview of what topics are covered under each of these five themes and how many of these items are linked to other themes. It also lists the major policies that will be needed to fulfill them. (Details of the policies, who is responsible for their implementation, phasing of actions and expected outcomes are in Part 3 of this plan.)

Note: The maps that follow each theme show the most important spatial results of carrying out the policies associated with each theme and should be referenced in future land use and zoning decisions. Nevertheless, these maps do NOT cover all of the policies and actions needed to achieve the Unified Plan’s goals and priorities. All future decisions regarding implementation of any of the policies cited here must also refer to the more detailed explanations of their intent and expected outcomes that are detailed in Part 3.A of this plan.

D.2 The Details

D.2.1 Theme 1: Maintain Economic Development and Fiscal Health

Economic Development

Gwinnett’s ability to grow its economic base is fundamental to its long term fiscal abilities to sustain the infrastructure, government services, and publicly provided amenities that will be a big part of its overall well being and attractiveness as a “preferred place.”

Maintaining economic development is not merely a question of capturing and adding more jobs to those that are already here. Two decades from now Gwinnett’s economic base will inevitably be different from today’s business and job profile. For example, the migration of many light industrial and manufacturing jobs will likely persist. Growth based industries such as homebuilding could also decline as Gwinnett matures and further out regional jurisdictions become the main arena of suburban change.

The types of businesses and jobs that can be attracted in place of Gwinnett’s diminishing sectors is a major concern of this Unified Plan in large part because the results will have direct and significant implications for the income profile of Gwinnett’s residents, the value of its residential and business properties and, as a consequence, its tax base.

Gwinnett long ago ceased to be a bedroom community for commuters to other jurisdictions. Where in 1980 there were 0.3 jobs for every person, in 2000 there were 0.5 jobs for every person. In that respect Gwinnett has become one of regional Atlanta’s most “job rich” jurisdictions. Furthermore, in 2005 some 68% of Gwinnett residents worked in the County.

Despite such recent job growth, there is no guarantee that Gwinnett will continue to capture a generous share of the Atlanta area’s continued long term economic expansion. Nor is it just a question of increasing numbers. There is also no guarantee that Gwinnett will attract a good share of the jobs that the more advanced (and usually better paying) sectors of the regional economy will generate.

The economic policies in the Plan should address the

following questions. These questions have emerged in our work so far on the Plan:

- How to increase Gwinnett’s technology and science oriented employers and other sectors such as financial services that create many high skilled, high pay jobs,
- How to avoid an over-reliance on commercial retail as a source of tax revenues
- Whether retaining some base of light industrial and manufacturing is desirable and at what costs
- To what degree can and must employment land be protected for the highest value uses vis-à-vis uses that are more immediately marketable but bring lower long term benefit
- What demands a more technology and service oriented employment base will place on local government services and education systems
- Why better regional and local accessibility and mobility (e.g., to North Fulton County) are crucial for Gwinnett’s economic future
- How big infrastructure projects that support economic development can be funded and maintained
- To what degree must Gwinnett offer (and can it afford) various economic development incentives to compete with its regional rivals

Fiscal Health

The winds of change blowing over Gwinnett will ultimately reshape its fiscal landscape. The consistent housing and job growth that has fueled the economy over three decades is projected to slow and with it the underpinnings of the County’s enviable fiscal base. As a result, this planning effort included a rigorous investigation of fiscal futures in order to answer the following questions:

- How will the projected economic base changes affect property and sales tax?
- How will the projected changes in income profile affect revenues and expenditures?
- Are there cost-effectiveness thresholds for infrastructure that are sensitive to wall-to-wall buildout of the County?
- Will SPLOST funds continue to support necessary infrastructure expansions?
- Can the County continue to rely on a pay-as-you-grow fiscal philosophy?
- What other financing tools should Gwinnett prepare?

- How much of its potential tax capacity does Gwinnett actually capture?
- Will a millage rate increase become inevitable?

Major Policies and Strategies

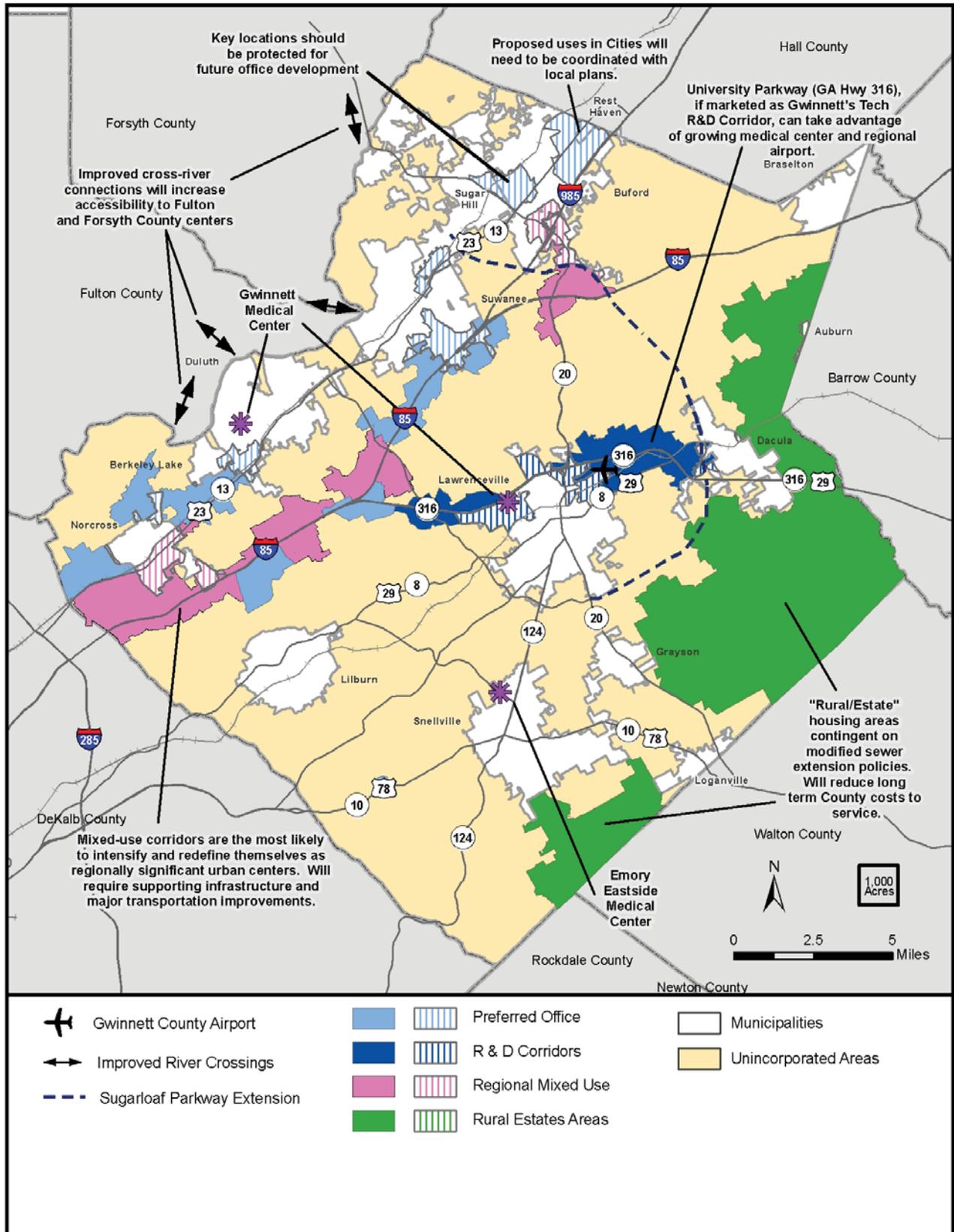
Economic Development

- Policy 1.1: Promote Major Mixed-Use Developments
- Policy 1.2: Protect Large, Well-Located Parcels/Areas for Office Use through Proactive Rezoning
- Policy 1.3: Strategic Placement of Sewer
- Policy 1.4: Use Transfer of Development Rights (TDR) for Rural-Estate Housing in the East

Fiscal Health

- Policy 1.5: Revise Current Millage Rates
- Policy 1.6: Promote University Parkway (GA Hwy 316) Corridor as Gwinnett’s Research and Development Belt
- Policy 1.7: Employ Debt Financing of Major Infrastructure
- Policy 1.8: Obtain Appropriate Balance of Retail

Figure 71: Economic Development / Fiscal Balance Map



D.2.2 Theme 2: Foster Redevelopment

Redevelopment is not merely a question of improving older properties or adding more features or amenities such as landscaping or better lighting. As with any maturing county, Gwinnett will increasingly need to promote redevelopment based on a redefinition of purpose of its older areas if it is to avoid finding itself saddled with wide swathes of substandard, vacant or severely underused properties. This concern is especially acute for Gwinnett's extensive acreage of aging strip commercial and traditional shopping center developments much of which may represent an excess of supply for such spaces. Nevertheless, redevelopment priorities will also apply to areas of aging housing units and to former light industrial or manufacturing sites for which replacement uses will need to be determined.

Redevelopment can be expensive and can be much more difficult (and riskier) than building on and the improvement of "greenfield" locations. As Gwinnett matures, it will need to recognize the full extent of its redevelopment needs and opportunities and institute a number of incentives and initiatives to address them. This theme therefore responds to the following questions and concerns:

- Is the existing and planned extent of purely commercial excessive in some areas?
- Is some form of mixed-use a better basis for the long term viability of some retail dominated sites?
- How much will Gwinnett's economic development goals depend on widespread redevelopment?
- To what degree can allowing higher densities or intensity of uses increase the likelihood of a property being redeveloped?
- How effectively can existing redevelopment tools such as community improvement districts (CID) or tax allocation districts (TAD) help promote redevelopment? What new tools can be added?
- To what extent should the public sector bear some of the costs of redevelopment—land assembly, infrastructure upgrades, major road improvements, parking garages?
- To what extent should the public sector bear some of the risks of redevelopment (loan guarantees, deferred taxes, etc.)?
- Can redevelopment help ease Gwinnett's housing affordability problems?

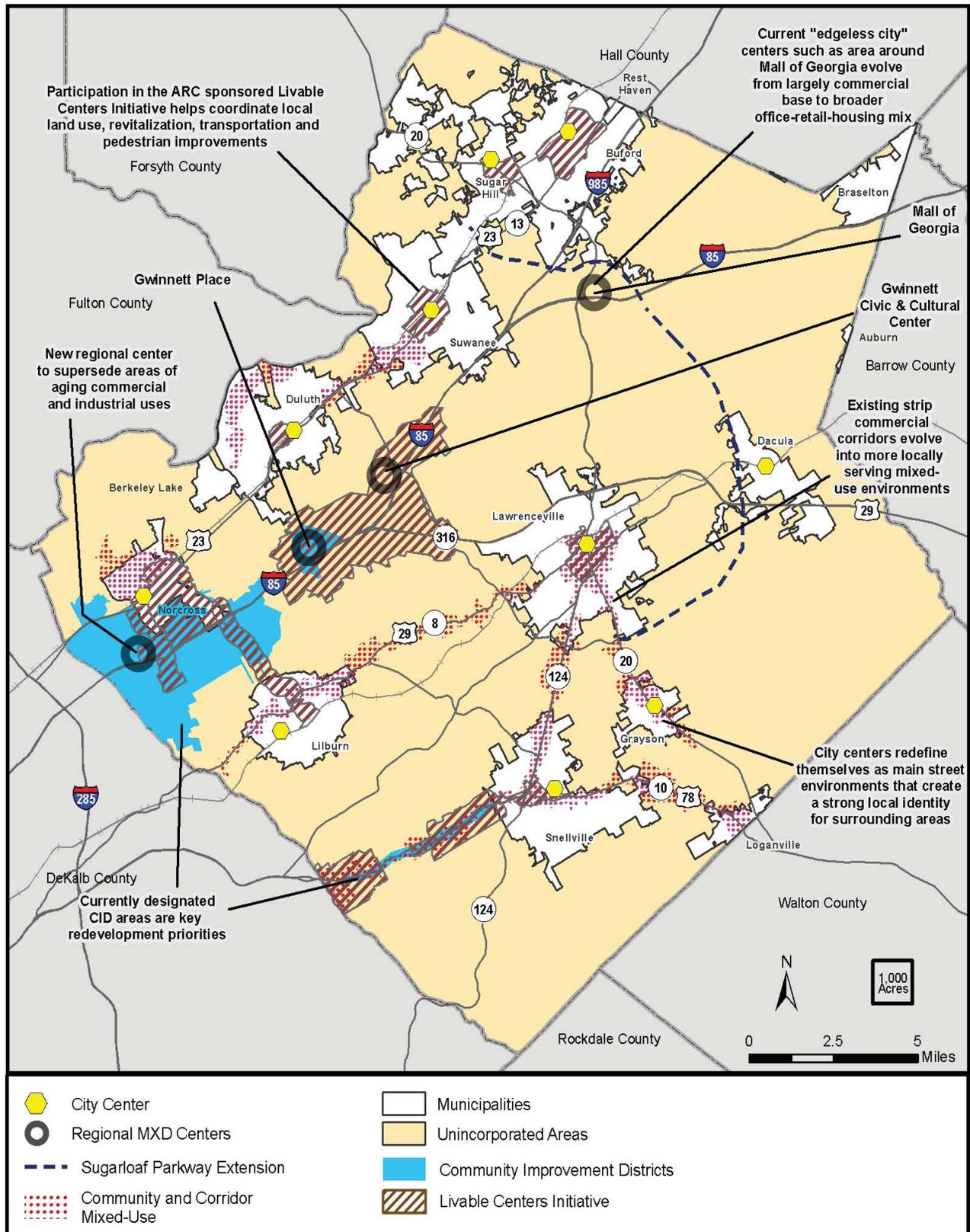
- How can redevelopment incorporate public amenities such as local parks, venues for community events, pedestrian and bike linkages to adjacent neighborhoods, restoration of environmental features and functions, etc?

The ARC's Livable Centers Initiative (LCI) is a key tool that enables small concentrated areas and corridors to apply for funding that helps attain redevelopment goals. Much like a TAD, the LCI funds can be used to set in motion certain catalyst projects that lead to an influx of private sector development. These types of projects, both public and private, lead to less reliance on personal automobile travel by creating areas where many societal transactions can take place within a safe, walkable environment. As shown on the "Foster Redevelopment" map (Figure 72), existing LCI areas are located along the I-85 corridor and other areas where redevelopment is needed.

Major Policies and Strategies

- Policy 2.1: Institute a Variety of Redevelopment Incentives and Bonuses
- Policy 2.2: Promote Densification in Specific Areas Designated for Mixed-Use Through TDRs, Rezoning, Increased Infrastructure Capacity
- Policy 2.3: Use Tax Allocation Districts (TADs)
- Policy 2.4: Promote Shared Infrastructure Facilities
- Policy 2.5: Allow "Corner Stores" within Specified Medium/Higher Density Areas as "Floating Zones"

Figure 72: Foster Redevelopment Map



D.2.3 Theme 3: Maintain Mobility

Perhaps no issue raises more complaints among Gwinnett residents and businesses than traffic congestion. It is also the most intractable (and expensive) issue to resolve – largely because it is a regional-scale problem over which no single jurisdiction can fully prevail. Nevertheless, Gwinnett can do more to remove or reduce the impact of a number of obstacles to better access to centers and attractions within Gwinnett and the region. Gwinnett can also do more to improve movement on the local roads and arterials within Gwinnett. Because increasing traffic congestion may be the greatest long term threat to its economic future, Gwinnett will need to do whatever it can to minimize congestion.

This theme focuses on those actions that Gwinnett can take to better manage travel demand and mobility.

- Land use patterns and intensities are prime determinants of how much traffic is generated. The two scenarios included in this plan will have noticeably different results in this respect.
- Most of Gwinnett’s existing developments are poorly connected to each other forcing many minor trips to share arterials with regional traffic. This theme addresses ways to diminish this.
- Transit will not end congestion but it can play a bigger role in tempering it and can provide those without ready access to cars a way to live better. But what forms of transit might work best in Gwinnett and where?
- Better access to North Fulton and its GA400 corridor is key to Gwinnett developing a more office based local economy and to Gwinnett attracting as residents some of those employees in more affluent North Fulton jobs. How can Gwinnett make it easier to get back and forth to North Fulton?
- Too many Gwinnett residents or commuters must work their way across much of the County to I-85 to then get to such greater Atlanta locations as Downtown Atlanta, Midtown, Buckhead, or the various I-285 centers like Perimeter. In what ways might Gwinnett reduce this dependency on I-85?
- How can Gwinnett encourage and better provide for both pedestrians and bicycles within and between Gwinnett’s neighborhoods as well as to their locally serving businesses?
- Are there any innovative ways that Gwinnett can fund transportation improvements and enhancements – new road lanes, grade separation at key intersections, new rights-of-way, transit options such as some form

of Bus Rapid Transit, MARTA extension into Gwinnett, pedestrian connections between developments, etc.?

- Which highways are best suited for applying congestion management fees? Will such charges on regional arterials like I-85 require regional cooperation or can it apply just within Gwinnett? How can toll avoidance behavior be managed to not adversely impact alternative routes ?

Major Policies and Strategies

- Policy 3.1: Enhance Signal Coordination and Intelligent Transportation Systems (ITS)
- Policy 3.2: Manage Access on Arterials
- Policy 3.3: Enhance Incident Management (Traffic Control Center)
- Policy 3.4: Establish a Road Connectivity Requirement for New Development
- Policy 3.5: Create Transit-Oriented Development (TOD) at Appropriate Sites through Proactive Zoning
- Policy 3.6: Establish a More Extensive Transit System
- Policy 3.7: Pursue Strategic Road Widening and New Alignments

Figure 73: Maintain Mobility and Accessibility Map- Transit

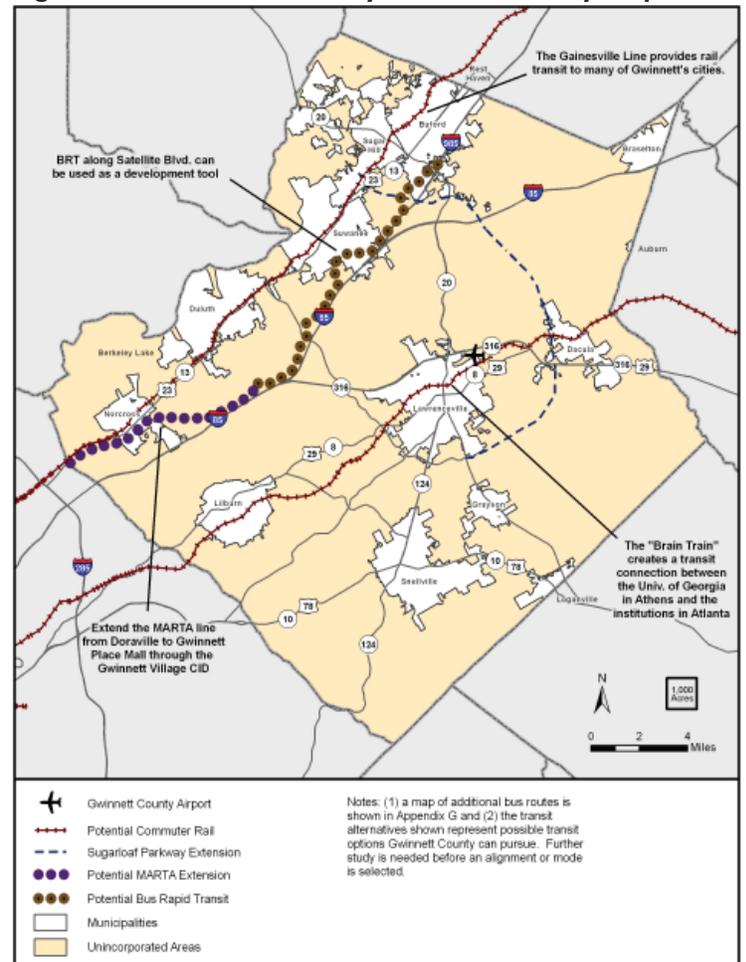
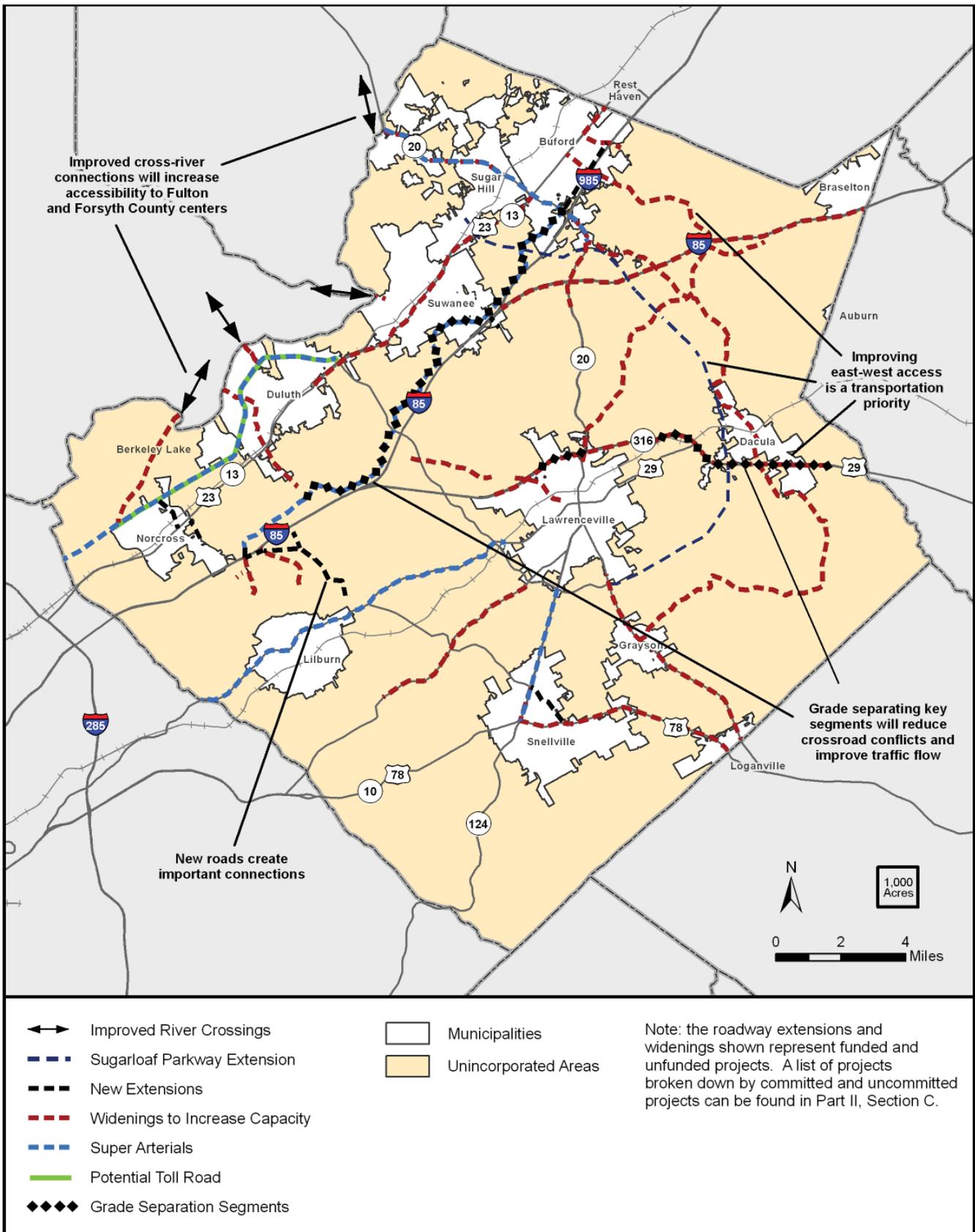


Figure 74: Maintain Mobility and Accessibility Map - Roads



D.2.4 Theme 4: Provide More Housing Choices

The declining quality of some of the County's oldest residential developments has been a growing concern. But, given the overall quality of most Gwinnett neighborhoods, the full range of Gwinnett's housing issues may not be readily apparent to many. As time passes however, the number of current or potential problems demanding attention and resources will increase and dealing with Gwinnett's housing issues will become more complex.

This theme recognizes this growing complexity and links housing issues to such topics as successful economic development and the overall quality of life of those who choose (and are able) to live in Gwinnett. Economic development and housing issues are intricately linked.

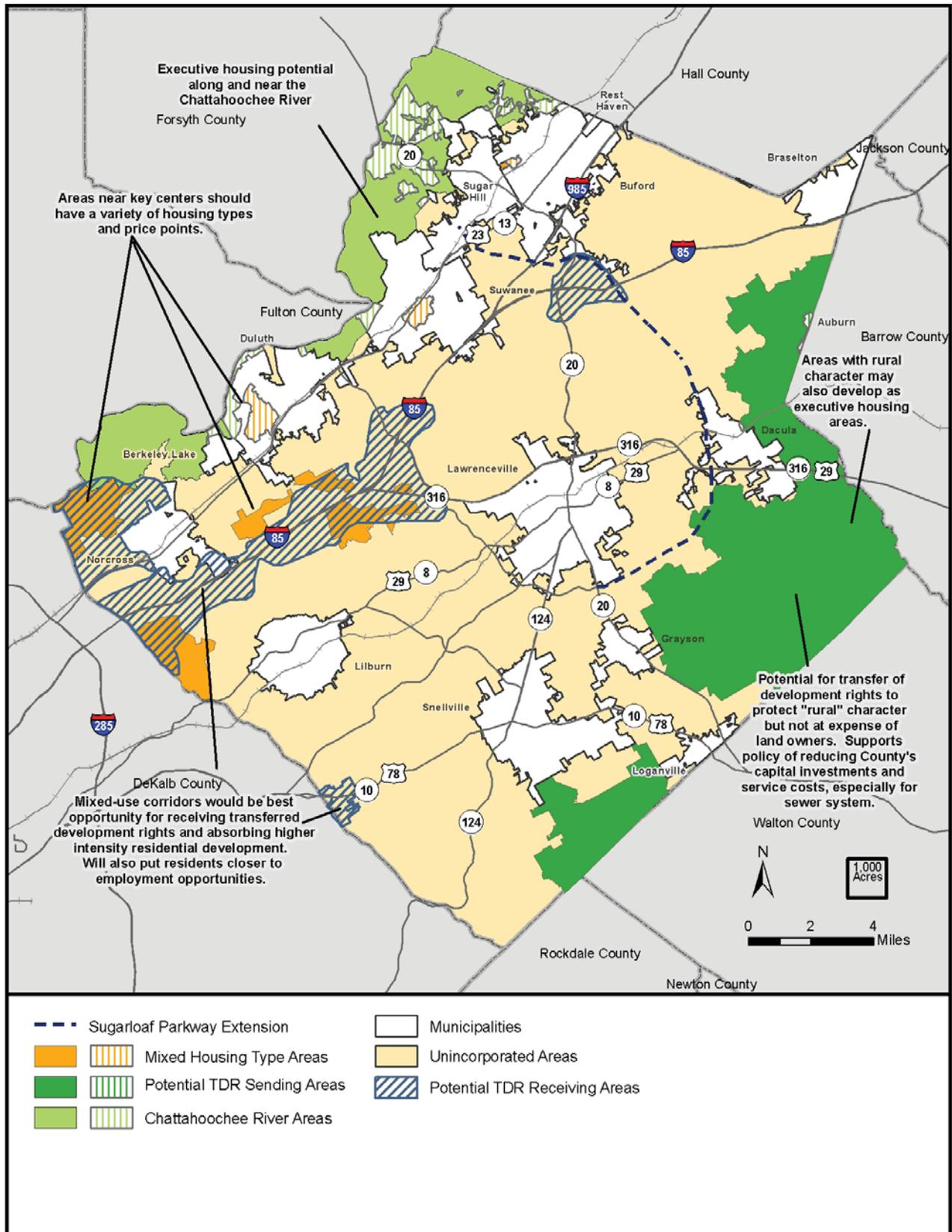
- How well each set of concerns is handled can create opportunities or problems for dealing with the other. Job creation and housing demand are, rather obviously, closely linked.
- If Gwinnett grows many jobs, there will be increased demand for nearby housing. If housing cannot be provided for all of the job sectors being created, it will lead to increased commutes in and out of the County (and increased congestion) or even to such employers seeking alternative locations outside Gwinnett.
- Rising or stagnating average incomes will directly affect the type of housing sought and built, how well neighborhoods are maintained, neighborhood stability and, in the case of extremes, the degree of foreclosures or scale of homelessness within Gwinnett.
- Housing needs and preferences are also directly influenced by changing demographics. For example, the large family sizes of many ethnic groups may be keeping household sizes at present levels or slightly higher rather than following the current trend of decreasing average household sizes. Other social trends with implications for changes in household size include the overall aging of the population, increases in non-traditional family organization (e.g. through divorce and custody decisions), differences in how various ethnic groups organize their households (e.g. large extended families), the size of disabled or otherwise dependent special needs populations.



Providing the housing supply to meet all this increasingly varied demand is also becoming more complex. As long as Gwinnett was in a rapid growth mode based on a vast influx of middle class and more affluent households seeking single-family detached environments, the for-profit housing market has generally been able to meet Gwinnett's housing needs. This may be less and less true in the future for a variety of reasons, not the least of which being any prolonged extension or expansion of the current difficulties in the economics of home construction and financing of home purchases. Consequently, this theme also covers the prospects that non-profit providers and County government itself may need to increase their influence over or direct involvement in providing housing opportunities and maintaining the quality of the Gwinnett's housing.

Certain parts of Gwinnett are acquiring a noticeable ethnic flavor – e.g., Koreans in the Duluth area, South Asians in the southwest portions of Gwinnett. Nevertheless, the analysis of housing patterns described in the Trends and Driving Forces section (Part I.C.5) revealed that the separation of where different racial or ethnic groups live is not highly pronounced and that many groups are increasingly dispersed through much of the County, not gravitating to only certain locations. One of the key challenges of the housing policies of the Unified Plan is to maintain such a pattern, in part by land use decisions that help provide for a variety of housing types and price levels over much of Gwinnett. Also it is important that redevelopment of areas that today have concentrations of poverty or ethnic exclusivity take place in ways that do not simply reconstitute such situations.

Figure 75: Housing Choices Map



Major Policies and Strategies

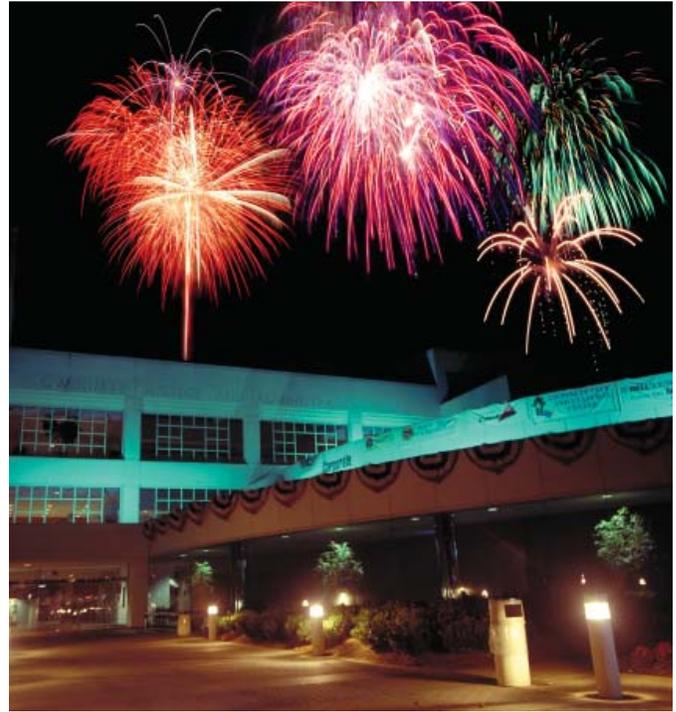
- Policy 4.1: Establish and Provide Access to More Executive Housing Areas
 - Policy 4.2: Preserve Existing Workforce Housing
 - Policy 4.3: Expand Maintenance and Rehabilitation Assistance to Homeowners and Small Businesses
 - Policy 4.4: Expand Senior Housing Options
- These interventions are also an economic development strategy.

D.2.5 Theme 5: Keep Gwinnett a “Preferred Place”

By such important measures as average incomes, neighborhood quality, quality of schools and quality of government services, Gwinnett today is a good place to live and work. Tomorrow it could be even better – a “preferred place” within the Atlanta region to live, work, play and relax.

This theme describes and ties together a broad array of issues that underpin the often cited but rarely explicitly detailed concept of “quality of life.” Among these issues are those related to the environment, open space and recreation, culture and entertainment, the quality of development and adding more amenities and convenience to Gwinnett’s neighborhoods. Although the items cited below may seem like a random grab bag of ideas, they all relate to the need to more energetically and purposefully pursue aspects of living in Gwinnett that have not yet fully gotten their due.

Achieving this “preferred place” status requires more than resolving the problems and fulfilling the goals that the preceding four themes address. Achieving those goals will create a more efficient and more sustainable framework for economic prosperity, decent and affordable housing and the ability to get around with less difficulty. All of these are important aspects of life in Gwinnett, but, as such initiatives as **Partnership Gwinnett** point out, they are insufficient in themselves to make Gwinnett more than just another successful suburban setting. To go beyond this, one should imagine the improvement in overall quality of life in Gwinnett if many of the kinds of amenities and features cited in this theme were built into every new development, every redevelopment and, where possible, into existing developments.



Issues tied to quality of the built environment that this theme covers are:

- Fashioning a more connected network of open space, environmental features, and greenways, especially in areas where these features are now highly fragmented or isolated from each other.
- Acquiring surplus industrial or commercial sites for open space or recreation facilities in highly developed areas, especially where such facilities are now missing or overstressed.
- Providing more incentives to enhance the open space/green space within new neighborhoods or redeveloped areas, especially mixed use areas.
- Improving the overall quality of architecture and public spaces such as streets; especially enhanced development aesthetics within employment and commercial sites.
- Allowing “corner stores” and other neighborhood oriented services within a “floating zone” category in planned residential areas as long as they can meet specified criteria regarding type of business, size of business, number of nearby households and accessibility by pedestrians, etc.
- Creating stronger incentives to protect and enhance the County’s remaining historical resources and its cultural landmarks as signature elements of its overall identity.

A New Center for Gwinnett

One unique type of mixed use center that relates directly to many of the issues tied to maintaining and enhancing the attractiveness of Gwinnett's quality of life is the development of a new cultural, civic and symbolic center for Gwinnett County. Although some of the small cities within Gwinnett have been working toward creating attractive and energized mixed use town centers, the County itself does not have any center of its own that would:

- Be a critical mass of civic, cultural, entertainment and arts attractions
- Be a principal venue for community events such as bazaars, holiday celebrations, fairs and festivals.
- Symbolize that Gwinnett is maturing into a more urban and urbane community with a more defined identity.
- Exemplify that Gwinnett's quality of life amenities are comparable to the best in the southeast United States.

Ideally, such a center should be highly pedestrian friendly, provide for easy pedestrian access to all attractions (once someone has arrived at the Center), and include a range of major venues and smaller attractions and entertainment providers in close proximity to each other. Such a center should also be the heart of Gwinnett's arts and culture community and be the location of numerous special exhibits and special events. It should be a place that is active 18 hours a day, that draws people from all across Gwinnett and from other nearby jurisdictions as well.

The most logical place for such a center is the area around the existing Gwinnett Center. It is highly accessible, located within one of the regional scale mixed use corridors that the Unified Plan promotes. With its convention facilities, its Arena and its Performance Center, this complex already has some of the features that can help anchor an exciting mix of various attractions. However, the current highly auto-oriented nature of the existing complex and its surroundings negates much of what a regionally significant and locally cultural center should be.

To create the type of center that is a real "place" along the lines of a big city 'arts district' or entertainment center area will require a commitment to planning and urban design principles that include:

- Basing the center on a grid of connecting, highly pedestrian-friendly streets that ties together all major attractions and that can be fronted by numerous uses between the main attractions.
- Much of the center should be occupied by "cultural incubator" spaces geared specifically to the needs of the arts community – e.g., work-live units.
- There should be a sufficient variety of outdoor public spaces to meet the various needs of the center and to create interest in visiting the center – green spaces for relaxation, more urban hard surface spaces for events, more outdoor amenities such as public art, fountains, etc.
- Parking must not dominate the environment between attractions but should be subordinate to both the pedestrian realm and the street frontage architecture.
- Creating such an environment will require a concerted effort by the public and private sectors. Various incentives to attract and support a variety of small scale privately-run cultural and entertainment should be part of such a strategy. A key role in helping implement such a strategy would be the participation of a non-profit, privately endowed Arts Council as outlined in Policy E.6 in Part 3, Section A.I of this Unified Plan.

School Issues

One issue important to Gwinnett’s quality of life is the quality of its school system, long a source of local pride and one of the strongest magnets drawing new families to Gwinnett. The Unified Plan does not deal with school issues directly. Nevertheless, the different scenarios will affect school issues through their varied outcomes regarding increasing or decreasing population in specific sections of the County (which affects the number of schools needed and where they can be located). Another way the scenarios would affect schools is by leading to different type of household income structure in maintaining today’s overall high proportion of affluent households.

Major Policies and Strategies

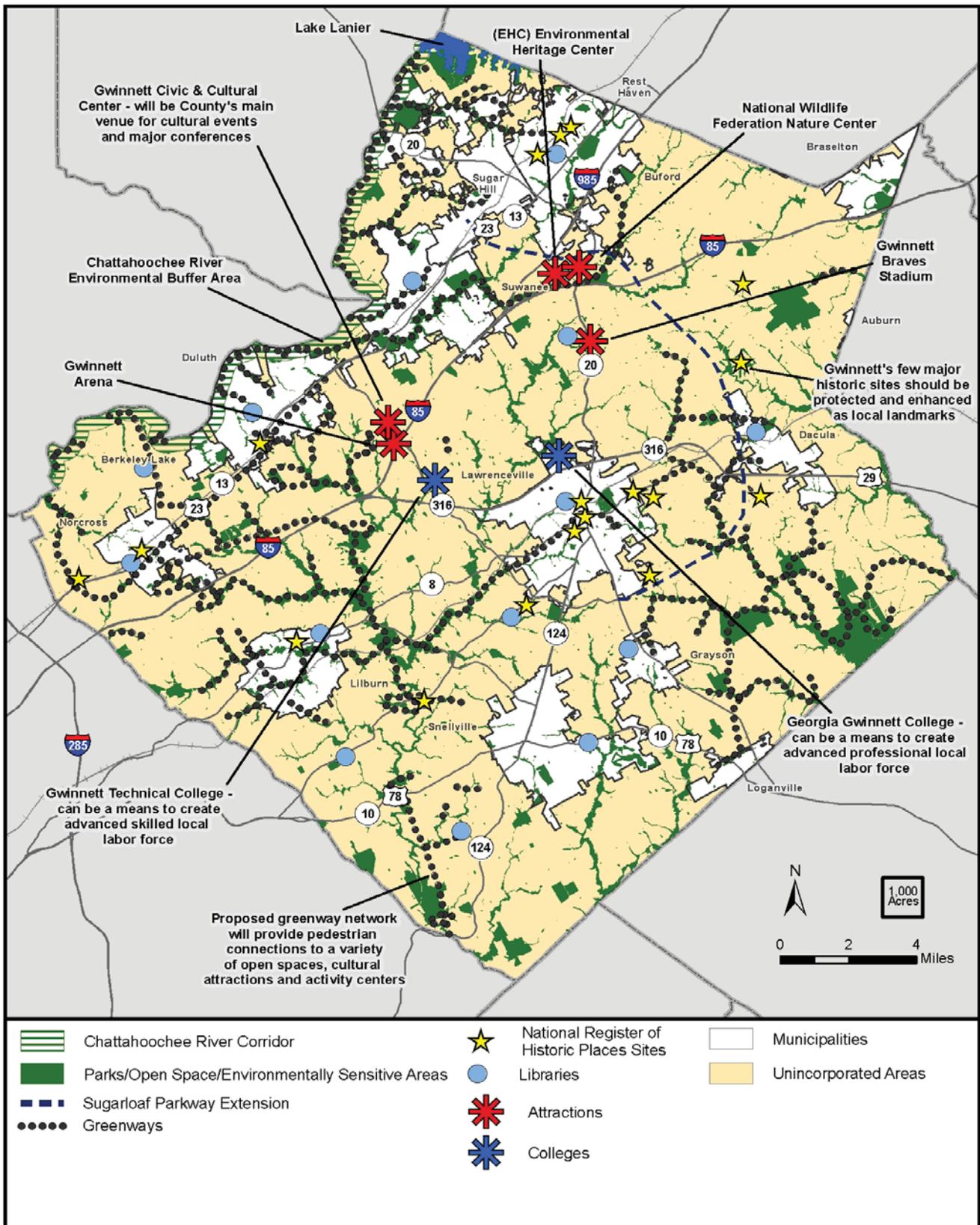
- Policy 5.1: Improve the Walkability of Gwinnett’s Activity Centers and Neighborhoods
- Policy 5.2: Support and Promote the Expanded Four Year College
- Policy 5.3: Invest in Youth Enrichment Programs
- Policy 5.4: Enhance Development Aesthetics
- Policy 5.5: Provide Venues to Celebrate Growing Cultural Diversity of County
- Policy 5.6: Expand Presence of “Arts Community”
- Policy 5.7: Provide Incentives for Enhanced Open Space/Trails
- Policy 5.8: Use Development Regulations to Create Local Parks
- Policy 5.9: Acquire Surplus Industrial or Commercial Sites for Open Space/Recreation

In addition to better treating its physical framework, Gwinnett needs to nurture its cultural resources and talents. Two relatively easy ways to achieve this are:

- Expanding (and funding) the role of the Arts Community as a leading promoter and supporter of locally based artists and cultural events.
- Providing venues to celebrate the growing cultural diversity of the County through special holiday events, fairs, music performances, “foodways” festivals and so on.

The International Gateway scenario places much significance on the County better tapping into the talents, energy and financial resources of the many ethnic groups that are now here and growing in numbers. As important as this diversity will be as a driver of a new type of Gwinnett economy, it should also be embraced as a source of the fun and enjoyment which are also part of living in a “preferred place.”

Figure 76: Preferred Place Map



PART 1
PART 2
PART 3

Why No Parcel-Based Land Use Map?

One of the biggest differences between this Unified Plan and its predecessors is the absence of a parcel-based land use plan. Instead, the Composite Policy Map and the various Theme Maps as well as the Key Future Land Use Actions Map are the main guide to how many Unified Plan policies are located across Gwinnett. There are several reasons why the Unified Plan does not present a more detailed parcel based land use map that has traditionally been a feature of past comprehensive plans:

- The previous future land use maps were, in fact, depictions of current land uses at the time the plan was adopted or updated and a depiction of future land uses based on anticipated growth in areas that had not yet been developed – e.g., current RA-200 zoned areas transitioning to quarter acre lots.
- This made such a map a quasi-zoning map rather than a real guide to the intended spatial application of major policy decisions.
- The Unified Plan stresses big issues and big consequences and emphasizes the overall collective impact of the plan's key policies and actions.
- A detailed parcel-based land use map in effect asserts there is only one possible and best end state that can be achieved by the Plan.
- The Unified Plan however, addresses two possible futures and stresses that we need to be able to deal with each of them in equally effective ways.
- Gwinnett is far too complex for a comprehensive plan to detail all the decisions that need to be made regarding the relationships of land uses, local streets, open space location and functions, and protected areas. A parcel-based map implies a comprehensive plan has accomplished this impossible feat.
- Such localized details are better handled in doing sector plan maps whose smaller scale and more local focus makes it easier to properly coordinate, in an informed way, such decisions. That is why the Unified Plan advocates for sector planning and depicts the recommended districts shown on Figure 1 (page 7). Planning in Gwinnett County in the years to follow will address the formulation of these sector maps.

E. THE SYNTHESIS

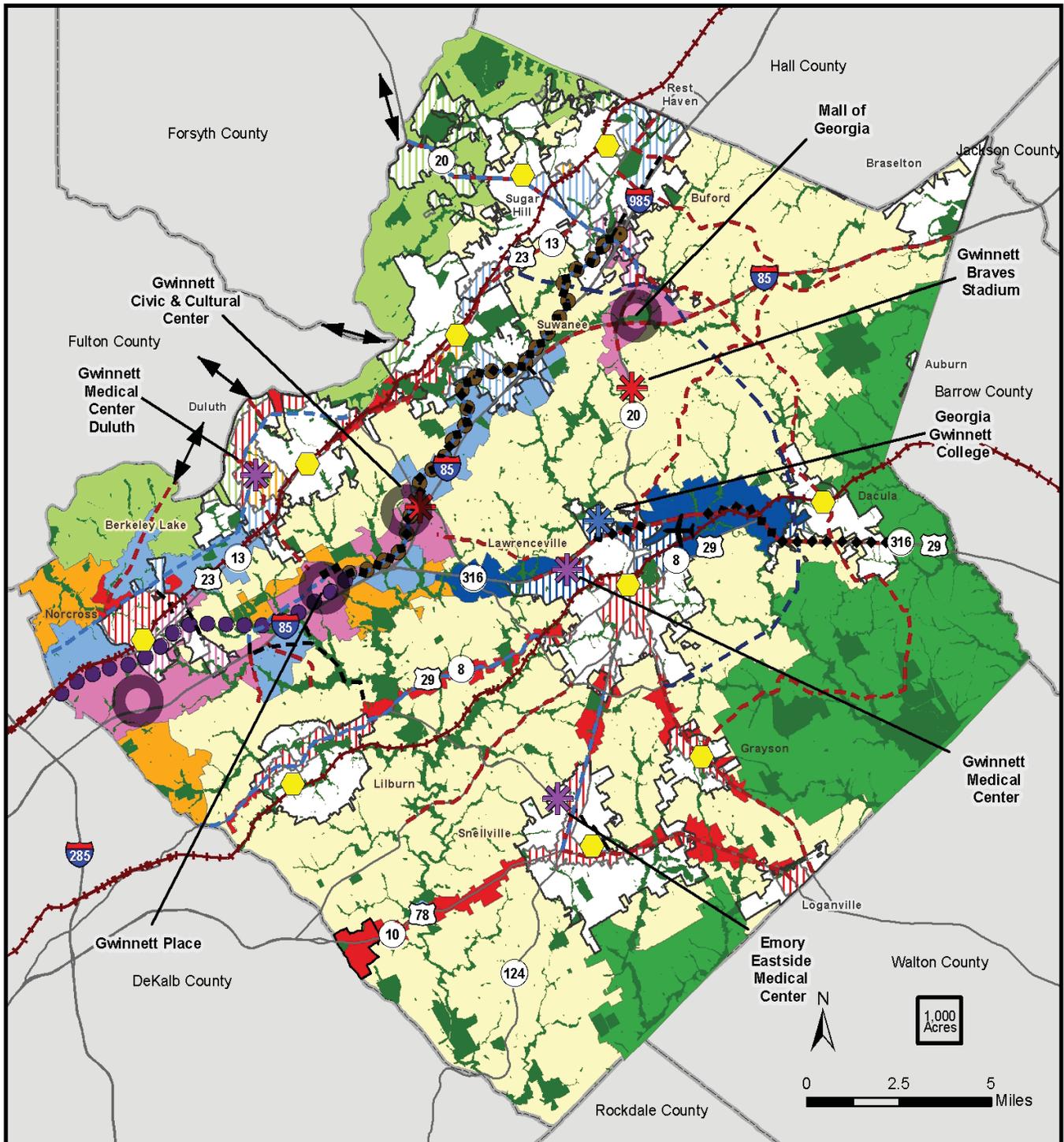
The following section constitutes an overall summary of the interactions of the five themes and the supporting road network.

This section features the key summary graphic of the plan – the Composite Policy Map. This map is a conceptual synthesis of the geographic relationships and interactions of selected key policies from each of the five theme maps. This Composite Policy Map provides the primary overview of the desired outcomes of the International Gateway scenario which is the Unified Plan's "preferred alternative."

Conclusion

In combination, the Composite Policy Map, the five theme maps, and the Future Development Map (Figure 78 in Part 3) are the major guidance for staff, agencies, the public, and the Board of Commissioners on future decisions for the County regarding land use, transportation improvements and needed infrastructure such as sewer system upgrades. These maps provide a framework for many details of plan implementation such as developing the various sector plans, key rezonings and other more location specific decisions. Part 3 presents a framework for carrying out the Unified Plan's goals and policies.

Figure 77: Composite Policy Map



PART 1
PART 2
PART 3

	Gwinnett County Airport		Potential MARTA Extension		Preferred Office
	City Centers		Potential Bus Rapid Transit		Rural/Estate Areas
	Regional MXD Centers		Potential Commuter Rail		Parks/Open Space/ Environmentally Sensitive Areas
	Improved River Crossings		R & D Corridor		Chattahoochee River Areas
	Sugarloaf Parkway Extension		Community and Corridor Mixed-Use		Existing/Emerging Suburban
	New Extensions		Regional Mixed-Uses		Municipalities
	Super Arterials		Mixed Housing Types		
	Widenings to Increase Capacity				
	Grade Separation Segments				

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PART 3: IMPLEMENTATION

This final section of the Unified Plan is the Plan's "user's manual." This section provides guidance to citizens, local agency staff, and elected officials regarding how to interpret and apply key concepts and policies contained within the Plan.

The central feature of Part 3 is a collection of detailed implementation summaries for each of the 33 policies that were listed under the five themes in Part 2. These summaries are organized to provide:

- A synopsis of the policy,
- The benefits the policy will facilitate,
- Key implementation steps necessary to achieve policy benefits, and
- Guidance for decisions to further implement the policies.

These summaries also show:

- Primary responsibility for implementation,
- Key implementation challenges, and
- Measures of success.

Organizing this information in one place and using a consistent format for each policy provides all parties – decision makers, administrators, and those affected by such decisions and processes – with a shared understanding of

what should and must be accomplished to make the policy successful over time.

The Short Term Work Program (STWP) prioritizes and identifies the key policies that should be initiated and in some cases completed within five years. Not all policies are included in the five-year Short Term Work Program. This is because it is not possible to begin all policies within five years. The policies not included in the five-year STWP are important, but the Plan's success does not hinge on their short-term implementation. However, it is important to remember that these policies can be initiated when needed and appropriate, based on available funding, manpower, and changing circumstances.

The sections entitled 'Using the Plan and Its Maps' and 'Changes to the Zoning Resolution and Development Regulations' provide policy guidance about the appropriate zoning districts for specific areas of the county. The sections also recommend important changes to the County's current zoning regulations. The final section of the Plan, 'Monitoring and Updating the Plan', provides guidance on how to track the Plan's effectiveness and amend it.

A. POLICIES AND THEIR IMPLEMENTATION

A.I Theme I: Maintain Economic Development and Fiscal Health

POLICY A.I.I: Promote Major Mixed-Use Developments

Synopsis of the Policy:

Gwinnett must develop its own regional “mixed-use centers” if it is to absorb the highest levels of economic development, especially office growth, that are forecast for the County. Not being prepared to accept this office growth when it happens will possibly mean losing it to other jurisdictions. These centers will provide a mix of jobs, housing, recreation, and civic uses as well as create a stronger “sense of place” than current more-suburban centers. Regional “mixed-use centers” will require a substantial investment in capital facilities from the County to reach their full potential. Therefore, capital investment should be concentrated in growth nodes designated by the Board of Commissioners. Through the years, the County has already made major infrastructure investments in several commercial nodes, such as Gwinnett Place Mall, the Civic Center, the Mall of Georgia, and Gwinnett Village. While not ruling out the development of others, these commercial nodes are the most likely potential candidates to become the County’s regional mixed-use centers.

Potential Policy Benefits:

- Revitalization of I-85 corridor
- Increased number of local, high-wage jobs
- Increased redevelopment opportunities
- Development focused in specific areas
- Preservation of rural areas
- Focused capital investments



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Revise Zoning Resolution to permit higher densities and more by-right uses in designated mixed-use centers	Department of Planning and Development and Board of Commissioners
Make proactive investments in designated mixed-use centers (e.g., upgrade roads and sewers, parking structures, civic buildings, landscaping, etc.)	Board of Commissioners, Various County agencies and CIDs
Revise approval process so that it is less complicated and easier to execute. For example, specify standards that if met allow for automatic, administrative approval of allowed uses	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Funding for infrastructure improvements will be needed
- Land assembly could be difficult
- Delegation of some development decisions to authorities and staff to simplify the approval process

Measures of Effectiveness/Monitoring Benchmarks:

- Revised Zoning Resolution
- Shorter amount of time for permit approvals
- Increased development activity within mixed-use centers
- Increased number of jobs within mixed-use centers
- Increased County investment in mixed-use centers

POLICY A.1.2: Protect Large, Well-located Parcels/Areas For Office Use Through Proactive Rezoning

Synopsis of the Policy:

Office development and the attendant jobs that it brings will ultimately produce the highest form of sustainable economic development for Gwinnett County. The ability to attract a larger share of the regional office market is vital to the long-term economic health of Gwinnett. To help ensure that prime office sites, hospitals and related medical uses are available and not developed for other uses prematurely, the County should initiate a comprehensive zoning plan that better protects the best sites for office development. Proactive area-wide zoning actions based upon careful study and analysis could be an effective way to implement this policy.



Potential Policy Benefits:

- Increased number of high-wage jobs
- Development focused in specific areas
- Strengthen the tax base with targeted growth
- Faster rezoning approval and permitting process for appropriate uses

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determination of which parcels to protect for future office use	Department of Planning and Development in collaboration with Economic Analysis Division
Rezone parcels to office use	Department of Planning and Development and Board of Commissioners
Protect parcels designated for office use rather than rezoning these parcels to uses that do not support sustained economic health and higher wage jobs in the County	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Market pressures to put land to use before office market develops in Gwinnett

Measures of Effectiveness/Monitoring Benchmarks:

- Revised zoning maps
- Revised Zoning Resolution
- Increased number of high-wage jobs
- Land designated and zoned for office use is not rezoned for other uses

POLICY A.1.3: Strategic Placement of Sewer

Synopsis of the Policy:

The County will not have the resources to provide both new sewer connections in the east and rehabilitate older sewers in the western and southern portions of the County. The eastern part of Gwinnett currently remains largely unsewered today. While large sewer interceptors and regional pump stations were envisioned for that area over the years, sewer extensions have never been designed nor constructed due to budget limitations. Parcels that have built out on sewer have done so primarily through the use of developer-built wastewater pumping stations and force mains designed to convey flows relatively long distances to existing sewer infrastructure. Constructing interceptors and large regional pump stations in this area of the County would be expensive and would likely preclude the ability of the County to expend dollars on rehabilitation and expansion of existing sewer infrastructure in the western and southern areas of the County. This would limit densification efforts in areas needing revitalization and could in turn limit economic development in the County as a whole. Therefore, limiting sewer extensions in the east is a step toward fostering the type of growth which can revitalize Gwinnett and heighten economic development for the future. Ensuring that the sewer system is upgraded and expanded in key locations is one of the most important measures Gwinnett can take to protect its economic development potential.

Reserving sewer capacity is tied directly to limiting sewer extensions into the eastern portions of the County. One method of doing this is to reserve sewer capacity and make it available for office, mixed-use employment and hospital expansions in key locations. Currently, sewer transmission system expansions are needed in the major employment and mixed-use areas. Any gaps in capacity verses demand that may arise while the expansion process is underway should be managed in part by making employment sectors the priority user. With this, any problems associated with increasing sewer system capacities will be less likely to impede major employment growth.

Retaining a more “rural” eastern edge can also help promote Gwinnett as a desirable place to live for those seeking rural or “estate housing” lifestyles based on low-density, large-lot environments. Because owners and top management prefer to live near their businesses, establishing such opportunities fits in with the economic development



goal of attracting high quality, high paying jobs to Gwinnett. Even if housing in eastern Gwinnett does not all evolve as executive housing enclaves, limiting sewer extension in eastern Gwinnett is still paramount to the County's fiscal health strategy because low-density housing of average value costs the County more than it returns in revenue, unlike the higher density, mixed-use environments.

Potential Policy Benefits:

- Development focused in specific areas
- Rural estate preservation
- Provide executive housing
- Environmental conservation
- Growth directed to desired areas
- Maintain fiscal health of County
- Local job growth
- Increased number of high-wage jobs

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to establish guidelines to limit the transfer of wastewater across sewer basin boundaries in the eastern area of the County (to include limiting the construction of developer built wastewater pump stations and force mains as well as tunnel gravity sewers).	Board of Commissioners
Action to identify specific boundaries and limit the extension of sewer into the areas of eastern Gwinnett County and to begin reserving sewer capacity for office, mixed-use and hospital expansion uses identified in the Unified Plan.	Board of Commissioners
Action to direct the Department of Water Resources to modify the Water and Sewer Master Plan accordingly.	Board of Commissioners
Modify sewer extension policy to prevent or limit new connections.	Department of Water Resources
Determine amount of excess sewer capacity in those areas designated for office development and estimate how much capacity should be retained for future office employment use	Department of Water Resources
Evaluate the most appropriate zoning district to rezone properties that will have limited or no sewer. Create new zoning district if needed.	Department of Planning and Development
Rezone areas not served by sewer that will have limited or no sewer service.	Board of Commissioners

Policy Challenges and Costs:

- Pressure to rezone eastern area to more suburban uses.
- Limiting length and location of sewer main extensions could be difficult.
- Difficult to reserve capacity for a future use in some areas while current development is seeking service.
- Existing sewer facilities may be insufficient to provide the necessary treatment and transport capacity.
- The Georgia EPD and the Metropolitan North Georgia Water Planning District are exploring the use of water management policies to include consumptive use budgets in the permitting process. Because septic systems are currently considered 100 percent consumptive use, the long-term use of such systems could affect future water withdrawal permits if these kinds of policies were to be implemented in the future.

Measures of Effectiveness/Monitoring Benchmarks:

- Revised sewer policy
- Slower growth of total length of sewer system
- Slower growth of sewer costs
- Sewer capacity available when office uses arrive
- Office developers respond to/apply for these sites
- Fiscal outcomes in keeping with Unified Plan projections

POLICY A.I.4: Use Transfer of Development Rights (TDR) for Rural Estate Housing in the East

Synopsis of the Policy:

Retaining a more “rural” eastern edge within the County can help promote Gwinnett as a desirable place for those seeking “estate housing” lifestyles based on low-density, large-lot environments. This policy is mutually supportive of several others, including:

- Establishing more executive housing, because owners and top management prefer to live near their businesses.
- Promoting University Parkway as Gwinnett’s research and development belt, because eastern Gwinnett would be the most likely location for needed executive housing to support the R & D businesses; which would in turn attract high quality, high paying jobs to Gwinnett.

All of these goals would be enhanced by the goal of strategic placement of sewer; because shifting sewer expansion to the I-85 and University Parkway (GA Highway 316) corridors would promote both redevelopment and support the County’s long term economic future.

Transfer of development rights (TDR) separates a parcel’s potential development rights from the parcel itself. The separation allows the development right that would have been constructed on the parcel to be sold and used on a different parcel in a different area of the County. The desired outcome of a TDR program is that the sending parcels would remain undeveloped or developed at very low densities while still allowing the landowners to receive development associated income. Receiving areas would be developed at higher intensities than otherwise allowed.

TDRs may also be a tool to promote rural clustering based on shifting development rights to designated parcels within the rural area. This pattern would permit limited extension of costly sewer system requirements and reduce the County’s long-term capital and operating costs for its sewer network. Residents of such a “rural” environment would have less need for such amenities as publicly-owned passive open space, resulting in another incremental reduction of overall County expenditures.



Potential Policy Benefits:

- Development focused in specific areas
- Rural estate preservation
- High quality jobs attracted
- Environmental conservation
- Redevelopment in receiving areas

Key Implementation Steps:

Action:	Primary Responsible Party:
Policy direction to applicable department to study and develop an implementation plan for a TDR program	Board of Commissioners
Conduct TDR sending and receiving area analysis and recommend a measure of development rights	Department of Planning and Development in collaboration with the Economic Development Division and Law Department
Specify sending and receiving areas	Department of Planning and Development in collaboration with the CIDs and Board of Commissioners
Set the number of development units associated with sending and receiving area parcels	Department of Planning and Development and Board of Commissioners
Determine whether the system will include a TDR bank or be a market driven system	Department of Planning and Development, Economic Development Division, and Board of Commissioners
Set up TDR marketing program	Department of Planning and Development, Economic Development Division, and Communications Division
Adopt a TDR ordinance	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Need to create a limit on by-right development in receiving areas so that there is an incentive to purchase development rights from the sending area
- Opposition to higher densities in receiving areas
- Varying market demand for development in the receiving areas may necessitate purchase of additional development rights
- Development limits placed on sending areas

Measures of Effectiveness/Monitoring Benchmarks:

- TDR analysis conducted
- Sending and receiving areas mapped / specified
- Program set up and marketed
- Ordinance adopted
- Preservation of the rural eastern edge of Gwinnett through targeted amount of land utilized as sending parcels
- Increased densities in the receiving areas

POLICY A.I.5: Revise Current Millage Rates

Synopsis of the Policy:

Gwinnett's current system of raising revenues – relying on SPLOST (Special Purpose Local Option Tax) and new development's property taxes – is becoming insufficient to keep up with revenue needs. These current revenue sources are geared toward a rapidly growing county, and they are not sustainable as Gwinnett County's growth slows and reaches build out. One of the first steps the County can take to help fund the County's future fiscal needs is to maintain the millage rate as property values increase. This will allow tax revenue to increase as a result of increased property values. Fiscal impact analysis, conducted in conjunction with the Department of Financial Services, suggests that the County may also need to consider an even more aggressive strategy. As the population of the County grows and increases the demand for services, even higher millage rates will be needed to keep pace with the demand.

Potential Policy Benefits:

- Raise revenue
- Address fiscal impact concerns
- Provide funds for other County service needs

Policy Challenges and Costs:

- Political opposition to "raising taxes"

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement a Study Seeking Direction Regarding Millage Rates	Board of Commissioners
Develop education and outreach program about County's current and future financial condition, strategies to address the situation, and the impact of doing nothing	Department of Financial Services in collaboration with the Communications Division
Revise millage rates	Board of Commissioners

POLICY A.1.6: Promote University Parkway (SR 316) Corridor as Gwinnett’s Research and Development Belt

Synopsis of the Policy:

The University Parkway (SR 316) corridor already has some of the feel of a high-tech corridor. With the appropriate investments in transportation, including upgrading University Parkway to a limited access parkway, the County can take greater advantage of resources such as the existing and expanding medical center, the existing industrial parks, the airport, the Georgia Gwinnett College, and Gwinnett Technical College and use them as anchors for a stronger Gwinnett-based high tech-biotech business complex. The corridor can also take advantage of the airport and the emerging lifestyle amenities in downtown Lawrenceville.

Although SR 316 is an important economic development center, it will, and should, differ from the economic development centers and mixed-use nodes in the County’s I-85 corridor. The SR 316 corridor will likely build-out as a set of suburban, campus-style office parks inhabited by related activities or even single user owners or tenants. These parks may have their own infrastructure and technical support requirements. Zoning and other related development policies and incentives will need to treat this corridor accordingly. Encouraging an “enterprise” relationship with area colleges and the Gwinnett Medical Center; evaluating the future of the airport; evaluating the needs of research and development businesses and then revising the zoning regulations and implementing a market strategy are all steps that will promote this valuable resource.

Potential Policy Benefits:

- Local job growth
- Increased number of high-wage jobs
- Development focused in specific areas



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Develop and implement a strategy to upgrade University Parkway to a limited access highway	Department of Transportation and Board of Commissioners
Determine specific areas along corridor to focus development	Department of Planning and Development in cooperation with Economic Analysis Division
Determine what amenities will attract high tech and research and development firms	Economic Analysis Division in cooperation with Chamber of Commerce and Partnership Gwinnett
Develop “enterprise” relationship with Georgia Gwinnett College, Gwinnett Technical College and Gwinnett Medical Center to encourage the transition of promising research ideas into successful businesses	Economic Analysis Division in cooperation with Georgia Gwinnett College, Gwinnett Technical College, Gwinnett Medical Center, Chamber of Commerce, and Partnership Gwinnett
Revise Zoning Resolution and Development Regulations to promote desired uses and amenities	Department of Planning and Development in cooperation with Economic Analysis Division, Board of Commissioners
Develop and implement promotional materials to attract businesses	Economic Analysis Division in cooperation with Chamber of Commerce and Partnership Gwinnett

Policy Challenges and Costs:

- Revision of Zoning Resolution and Development Regulations
- May require County infrastructure investments (e.g., roads, sewers, high speed internet access, etc.)
- Difficult to attract enough businesses early on to create the agglomeration effect needed to attract additional business

Measures of Effectiveness/Monitoring Benchmarks:

- Revised regulations adopted
- Collaboration with college in expansion plans and a College master plan
- Increased number of high tech and research and development businesses in the corridor

POLICY A.1.7: Employ Debt Financing of Major Infrastructure

Synopsis of the Policy:

Gwinnett uses a “pay as you go” approach to fund major infrastructure projects. However, with State and Federal funds becoming limited and revenue generated by SPLOST and property taxes expected to decrease, the County will need to look at additional ways to pay for major infrastructure projects. The County has taken some initial steps to use debt financing, specifically to fund a major sewer treatment expansion, but it is likely that the County will need to greatly expand its use of debt financing to help support key public sector initiatives and improvements.



Potential Policy Benefits:

- Speed up the provision of County infrastructure
- Provide funding for roads and transit
- Increase roadway capacity
- Infrastructure funding to support redevelopment of major mixed-use centers

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determine costs for capital improvement projects	Various departments, for example, Financial Services, Transportation, Support Services, Community Services, etc.
Issue bonds to cover infrastructure costs	Board of Commissioners

Policy Challenges and Costs:

- Very different method of paying for projects than the County currently employs

Measures of Effectiveness/Monitoring Benchmarks:

- Capital funds available for priority projects
- Issuance of bonds
- Faster provision of infrastructure

POLICY A.1.8: Obtain Appropriate Balance of Retail

Synopsis of the Policy:

Segments of Gwinnett are over-served by conventional retail development. Currently, Gwinnett has the lowest dollar per square foot yield on retail floor space in the region, which suggests the impact of too many retailers competing for too few dollars. An over supply of retail could also play a role in the number of empty stores and declining strip centers in the County. Vacant and economically blighted retail centers often affect surrounding residential areas. To ensure the long-term economic health of Gwinnett County, the current land use pattern of older, distressed strip malls and empty commercial structures along major arterial corridors must be changed.

Two potential ways to make older, surplus retail strip centers candidates for redevelopment are overlay zones or by rezoning. The first method would use an overlay or floating zone that allows larger (e.g., more than 10 acres) parcels or parcel assemblages to be redeveloped for a wider mix of retail/office/residential uses. The second method requires performing a market forecast to determine the demand for commercial space over time. Areas identified as having struggling retail or underdeveloped commercially zoned lands that exceed foreseeable market demand could be designated for rezoning to residential or mixed-use.

It is also important for the County to prevent a future oversupply. To address this issue, the County could consider requiring a market needs test prior to rezoning approval. The results of the market analysis could then be considered among other factors during the public hearing process for rezoning.

Potential Policy Benefits:

- Increased redevelopment opportunities
- Reduced percentage of retail in the County
- Development focused in specific areas
- I-85 corridor revitalized
- Number of empty stores and distressed strip centers reduced
- Increase in the taxable value of commercial properties as retail sales per square foot increase
- Tools to evaluate rezoning increased



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Conduct market forecast to determine the existing and anticipated market demand for commercial/retail uses along targeted corridors	Department of Planning and Development in collaboration with Economic Analysis Division
Determine priority retail centers for redevelopment and rezoning	Department of Planning and Development in collaboration with Economic Analysis Division
Create overlay or floating zone that can be applied to larger parcels	Department of Planning and Development and Board of Commissioners
Rezone excess commercial that is struggling or underdeveloped	Board of Commissioners
Develop “needs testing” methods for approving future retail	Department of Planning and Development
Amend Zoning Resolution to incorporate a market needs test as a requirement for future commercial/retail zoning applications	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Owners of older, decaying commercial properties that are still profitable
- Slow market for alternative uses in the county.
- Perception of negative fiscal impacts of slowing retail development

Measures of Effectiveness/Monitoring Benchmarks:

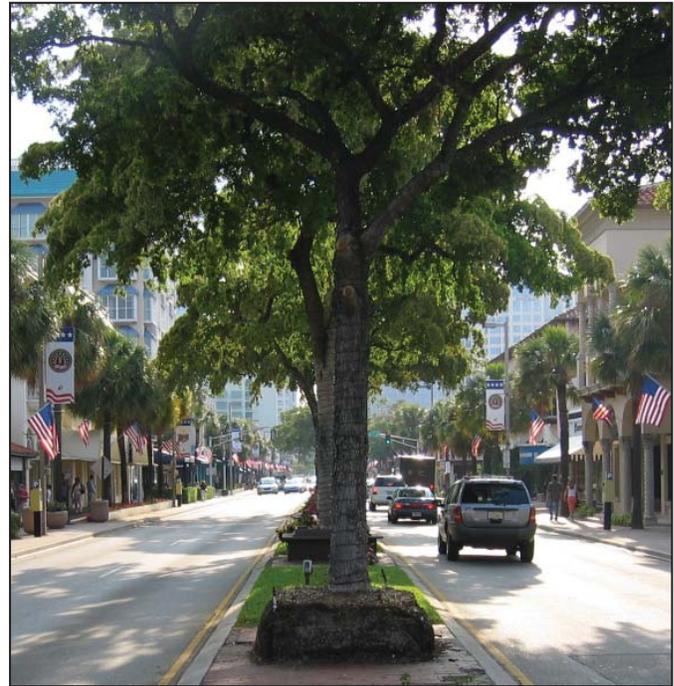
- Revised ordinances and policies
- Redevelopment of retail properties
- Improved dollar per square footage yield for retail property compared to the region
- Determination of appropriate amount and location of retail in County based on standard commercial market analysis
- Retail becomes a smaller percentage of overall non-residential development
- Higher percentage of occupied retail space
- Revitalized former retail spaces

A.2 Theme 2: Foster Redevelopment

POLICY A.2.1: Institute a Variety of Redevelopment Incentives and Bonuses

Synopsis of the Policy:

A variety of redevelopment incentives and density bonuses can help attract development into regional mixed-use centers and other areas that are designated for revitalization. Such incentives would help “level the playing field” with greenfield development to attract potential development to areas that have lost market appeal. Potential incentives include new standards for building height, massing of development, and Floor Area Ratio (FAR), which will allow more intensive development than in other parts of the County. Incentives and bonuses could also allow denser, more varied attached/multi-family redevelopment projects that include limited commercial development. Successful widespread redevelopment may require that other tax-related incentives, such as tax rebates and deferred reassessments, be made available through legislative action. Incentives could be supplemented by public sector actions such as land assembly and infrastructure improvements. The County can permit shared facilities for certain development needs such as parking and stormwater management facilities to encourage redevelopment.



Potential Policy Benefits:

- Increased redevelopment opportunities
- Development focused in specific areas
- Revitalization of I-85 corridor
- Local job growth

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determine the specific areas the County wishes to revitalize	Department of Planning and Development in collaboration with Economic Analysis Division, CIDs, and Board of Commissioners
Determine the desired amount and character of development of targeted areas	Department of Planning and Development in collaboration with CIDs and Board of Commissioners
Determine which incentives would be most effective at attracting desired development	Department of Planning and Development in collaboration with the Economic Analysis Division and CIDs
Change applicable policies and ordinances to allow the incentives	Department of Planning and Development and Board of Commissioners
Develop program to promote incentives to potential developers	Department of Planning and Development in collaboration with Economic Analysis Division and CIDs

Policy Challenges and Costs:

- Land assembly
- Cost of providing or retrofitting infrastructure in designated areas

Measures of Effectiveness/Monitoring Benchmarks:

- Revised ordinances and policies
- Increased developer interest in redevelopment properties
- Reduction in underutilized or vacant land within redevelopment areas
- Increased percentage of public and private dollars invested in redevelopment areas

POLICY A.2.2: Promote Densification in Specific Areas Designated for Mixed-Use Through TDRs, Rezoning, Increased Infrastructure Capacity

Synopsis of the Policy:

As part of the effort to promote major mixed-use developments, Gwinnett County should promote higher development intensity in specific areas designated for mixed-use. Successful mixed-use depends on the integration of closely spaced residential, commercial and office uses which can be accessed on foot. The county can promote the creation of environments which will foster such high intensity/density development in many ways, including rezoning, transfer of development rights, and improved infrastructure. The most direct approach to promoting densification at appropriate locations is through the County's ability to rezone for higher densities and mixed-use as "by right" measures, in advance of specific requests to do so. Additional densities above a base level could be allowed through such measures as a transfer of development rights program that is tied to reductions of density in the eastern part of the County. The provision or reservation of infrastructure, such as additional sewer capacity, can also help implement this policy. The County will work with Gwinnett cities to develop a comprehensive TDR plan. The county will also consider TOD areas as TDR receiving areas.



Potential Policy Benefits:

- Revitalized I-85 corridor
- Increased number of local, high-wage jobs
- Increased redevelopment opportunities
- Development focused in specific areas
- Rural areas preserved
- Promotion of environmental conservation
- Protection of historic structures/districts
- Protection of the last remaining rural and agricultural lands
- Development opportunities of parks are increased

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Revise zoning district text and/or create new districts to permit higher densities and design standards in specific areas in accordance with policy maps	Department of Planning and Development
Make complementary proactive investments in redevelopment areas designated for higher densities (e.g., parking structures, enhanced infrastructure capacity, civic buildings, landscaping, etc.)	Department of Planning and Development and the Law Department
Develop and implement TDR program	Department of Planning and Development and the Law Department

Policy Challenges and Costs:

- Neighborhood concerns about higher densities
- For a TDR program, need to apply density ceilings to currently uncapped zoning districts designated as “receiving areas” and the possible need to downzone selected areas designated as “sending areas.” There will also be a need to monitor and adjust the caps so that receiving acreage is in balance with the market for sending acreage.
- Funding for infrastructure improvements will be needed

Measures of Effectiveness/Monitoring Benchmarks:

- Revised zoning resolution and maps
- TDR program/ordinance developed
- Increased County investment in higher density areas
- Increased density and design standards in designated areas

POLICY A.2.3: Use Tax Allocation Districts (TADs)

Synopsis of the Policy:

Tax Allocation Districts (TADs) can be a powerful way to fund infrastructure and other improvements needed to promote mixed-use development or redevelopment. In Georgia, eligible uses of funds include capital costs for the construction or improvement of public works; new buildings; renovation, repair or demolition of existing buildings; grading and clearing land; soft costs associated with these activities; land assemblage costs; and costs associated with conducting environmental impact or other studies.

TADs (also known as tax increment financing or TIFs in other states) pledge the difference between the current taxed value of property and the future tax value of properties within a designated area to finance bonds that pay for the improvements. The increase in tax revenue is based on the increased value of the property not on a tax increase. TADs are applied to a specific, targeted location, and the tax increment is used to pay for improvements made within that specific location.

Potential Policy Benefits:

- Raise revenue
- Development focused in specific areas
- Revitalization of I-85 corridor
- Provide funding for infrastructure projects
- Promotion of redevelopment
- Address fiscal concerns

Policy Challenges and Costs:

- State legislation to allow TAD implementation
- Securing support of affected property owners
- Annually rolling back millage rates to offset increases in real estate market values, means only limited revenue will be generated by TADs.

Measures of Effectiveness/ Monitoring Benchmarks:

- Identification of TAD areas
- Creation of TADs
- New infrastructure constructed in TAD areas
- Generation of tax revenue from TAD areas

Key Implementation Steps:

Action:	Primary Responsible Party:
Action by General Assembly to allow revenue from School taxes to support TADs	State of Georgia
Action to Implement	Board of Commissioners
Voter Approval	Citizens of Gwinnett County
Designate TAD areas	Department of Planning and Development in collaboration with Economic Analysis Division and CIDs
Identify projects for the TAD areas	Department of Planning and Development in collaboration with CIDs and Economic Analysis Division
Secure bonds for the projects	Economic Analysis Division

POLICY A.2.4: Promote Shared Infrastructure Facilities

Synopsis of the Policy:

A frequent impediment to redevelopment is the magnitude of necessary upgrades associated with certain infrastructure facilities, such as stormwater ponds and required parking. To reduce these impediments and increase the economic feasibility potential of redevelopment areas, the County can allow several adjacent properties to install shared infrastructure facilities including, but not limited to, regional ponds and parking decks. These facilities may be owned, operated and maintained by a common association contractually responsible for the facilities. State legislation to permit the use of shared regional storm water ponds may be required.



Potential Policy Benefits:

- Redevelopment opportunities increased
- Development focused in specific areas
- Revitalization of I-85 corridor
- Local job growth

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
If it is determined that State Legislative action is required, direct Law Department to develop appropriate amendment and find a Legislative sponsor	Board of Commissioners and Law Department
Change applicable policies and ordinances to allow multi-parcel owners to create and use shared storm water and parking facilities	Department of Planning and Development, Department of Water Resources and Board of Commissioners
Develop a program to promote this option to developers	Department of Planning and Development in collaboration with Economic Analysis Division and CIDs

Policy Challenges and Costs:

- Will need to develop a formula to equitably compensate users and owners of shared properties
- Land assembly or shared easements have to be negotiated

Measures of Effectiveness/Monitoring Benchmarks:

- Revised ordinances and policies
- Increased developer interest in redevelopment properties
- Reduction in underutilized or vacant land within redevelopment areas
- Increased percentage of private dollars invested in redevelopment areas

POLICY A.2.5: Allow “Corner Stores” within Specified Medium/Higher Density Areas as “Floating Zones”

Synopsis of the Policy:

By providing convenience shopping at small stores within pedestrian-oriented medium and higher density neighborhoods, corner stores help shorten or eliminate car trips. Travel to and from corner stores is frequently done on foot or by bicycle and helps keep cars off of major roads. While they help achieve a public purpose and are often seen as valuable and convenient by many residents, corner stores can be subject to strong opposition by adjacent residents. This policy seeks to introduce them, in a planned way, into new medium- and high-density areas using floating zones. Floating zones are not mapped, but rather set standards for their approval. When these standards are met, they allow the applicant to submit for a rezoning. Uses like corner stores can benefit from this approach. Small-scale community-serving retail and personal services for surrounding neighborhoods would be subject to size limits (e.g., 1 acre maximum lot size), quality controls regarding permitted uses, lighting, signage, prohibiting gas pumps, etc. and would be applied for as part of an integrated design for a residential development plan of minimum size (e.g., 100 units) that exceeds a density of four dwelling units per acre.

Potential Policy Benefits:

- Congestion on arterials reduced
- Bicycle and pedestrian trip-making increased
- Access for local residents improved

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Develop floating zone standards for neighborhood serving retail within new medium/higher density residential developments	Department of Planning and Development and Law Department
Revise zoning ordinance to include new floating zone	Department of Planning and Development and Board of Commissioners



Policy Challenges and Costs:

- Introducing new retail concept

Measures of Effectiveness/Monitoring Benchmarks:

- Increased number of small-scale retail uses located in residential areas

A.3 Theme 3: Enhance Mobility and Accessibility

POLICY A.3.1: Enhance Signal Coordination and Intelligent Transportation Systems (ITS)

Synopsis of the Policy:

A cost effective way to increase the efficiency of the existing road system is to further coordinate traffic signal timing and further invest in Intelligent Traffic Systems technology such as electronic driver signboards that display traffic conditions and alternatives. The County already does a great deal of this type of activity using State and Federal funding. In order to do more, it will be necessary for the County to use its own funding.



Potential Policy Benefits:

- Reduced congestion
- Increased roadway capacity
- Increased roadway safety

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determine areas in need of signal coordination and/or ITS improvements	Department of Transportation
Determine County funding source for improvements	Financial Services Department and Board of Commissioners
Installation of ITS improvements	Department of Transportation

Policy Challenges and Costs:

- Relatively low cost to implement compared to most transportation projects
- Expansion would require County funds and not simply relying on State and Federal funds

Measures of Effectiveness/Monitoring Benchmarks:

- List of intersections in need of improvements and signboard locations
- Funding sources identified
- Improved signal coordination and traffic diversion
- Greater percentage of intersections upgraded with “smart” signals

POLICY A.3.2: Manage Access on Arterials

Synopsis of the Policy:

Managing access to and from properties along major roads improves traffic flow and decreases probability of accidents. Many jurisdictions manage vehicular access onto arterials by an overlay district that varies the roadway design details by roadway classification. Typically, access management systems limit block lengths between access roads, require shared access ways and inter-parcel connections, require frontage roads or rear access, limit curb cuts, etc. These measures conserve valuable roadway capacity and improve safety. Redevelopment of land uses along such arterials may provide opportunities to implement such access improvements, but such changes should fit into an overall strategy for each arterial.

Gwinnett County already implements access management in a limited way. The County uses a Long Range Road Classification Map to identify and establish road classifications. Also, the Development Regulations provide some guidance for driveway separations. These tools could be strengthened and integrated more fully into an access management system.

Potential Policy Benefits:

- Increased roadway capacity
- Reduced congestion
- Improved roadway safety
- Expanded roadway network
- Improved access between uses
- Create alternative routes in highway / street network



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
<p>Strengthen the provisions in the County's existing Development Regulations in combination with the County's Long Range Road Classification Map to include provisions that:</p> <ul style="list-style-type: none"> • Limit driveway access points for all roads above a certain classification (e.g. residential arterial or major collector) so that shared driveways or inter-parcel connections are planned as part of new development or redevelopment • Require roadway access from abutting development rather than direct driveway access to arterials and limit roadway spacing in relation to the level of roadway class; for example, roadway spacing may range from block lengths of 400 feet in denser, more urban areas for major collectors and perhaps minor arterials to 800 feet – 1500 feet for major and principal arterials • Require frontage roads, "backage" roads, or alleys to achieve these same outcomes for roadway spacing, especially where major development and redevelopment is occurring • Require that corner lots facing major roads and minor roads only take access from the minor road • Extend the classification concept to include multimodal road types so that where roads are classified as ped/bike roads or transit roads additional standards may be applied (e.g. sidewalk width, bike path striping, tree planting strips etc.) 	<p>Department of Planning and Development and Department of Transportation</p>
<p>Similarly strengthen the access management portion of the County's existing activity center/corridor overlay districts overlay zone</p>	<p>Department of Planning and Development</p>

Policy Challenges and Costs:

- Cooperation of property owners is needed
- Coordination with Community Improvement Districts (CID) may be required.
- Additional development costs
- Requirement will be associated with these actions.

Measures of Effectiveness/Monitoring Benchmarks:

- Revised, updated Long Range Road Classification Map
- Revised Development Regulations addressing access management
- More effective access management evident in new subdivisions and site plan practices
- Modified Development Regulations
- Reduced number of driveways and curb cuts on arterial roads
- Increased use of access roads
- Reduced number of accidents on arterial roads

POLICY A.3.3: Enhance Incident Management (Traffic Control Center)

Synopsis of the Policy:

A main objective of the Traffic Control Center (TCC) is incident management. The TCC can help relieve congestion and increase mobility by adjusting signal timing to handle additional traffic diverted onto local roads from Interstate Highways due to major incidents. Also, the TCC can produce real-time travel times, so that travelers can make better informed decisions regarding where and when to travel. Further expanding Gwinnett’s current efforts in this area will pay handsomely and this will yield immediate short-term benefits at relatively little cost.

Potential Policy Benefits:

- Reduced congestion
- Increased roadway safety

Policy Challenges and Costs:

- Data on cost-effectiveness of investment will be required to justify budget request will need to be established

Measures of Effectiveness/ Monitoring Benchmarks:

- Acquisition of equipment, technology and personnel
- Increased speed in addressing traffic incidents compared to current benchmark

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Identify and prioritize additional resources for incident management	Department of Transportation

POLICY A.3.4: Establish a Road Connectivity Requirement for New Development

Synopsis of the Policy:

Establishing a connectivity requirement based on block length will help reduce traffic congestion and improve walkability. Because most subdivisions in Gwinnett do not interconnect, even short trips require the use of major arterials and collectors, contributing to the overloading of the major road systems. Keeping local trips to destinations such as nearby shopping areas, schools and parks off major arterials will help alleviate congestion. New development should be designed with more connections between developments and with alternative and redundant minor collector networks within developments that connect to the county’s arterial roadway system.



Potential Policy Benefits:

- Reduced congestion
- Increased roadway safety
- Expanded roadway network
- Improved access between uses

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Define block lengths for urban and suburban areas (typically these should be between 400 and 800 feet) and may vary between urban and suburban areas	Department of Planning and Development and Department of Transportation
Adopt a Connectivity Index for all new residential subdivisions. This index is measured as the number of street links divided by the number of intersections (or nodes) or link ends (cul-de-sacs). An index of 1.40 is an appropriate target.	Department of Planning & Development and Department of Transportation
Develop and incorporate into the Development Regulations connectivity standards for new development including requirements to: <ul style="list-style-type: none"> • Provide multiple direct connections to local street and pedestrian systems to increase access to and between local destinations, such as parks, schools, and shopping. • Establish criteria that must be met to obtain a variance to the requirement for stub outs to adjacent properties 	Department of Planning & Development and Department of Transportation

Policy Challenges and Costs:

- Difficulty in creating connections between existing properties and new and other existing properties

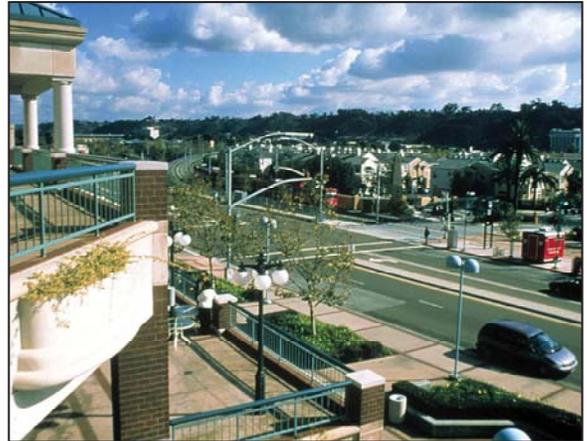
Measures of Effectiveness/Monitoring Benchmarks:

- Increased connectivity between and within new subdivisions
- Increased connections between existing and new subdivisions
- Better connections between residential areas and commercial areas via secondary roads

POLICY A.3.5: Create Transit-Oriented Development (TOD) at Appropriate Sites Through Proactive Zoning

Synopsis of the Policy:

A transit system can help support more intensely developed, mixed-use centers in Gwinnett. A growing segment of the general population is attracted to the urban lifestyles associated with well-designed TODs whose density and use mix is a benefit for them. Creating TODs that are centered within livable, walkable mixed-use areas should be part of the County’s formula for attracting and retaining urban-acclimated professionals, tech workers, empty nesters, and other households. Well-designed TODs will also help increase ridership once Gwinnett gets a rapid transit system. After the decision is made to develop a rail or bus rapid transit (BRT) transit system, the County should take action to establish incentives that encourage development that will support transit.



Many of the existing rail lines go through Gwinnett’s cities, and being natural station areas, the Cities should be active participants.

Potential Policy Benefits:

- Development focused in specific areas
- Revitalization of I-85 corridor
- Promotion of redevelopment
- Reduced roadway demand

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Identify possible transit alignments	ARC Transit Planning Board, MARTA, GRTA, Gwinnett Transit, Department of Planning and Development, and Department of Transportation in collaboration with Cities
Identify areas that would be suitable for TOD and station development	Department of Planning and Development and Department of Transportation in collaboration with Economic Analysis Division
Revise zoning in TOD areas	Department of Planning and Development, Board of Commissioners
Create incentives to promote development in TOD areas	Department of Planning and Development in collaboration with Economic Analysis Division and Board of Commissioners

Policy Challenges and Costs:

- Applying TOD principles and getting development community commitment in advance of transit implementation plan
- Long lead time for implementation
- Funding

Measures of Effectiveness/Monitoring Benchmarks:

- Potential transit alignments are identified
- Areas are designated for TOD
- Zoning for the TOD areas is revised
- Developer commitments to development/redevelopment at station areas
- Density increases in areas designated for TOD

POLICY A.3.6: Establish a More Extensive Transit System

Synopsis of the Policy:

Efforts to minimize congestion serve to enhance Gwinnett’s economic development and preferred place policies. Although transit will not greatly diminish congestion, it can provide people with travel choices. Providing people with more travel choices may encourage some number of single-occupant vehicle drivers to lessen their use of private vehicles, and it may persuade others who may not have considered living or working in Gwinnett because of congestion to consider Gwinnett as a location for their homes or businesses.

The existing rail line rights-of-way in the County can become the routes for cost-effective commuter rail service and should be protected until such service is viable. The potential for varied forms of bus rapid transit (BRT) along key arterials is more likely to occur during the life of the Unified Plan and also warrants future transit system investments, especially for routes that would provide an alternative for commuters to Atlanta and I-285 destinations. Finally, the County can make improvements to its local transit system to provide improved access to various destinations and east-west connectivity within the County.

It is important to note that rail or BRT transit development is not something Gwinnett County can do alone. It will require participation of Regional, State and Federal agencies including GRTA, ARC, the Transit Planning Board and the Federal Transit Administration. Many of the existing rail lines go through Gwinnett’s cities, and being natural station areas, the cities need to be active participants.

In early 2009, Gwinnett Transit will begin a 5-year transit plan. Based on land use patterns and forecasts in this plan, local bus routes will only likely grow incrementally, with some minor changes to routes as needed. Of greater potential consequence, however, are the bold and extensive transit service expansions into Gwinnett County as shown on the TPB Concept Plan 3. The Gwinnett Transit study should utilize the ARC study database to identify other transit and land use studies either underway or complete. Besides the TPB, local municipalities and the CIDs located within Gwinnett County are either considering or planning for a premium transit service. Not only should these entities work together on ensuring compatible land uses, but Gwinnett Transit should be in a position to provide the periphery or feeder routes necessary for a successful commuter line or rail service.

Potential Policy Benefits:

- Provide mode choices
- Reduce future roadway demand



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Identify additional areas to be served by transit	Department of Planning and Development, Department of Transportation in collaboration with GRTA, ARC, TPB, and Gwinnett Transit, as appropriate
Encourage protection of rail line right of ways for potential future transit service	Department of Planning and Development and Board of Commissioners
Increase funding levels for transit service and promotion	Board of Commissioners
Develop and implement aggressive transit promotion campaign	Gwinnett Transit
Encourage a development pattern that is more conducive to transit service	Department of Planning and Development and Board of Commissioners
Provide leadership for a regional transit solution and ensure local system supports regional system.	Department of Transportation

Policy Challenges and Costs

- Funding transit improvements
- Maintaining high levels of service
- Expansion costs for local bus service
- Implementation costs for BRT and rail service
- FTA New Starts submission hurdle
- Jurisdictions nationwide compete for limited Federal transit dollars

Measures of Effectiveness/Monitoring Benchmarks:

- FTA New Starts submission
- Federal transit dollars secured
- Increased transit service
- Increased mode split
- Decreased roadway demand

POLICY A.3.7: Pursue Strategic Road Widening and New Alignments

Synopsis of the Policy:

Between 1970 and 2000, Gwinnett County was ranked as one of the fastest growing counties in the nation. During that period, the county absorbed approximately 25 percent of the total growth of the Atlanta Region. To counter the rapid growth, Gwinnett County invested more money in highway expansion than any other jurisdiction in the metropolitan area. Despite Gwinnett County’s efforts, roadway infrastructure has not kept pace with the tremendous growth the County has experienced. A coordinated program of capacity improvement projects will provide some measure of relief. Capacity improvements include transforming key roads into “super-arterials,” grade separation at key intersections, building additional travel lanes along key road segments, and constructing new roads.



Policy Contributes the Following Intangible Benefits:

- Increased roadway capacity
- Increased connectivity

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Prioritize capacity improvement projects (using CTP)	Department of Transportation and Department of Planning and Development
Establish requirement that where feasible new roadway construction will incorporate bikelanes and multi-use paths to provide alternative transportation	Department of Transportation, Department of Planning and Development and Board of Commissioners
Develop funding plan for the projects	Economic Analysis Division
Implement the funding plan	Board of Commissioners

Policy Challenges and Costs:

- Expensive to implement
- Potential opposition to specific widening projects or new alignments
- Provides some congestion relief in the short term, but only slows the growth of longer term congestion

Measures of Effectiveness/Monitoring Benchmarks:

- Prioritized list of capacity improvement projects from CTP
- Funding strategy for priority projects
- Funding secured
- Increased number of lane miles – especially in priority corridors and between key origins/destinations

A.4 Theme 4: Provide More Housing Choice

POLICY A.4.1: Establish and Provide Access to More Executive Housing Areas

Synopsis of the Policy:

Executives and corporate leaders typically prefer to locate businesses near where they live. Promoting such places is a basic economic development strategy for Gwinnett. However, establishing more executive housing areas cannot be achieved merely through zoning. Limiting sewer expansion in eastern Gwinnett may provide the catalyst needed to transition eastern Gwinnett to an area of executive housing developments adjacent to the vast park acreage the county has already invested in. Another key component of the strategy to encourage executive housing is to enhance highway connections to Fulton and Forsyth Counties to allow Gwinnett to benefit from existing executive housing areas. The improved connections to Fulton and Forsyth Counties in the proposed road plan will help cement the interactions between the Counties and add to Gwinnett’s appeal to executives who may work in Fulton and Forsyth and live in Gwinnett or vice versa.



Potential Policy Benefits:

- Number of high wage local jobs increased
- Fiscal health of County maintained
- Increased County amenities
- Improved and expanded Chattahoochee River crossings

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Ensure that key connections to Fulton/Forsyth are on the Capital Improvement Plan (CIP) / Transportation Improvement Plan (TIP) of the Department of Transportation and are given priority for funding.	Department of Transportation
Improve road connections to Fulton / Forsyth per transportation plan	Department of Transportation

Policy Challenges and Costs:

- Long-range economic implications of connections to Fulton and Forsyth counties may be seen as less crucial than congestion mitigation when evaluating transportation projects for funding, so the economic development aspects of these projects may be downplayed unless they are championed by the Board of Commissioners

Measures of Effectiveness/Monitoring Benchmarks:

- Increased commuting to jobs in Gwinnett from Fulton / Forsyth
- Increased household relocations from Fulton / Forsyth to Gwinnett
- Increased technology related jobs in Gwinnett attributable to enhanced Fulton and Forsyth connections

POLICY A.4.2: Preserve Existing Workforce Housing

Synopsis of the Policy:

Gwinnett may see a decline in its ability to fill jobs in its services sector as commuting expenses and housing prices become ever greater burdens. Preserving workforce housing within Gwinnett through a variety of measures to retain a variety of housing types and price ranges will help achieve the County’s goals of reducing congestion and sustaining its economic base.



Potential Policy Benefits:

- Preserve available workforce housing
- Increase available workforce housing by reducing and/or eliminating substandard housing
- Reduce congestion

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Provide rehabilitation assistance from HUD grant funds and private sources to homeowners and to existing multi-family projects that preserve affordable workforce housing	Department of Financial Services, Community Development Current Program (on-going)
Provide financial assistance from HUD Grant funds and private sources to private and/or non-profit developers to acquire and rehabilitate substandard single-family housing for sale as affordable workforce housing to qualifying families	Department of Financial Services, Community Development Current Program (on-going)
Provide financial assistance from HUD Grant funds to private and/or non-profit developers to construct new single-family or new multi-family projects to provide affordable workforce housing	Department of Financial Services, Community Development Current Program (on-going)
Continue code enforcement through the Quality of Life unit to ensure that properties are maintained	Gwinnett County Police Department, Quality of Life Unit

<p>Consider creating a Housing Task Force to evaluate the following issues, and to consider developing recommendations for the following:</p> <ul style="list-style-type: none"> • Roles and responsibilities for existing housing entities or the possible creation of new housing entities • Mixed income multi-family housing units at selected sites in the County • Consider amendments to the Zoning Resolution to allow more Senior Housing at appropriate sites within the County • Workforce housing as component of mixed use developments through the use of incentives • Creation of an incentive-based moderately priced dwelling unit (MPDU) ordinance that encourages developments above a certain size to include some percentage of MPDUs (e.g., 10%) in exchange for a density bonus provision (e.g., 12%) that allows the developer to construct additional homes. • Permanent supportive housing for persons with special needs (including housing for seniors and assisted living facilities.) 	<p>Board of Commissioners</p>
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Policy Challenges and Costs:

- Appropriate zoning to encourage mix of housing opportunities
- Finding land suitably priced to make workforce housing economically viable.

Measures of Effectiveness/Monitoring Benchmarks:

- Units of substandard housing that are rehabilitated and preserved as affordable workforce housing
- Units of substandard single family housing that are acquired/rehabilitated and sold to homebuyers as affordable workforce housing
- Units of workforce housing that are constructed to replace the existing stock of affordable housing
- Creation of MDPU ordinance

POLICY A.4.3: Expand Maintenance And Rehabilitation Assistance To Homeowners And Small Businesses

Synopsis of the Policy:

Expand existing HUD funded assistance programs to include more homeowners as well as small business owners/operators of older properties who may have difficulty with upkeep and needed rehabilitation of their properties. The expansion of these programs would allow the County to target many of the causes of neighborhood/commercial decline in older areas. Programs would offer long-term and recent residents of Gwinnett good advice and assistance on proper repairs and materials, low cost loans, etc. These expanded programs would provide the County with more tools to promote revitalization of declining areas.



Potential Policy Benefits

- Available workforce housing preserved
- Substandard housing and commercial properties reduced
- Appearance and upkeep of an area maintained
- Revitalization goals of the Board of Commissioners enhanced

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Provide rehabilitation assistance from HUD grant funds for homeowner occupied dwellings	Department of Financial Services, Community Development Current Program (on-going)
Expand program beyond HUD grant funds to include County funds for commercial properties	Board of Commissioners

Policy Challenges and Costs:

- County has not historically funded rehabilitation of commercial properties

Measures of Effectiveness/Monitoring Benchmarks:

- Units of housing and commercial spaces are rehabilitated and preserved
- Funding allocated to this program

POLICY A.4.4: Support Expanded Housing Opportunities for Seniors

Synopsis of the Policy:

As they become a larger proportion of the population, there will be an increasing call for affordable and accessible housing suitable for the changing physical and financial situations of seniors. Gwinnett has historically had limited need for senior housing. However, as more people choose to “age in place” or relocate to Gwinnett to be closer to children and grandchildren, demand for various forms of senior housing will rise.

Senior housing needs are different from that of a growing family. Seniors may not want the maintenance responsibility of a yard and may prefer to live in a smaller home than they did when they were raising a family. Row houses, condominiums, and apartments may be more suitable housing types for these seniors. (Because such housing is for people at a post-family formation stage of their life, senior housing does not affect such issues as school capacity and therefore can be developed at higher intensities than equivalent units geared for younger families.) There will also be a growing need to provide available housing that can accommodate wheelchairs or other Americans with Disabilities Act (ADA) requirements.



Locating housing within easy walking distance to grocery stores, drug stores, medical or other services will be increasingly desirable and useful for seniors who no longer can or want to drive. Such walkability adds to a healthier lifestyle and also puts seniors near potential employment (part of increasing trend of seniors continuing some form of work).

Potential Policy Benefits

- Opportunities for existing residents to “age in place”
- Opportunities for senior relatives of Gwinnett residents to move closer to them
- More diverse mix of housing types
- More opportunity to accommodate seniors with physical limitations
- Increased emphasis on walkability and mixed use

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Consider amendments to the Zoning Resolution to allow more senior housing at appropriate sites within the County	Department of Planning and Development and Board of Commissioners
Revise Zoning Resolution to create more walkable, mixed use communities	Department of Planning and Development and Board of Commissioners
Universal Design guidelines included in building codes	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Appropriate zoning to encourage mix of housing opportunities
- Has not historically been a focus of the County

Measures of Effectiveness/Monitoring Benchmarks:

- Proportion of seniors living in senior oriented housing
- Number of residents aging in place

A.5 Theme 5: Keep Gwinnett a “Preferred Place”

POLICY A.5.1: Improve the Walkability of Gwinnett’s Activity Centers and Neighborhoods

Synopsis of the Policy:

Quality of life in Gwinnett can be enhanced by making it easier for people to walk through their neighborhoods to and from attractions such as local parks, schools, churches, or even neighborhood shopping. Walking and bicycling are also increasingly popular exercises in their own right and do not require special facilities when adequate sidewalks, pathways, and greenways are provided. Major activity centers should be easier to walk and bike to, and the uses within the centers should be better connected for pedestrian and bicycle access.

Gwinnett currently requires the construction of sidewalks for all new development. This is the first step in making the county walkable, but creating a pedestrian/bicycle amenity that will enhance and promote the county as a preferred place will require additional actions, such as improving and expanding the greenway network.

Since 1997, Gwinnett County has allocated over \$75 million for bicycle/pedestrian safety-related projects, not including over \$72 million for bicycle/pedestrian safety-related projects on or near school property.

The County should take steps to ensure that this large investment in bike/ped facilities, as well as any dedicated future funding, is coordinated with transit planning. Potential projects that are constructed along transit routes should receive priority in any project selection process. Likewise, projects that connect to or support safe routes to schools should receive priority.

Gwinnett County transportation and park planners should continue their active participation as members of Atlanta Regional Commission’s Bicycle & Pedestrian Task Force. This task force meets monthly with the goal of improving pedestrian and cycling safety and mobility throughout the region. By serving on this task force, Gwinnett County staff will stay aware of the latest bicycle and pedestrian mobility issues and apply this knowledge by providing input at the design phase of projects. As shown on the Preferred Place map (Figure 76), Gwinnett County’s proposed greenway network extends into DeKalb County, Walton County, Fulton County and Forsyth County. Beyond safety issues and trends, the ARC Bicycle & Pedestrian Task Force facilitates and encourages the coordination of these types of inter-jurisdictional projects.

Potential Policy Benefits:

- Increased connectivity
- Increased County amenities
- Improved public health and safety
- Removal of barriers to mobility on sidewalks for persons with disabilities



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Revise zoning and Development Regulations to ensure that sidewalk widths are appropriate for the anticipated intensities of development or redevelopment	Department of Planning and Development and Board of Commissioners
Revise zoning and Development Regulations to provide for adequate shade and lighting so that people feel safe and comfortable walking along County sidewalks and greenways	Department of Planning and Development, Department of Transportation, Department of Community Services and Board of Commissioners
Revise zoning and Development Regulations so that buildings, storefronts and other active uses are adjacent to sidewalks	Department of Planning and Development and Board of Commissioners
Revise zoning and Development Regulations so that pedestrian walks are minimized adjacent to isolated uses such as parking lots, garages, storage, etc.	Department of Planning and Development, Department of Transportation, and Board of Commissioners
Revise zoning and Development Regulations so that bicycle lanes are required on all new local, collector, and arterial roadways.	Department of Planning and Development, Department of Transportation, and Board of Commissioners
Revise zoning and Development Regulations so that pedestrians are separated or buffered from high-speed and heavy traffic volumes by distance and/or trees	Department of Planning and Development, Department of Transportation, and Board of Commissioners
Design/redesign busy intersections and mid-point crossings to improve pedestrian/bicycle safety	Department of Transportation
Allow County to require offsite extensions of sidewalks to establish connectivity (e.g., up to 200 foot beyond boundary) including county facilities	Department of Planning and Development
As part of the redevelopment process, remove existing barriers that prevent pedestrians and bicyclists from having direct access between destinations	Department of Planning and Development
In new development, prevent potential pedestrian/bicycle barriers from occurring	Department of Planning and Development
Encourage developers to have greenways within their projects and to provide connections to the existing and planned County greenway network	Department of Planning and Development
Remove barriers to mobility for persons with disabilities on existing sidewalks by providing curb cuts other accessibility improvements at existing intersections	Department of Transportation and Community Development Program [Using CDBG funds]

Policy Challenges and Costs:

- Recognizing the need to work with local, state and federal regulators to arrive at accommodations that will facilitate greenway construction in floodplains, buffers, etc.
- Potential increased costs of development
- Sidewalks that need to be provided by the County for high priority linkages not likely to be provided by development regulations

Measures of Effectiveness/Monitoring Benchmarks:

- Revised zoning ordinance
- Increased number of pedestrian trips being made for short trips
- Improved pedestrian connectivity
- Reduction in pedestrian accidents and death

PART 1
PART 2
PART 3

POLICY A.5.2: Support and Promote the Georgia Gwinnett College

Synopsis of the Policy:

Georgia Gwinnett College has the opportunity to become the “Campus of Tomorrow” and increase Gwinnett’s “preferred place” status. Research associated with the college could spawn new businesses, and employers interested in an educated workforce could choose to locate their businesses nearby. The land use needs and the spin-off employment uses that seek out and benefit from a significant institution like a college should be coordinated, in collaboration with the city of Lawrenceville.



Potential Policy Benefits:

- Attract high-wage jobs
- Development focused in specific area
- Improved amenities

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Develop detailed land use plan for area around the college in collaboration with the college and Lawrenceville	Gwinnett, Department of Planning and Development, Lawrenceville Planning Department, College Facilities Department
Determine actions each entity can take to further goals	Board of Commissioners, City Council, College President

Policy Challenges and Costs:

- Funding for possible infrastructure improvements
- County, city and college coordination related to student housing, business development, etc.

Measures of Effectiveness/Monitoring Benchmarks:

- Coordinated land use plan for the area around the college
- Specific action items each entity will be responsible for and timeline for accomplishment
- County funding to support improvements that benefit the college and the potential spin-off development

POLICY A.5.3: Invest in Youth Enrichment Programs

Synopsis of the Policy:

Beyond crime prevention measures like community policing, good lighting and defensive site design (Crime Prevention Through Environmental Design or CPTED), the County, in coordination with the Gwinnett County Public School System, can take actions to involve local youth in after school programs and activities. This involvement can help deter gang activity and recruitment, provide additional opportunities for children to get exercise, learn new skills, and provide a positive use of time. Extending and expanding current programs and developing new programs is an important redevelopment and quality of life strategy.



Policy Contributes the Following Intangible Benefits:

- Improved County amenities
- Increased capacity of public facilities and services
- Reduction in crime and gang activities

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Identify programs to expand	Health and Human Services and Parks and Recreation Divisions
Identify new programs to offer	Health and Human Services and Parks and Recreation Divisions
Allocate additional funding resources to the program	Board of Commissioners
Coordinate with Gwinnett County Public Schools, Buford City Schools, and non-profit organizations.	Health and Human Services Division, Parks and Recreation Divisions and Board of Commissioners

Policy Challenges and Costs:

- Availability of funding for these types of programs

Measures of Effectiveness/Monitoring Benchmarks:

- List of programs to expand and offer and costs associated with them
- Increased funding for after school programs
- Increased number of after school programs
- Correlation with reduction in youth criminal or other antisocial / gang activity
- Improved graduation rates
- Retention of young adults in Gwinnett's work force

POLICY A.5.4: Enhance Development Aesthetics

Synopsis of the Policy:

Promoting high-quality development is a strategy for attracting top quality employers, new affluent residents, and making Gwinnett a preferred place in the region. Improved development quality for commercial and office buildings and associated public areas will also encourage current employers and residents to stay in the County. To achieve this, new design standards are needed both to encourage and promote redevelopment where appropriate and to enhance overall development quality. To give Gwinnett a competitive edge, development quality can be enhanced through design standards that improve the appearance of buildings and parking areas, require additional landscaping and urban design amenities, call for attractive public spaces, promote less sign clutter, and provide better lighting standards.

Additional areas of improvement may include building height allowances, massing and introducing Floor Area Ratio (FAR) as a design standard in mixed-use and non-residential areas. Allowing increased densities for such areas will provide an incentive for developers to consider redevelopment. However, designing these private shared environments as more functional and attractive locations will also require revising the current development standards regarding such issues as access, interior road design, location of buildings in relation to streets, location and design of parking areas, opens space and public realm design (including pedestrian facilities) and ability of various users to share infrastructure.

Potential Policy Benefits:

- Increased redevelopment opportunities
- Redevelopment focused in specific areas
- Revitalization of I-85 corridor
- Number of high income residents increased
- Number of high-income jobs increased

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determine specific design standards	Department of Planning and Development
Add/Revise standards accordingly	Department of Planning and Development and Board of Commissioners



Policy Challenges and Costs:

- Creating effective and uncomplicated application of standards
- This action has low implementation costs but introduces new elements and processes into the county's review process

Measures of Effectiveness/Monitoring

Benchmarks:

- Revised standards
- Improved visual appearance and improved compatibility with existing areas
- Increased urban design amenities

POLICY A.5.5: Provide Venues to Celebrate Growing Cultural Diversity of County

Synopsis of the Policy:

As Gwinnett's diversity increases, the County can promote it as a positive attraction by providing support and locations for such events as cultural fairs, music festivals, "foodways" demonstrations, etc. Focus group members from different ethnic groups interviewed during the Unified Plan's development saw county funding and logistical support as a key catalyst in raising the profile of these events.



Potential Policy Benefits:

- County amenities increased
- Benefits of County's increasing diversity expanded

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Develop improved links to various ethnic communities	Chamber of Commerce and Department of Community Services
Develop criteria for promoting existing cultural activities	Department of Community Services/Board of Commissioners
Develop program to increase number of cultural activities	Chamber of Commerce and Department of Community Services

Policy Challenges and Costs:

- Lack of funding mechanism to support this policy

Measures of Effectiveness/Monitoring Benchmarks:

- Increased number of cultural events
- Increased attendance at cultural events
- Increased revenue generated by cultural events
- Regional recognition and attraction of these Gwinnett events

POLICY A.5.6: Expand Presence of “Arts Community”

Synopsis of the Policy:

As a “preferred place,” Gwinnett should feature a strong array of cultural attractions and businesses that support the arts. While most of these activities will be run by non-profits or private owners (e.g., art galleries, music venues and theaters, etc.), a county-wide organization is needed to promote and link their activities into a coordinated effort to enhance the County’s quality of life. Such an organization should view promoting the arts in Gwinnett as its primary mission. To be effective, such an organization should function somewhat like the Convention and Visitor’s Bureau with adequate private sector and county support to accomplish its mission.



Potential Policy Benefits:

- Increased County amenities
- Take advantage of the County’s diversity
- Increased number of urban-acclimated professionals, empty-nesters, tech workers and affluent residents

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Create and fund an arts authority or commission	Board of Commissioners, Department of Community Services and Partnership Gwinnett

Policy Challenges and Costs:

- Establishing needed funding
- Developing long term marketing/promotion strategy

Measures of Effectiveness/Monitoring Benchmarks:

- Creation of arts authority or commission (or similar entity)
- County contribution to the arts authority or commission
- Increased number of cultural attractions and creative enterprises
- Increased attendance at Gwinnett Center events

POLICY A.5.7: Provide Incentives for Enhanced Open Space/Trails

Synopsis of the Policy:

Gwinnett will benefit from increasing the variety of ways that open space, sensitive environments, and local recreation space, including pedestrian and bike trails, can be preserved and protected. Some examples of incentives to the developer/builder include tax benefits, smaller lot sizes, increased densities, and reduced infrastructure costs as result of clustered development. The inclusion of major greenways in the Unified Plan and tying open space enhancement to incentives in the Zoning Resolution and Development Regulations can facilitate the provision of open space through reservation or dedication.

Other options to facilitate the provision of open space include: revising current zoning districts (modified and CSO) that allow smaller lots in exchange for common open space to strengthen their appeal and ability to provide more meaningful open space, and allowing a lot size reduction in any residential zoning district. This would be in exchange for an equivalent dedication of right-of-way for greenway development or recreation area in excess of definite requirements. TDR may also have the potential as an incentive to land owners of strategic potential park land.



Potential Policy Benefits:

- Increased County amenities
- Increased amount of protected open space
- More active open space provided

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Determine incentives/bonuses requirements	Department of Planning and Development/Department of Community Services
Revise Zoning Resolution and/or Development Regulations accordingly	Department of Planning and Development/Department of Community Services and Board of Commissioners

Policy Challenges and Costs:

- Determining maintenance responsibility (and costs) of the local parks
- Possible conflict with current Development Regulations

Measures of Effectiveness/Monitoring Benchmarks:

- Revised regulations
- Increase in the amount of local, small-scaled parkland to meet a given target of all new open space provided (e.g., 5 percent to 10 percent)

POLICY A.5.8: Use Development Regulations to Create Local Parks

Synopsis of the Policy:

Gwinnett will benefit from increasing the variety of ways that open space, sensitive environments, and local recreation space, including pedestrian and bike trails, can be created, preserved, and protected. The County has an abundance of large acreage parks, but not enough smaller, local neighborhood parks. Neighborhood parks are in short supply in Gwinnett, especially in denser housing areas. Parks of less than 10 acres which serve local communities rather than addressing county-wide needs are of increasing value in an urbanizing area. The Department of Community Services, Parks and Recreation Division's new policy of now building Special Purpose Neighborhood parks in underserved areas on 5 acres of land or more will fill part of this gap.

Using development regulations to increase the provision of local recreation areas is an important strategy. One way is to change the regulations so that local recreation beyond swim, tennis, playground and other facilities becomes a development requirement. For example, the regulations might require dedication of 10 percent of the land for publicly-owned and maintained active recreation land that is suitably level, and within easy access of area residents. Another possibility is that an open space dedication could be linked to development incentives in the Zoning Resolution, Development Regulations or the Subdivision Regulations, such as an exchange for smaller minimum lot sizes, or other measures that reduce a project's overall costs. Projects would provide specified active open space or parkland resources beyond the current requirements. A fee in-lieu-of provision could be included for small projects.

Potential Policy Benefits:

- Increased neighborhood amenities
- Reduced auto trips to access everyday recreation needs
- Car-less segments of population (including local children) better served
- Park facilities scaled to local needs; less reliance on purchasing large properties
- Decreased areas of County with park deficiencies



Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Decide whether to make local parkland provision a development requirement or whether it will be linked to development incentives/bonuses	Department of Planning and Development, Department of Community Services, Parks and Recreation Division, and Board of Commissioners
Determine the regulations or incentive/bonus requirements	Department of Planning and Development
Revise Development Regulations appropriately	Department of Planning and Development and Board of Commissioners

Policy Challenges and Costs:

- Density bonuses or smaller lot sizes may not be considered worth the additional parkland by the development community
- Determining maintenance responsibility (including cost) of the local parks
- Perception that local parks are not needed because of the County's large regional and community park network
- Reduction in the number of buildable lots within a subdivision
- Conflict with current Development Regulations

Measures of Effectiveness/Monitoring Benchmarks:

- Revised regulations
- Increase in the amount of local, small-scaled parkland as a percentage of all new open space provided countywide (e.g., 5 percent to 10 percent)

POLICY A.5.9: Acquire Surplus Industrial or Commercial Sites for Open Space/Recreation

Synopsis of the Policy:

In the already built up areas of Gwinnett, properly located sites for various recreation needs are hard to find or are extremely expensive. Acquiring aged or abandoned industrial or commercial sites for conversion to park facilities, especially for active recreation, may be one way to bring such activities closer to the local populations that need them and end current and future service area deficiencies. TDR may also be a potential tool for protecting these sites.



Potential Policy Benefits:

- Increased County amenities
- Reduced number of vacant industrial and commercial sites

Key Implementation Steps:

Action:	Primary Responsible Party:
Action to Implement	Board of Commissioners
Identify surplus industrial or commercial parcels that would be suitable for open space or recreational uses	Department of Planning and Development and Department of Community Services
Develop property acquisition and funding strategy	Department of Financial Services
Acquire appropriate parcels	Department of Community Services, Department of Financial Services and Board of Commissioners
Construct recreation and/or open space facilities	Department of Community Services

Policy Challenges and Costs:

- Potential high cost to acquire land
- May be necessary to provide remediation efforts to some properties

Measures of Effectiveness/Monitoring Benchmarks:

- Increased parkland per capita, especially in already built up areas that may not have parks in close proximity
- Reduction in surplus industrial and commercial land

B. SHORT-TERM WORK PLAN AND PRIORITY POLICIES

The Rules of the Georgia Department of Community Affairs (DCA) Chapter 110-12-1 Standards and Procedures for Local Comprehensive Planning “Local Planning Requirements” require that all plans include a Short Term Work Program. The Rules define the Short-Term Work Program as “the portion of the Implementation Program that lists the specific actions to be undertaken by the local government over the next five years to implement the comprehensive plan.” For each activity or action listed, the Short Term Work Program must include a brief description of the activity, the timeframe for undertaking the activity, the party responsible for implementing the activity, the estimated cost of implementing the activity, and the funding source. DCA also requires local governments to prepare and submit annual or five-year updates to the

STWP. In addition to providing new policies and actions to achieve in the next five years, the updates should provide information on whether activities have been completed, are underway, have been postponed, or are no longer activities the government intends to undertake. Changes to the priorities for the STWP should be guided by monitoring current trends in accordance with the mechanisms described in Section 3.E, ‘Keeping on Course’.

Table 51 presents the State-mandated Short Term Work Program. The 22 actions identified for short term implementation were selected through collaboration between the Planning Advisory Committee, the Technical Advisory Committee, and County staff. The STWP focuses on implementing the critical actions needed to move the County in its preferred direction. It also lists the initiating actions like prioritizing highway and transit projects that are necessary precursors to subsequent actions such as building highways or implementing Transit Oriented Development (TOD).

Table 51: Priority Policies, 2009 - 2014

	Policy Number	Years	Primary Responsible Party	Cost Estimate	Funding Source
Priority Policies 2009-2014					
Maintain Economic Development and Fiscal Health					
Promote major Mixed Use Developments	1.1, 2.2	2009-2011	P&D with EAD	\$250,000	General Fund
Designate large, well-located parcels/areas for office use	1.2	2009-2011	P&D with EAD	\$20,000	General Fund
Promote University Parkway (Gw Hwy 316) as Gwinnett’s Research and Development belt	1.6	2009-2011	P&D with EAD and CD	\$150,000	General Fund, PPP
(Grade separation along Highway 316)		(2012)	(DOT)	(\$100 million)	(Federal DOT)
Obtain appropriate balance of retail	1.8	2009-2011	P&D with EAD	\$20,000	General Fund
Use Transfer of Development Rights (TDR) for rural estate housing in East	1.4	2009-2011	P&D with EAD	\$100,000	General Fund, PPP
Employ debt financing for major infrastructure	1.7	2012-2014	DFS with various County departments	\$50,000	General Fund, PPP
Revise millage rates	1.5	2009-2011	DFS with CD	\$50,000	General Fund
Strategic placement of sewer	1.3	2009-2011	P&D with EAD and DWR	\$100,000	Water & Sewer Authority
Foster Redevelopment					
Use Tax Allocation Districts (TADs)	2.3	2012-2013	P&D with EAD	\$50,000	General Fund
Institute a variety of redevelopment incentives/bonuses	2.1	2009-2011	P&D with EAD	\$250,000	General Fund, PPP

	Policy Number	Years	Primary Responsible Party	Cost Estimate	Funding Source
Maintain Mobility and Accessibility					
Enhance incident management (traffic control center)	3.3	2009-2011	DOT with P&D and EAD	\$500,000	General Fund, SPLOST, Federal DOT
Enhance signal coordination and Intelligent Transportation System (ITS)	3.1	2009-2011	DOT with P&D and EAD	\$500,000	General Fund, SPLOST, Federal DOT
Manage access on arterials	3.2	2009-2011	DOT with P&D and EAD	\$200,000	General Fund
Prioritize strategic road widenings and new road alignments	3.7	2012-2013	DOT with P&D and EAD	\$4 million	SPLOST, Federal DOT, General Fund
Prioritize transit system initiatives	3.6	2012-2013	DOT with P&D	\$200,000	General Fund and Federal DOT
Provide More Housing Choice					
Preserve existing workforce housing	4.2	2012-2013	P&D	\$500,000	CDBG (HUD)
Keep Gwinnett a Preferred Place					
Improve walkability of activity centers and neighborhoods	5.1	2009-2013	P&D with DOT	\$10 million	SPLOST
Expand presence of 'arts community'	5.6	2012-2013	DCS and CD	\$100,000	Recreation Funds, PPP
Invest in youth enrichment programs	5.3	2012-2014	HHS and DCS	\$100,000	General Fund, PPP, CDBG (HUD)
Support/promote Georgia Gwinnett College	5.2	2012-2014	P&D, EAD, and CD	\$150,000	State, General Fund, PPP
Provide incentives for neighborhood parks and enhanced open space/trails dedications	5.7	2012-2013	P&D with DCS	\$250,000	Recreation Funds
Enhance development aesthetics	5.4	2012-2013	P&D	\$35,000	General Fund
General Planning					
Annual update to Comprehensive Plan, 2010		2010	P&D	\$35,000	General Fund
Annual update to Comprehensive Plan, 2011		2011	P&D	\$35,000	General Fund
Annual update to Comprehensive Plan, 2012		2012	P&D	\$35,000	General Fund
Annual update to Comprehensive Plan, 2013		2013	P&D	\$35,000	General Fund
Annual update to Comprehensive Plan, 2014		2014	P&D	\$35,000	General Fund

P&D = Department of Planning and Development
 EAD = Economic Analysis Division
 DOT = Department of Transportation
 HHS = Health and Human Services
 DFS = Department of Financial Services

DCS = Department of Community Services
 DWR = Department of Water Resources
 PPP = Public Private Partnerships
 P&R = Parks and Recreation Division
 CD = Communications Division

Table 52 lists the 13 actions that are not included in the STWP. Although they are important, they have implementation timeframes beyond the five years specified in the STWP.

Table 52: Non-STWP Priority Policies, Post-2014

	Policy Number	Primary Responsible Party	Public Sector Costs	Funding Source
Foster Redevelopment				
Promote shared infrastructure facilities	2.4	P&D, Law Dept., DWR, and EAD	Minimal costs.	County, State
Allow corner stores within specified medium/high density areas as ‘floating zones’	2.5	P&D and Law Dept.	Minimal costs.	County
Maintain Mobility and Accessibility				
Create Transit Oriented Development (TOD) at appropriate sites	3.5	P&D with DOT and EAD	Moderate costs. Staff time to determine locations and provision of development alternatives.	County, State, PPP
Initiate strategic road widenings and new alignments	3.7	DOT	Significant costs. CTP estimates the highway capital cost of the Middle of the Pack Scenario improvements at \$1.6 billion and the International Gateway Scenario improvements at an additional \$1.4 billion.	County, State, Federal, PPP
Establish a road connectivity requirement for new development	3.4	DOT and P&D	Minimal costs.	County
Establish a more extensive transit system.	3.6	P&D, DOT in collaboration with GRTA and Gwinnett Transit	Significant costs involving participation by local, State, and Federal governments.	County, State
Provide More Housing Choices				
Establish and provide access to more executive housing areas	4.1	DOT	Undetermined.	County
Expand maintenance and rehabilitation assistance to homeowners and small businesses	4.3	DoFS	Undetermined.	County, Federal
Support expanded housing opportunities for seniors as they become a larger proportion of the population and as more people choose to age in place or relocate to be closer to children and grandchildren	4.4	P&D, DoFS	Minimal costs.	County
Keep Gwinnett a Preferred Place				
Provide venues to celebrate growing cultural diversity of County	5.5	DCS	Undetermined.	County
Use development regulations to create local parks.	5.8	P&D, DCS	Minimal costs.	County
Acquire surplus industrial or commercial sites for open space/recreation	5.9	P&D, DCS, and DFS	Significant costs.	County

C. USING THE PLAN AND ITS MAPS

This section gives County staff, elected and appointed officials, other agencies, developers, and property owners, as well as other interested parties, basic guidance on the types of uses encouraged or discouraged in the different character areas shown on the Unified Plan's Future Development Map. The recommendations herein are one set of guidelines for the evaluation of applications for rezoning and will help to keep such decisions consistent with the economic and fiscal analyses that are the foundation for this Unified Plan.

The Unified Plan is a tool to establish County-wide development goals and to broadly define the location of land uses that are projected between today and the year 2030. Therefore, the Board of Commissioners may consider the appropriateness of the proposed use, the timing of its approval, benefit to the community, and whether the request is consistent with the Unified Plan based on current community need and market conditions. To aid staff and the Board in these deliberations each Character Area description offers information on the types of uses that are encouraged or discouraged. In addition, guidelines follow the Character Area descriptions. The recommendations cited in the tables and the text which follow, are not intended to preempt the judgment of staff or the Board of Commissioners in their respective roles, but rather to serve as guidance for making decisions consistent with the goals and policies of the Unified Plan.

C.1 Future Development Map

The Future Development Map (Figure 78) presents the various character areas of the Unified Plan. This map features those general target areas where a number of key land use actions must occur to meet the Unified Plan goals related to economic development, expanded housing choices, protection of rural character and transformation of current strip commercial highway corridors. The major proposed changes will affect the Regional Mixed Use, Preferred Office, Community Oriented Mixed Use, Research & Development Corridor, Mixed Housing and Rural/Estate designations. The Existing / Emerging Suburban and River Corridor designations are largely stable areas of the County with only incremental changes through infill or limited redevelopment likely to occur.

The character areas overlap the cities and these overlaps are a part of the map. The Unified Plan is conceived as a County-wide concept, even though, the cities execute and implement their own plans independently of unincorporated Gwinnett County. Nevertheless, the map suggests how the cities might play an important role in the County's overall future as envisioned by this Plan. The County will need to monitor how the cities plan and execute their future development so as to adjust this Plan accordingly in subsequent updates to this plan and in the County's own sector plans.

Table 53 provides a summary of the types of land uses encouraged and discouraged within these target areas. All site specific land use changes will require case-by-case judgments based on a variety of contextual circumstances and site capabilities. The adoption of more specific sector plans as recommended in Part I will supply much of the detail on how to more effectively carry out these generalized guidelines. While it will serve as a guide for the duration of the Plan, Table 53 therefore will be especially useful for the period between Unified Plan adoption and the subsequent adoption of these various sector plans.

Table 53 and the discussion of the Character Areas that follows use the terms "encouraged" and "discouraged" instead of "allowed" and "not allowed" to describe potential rezoning uses because each proposed rezoning must be assessed on its specific merits. In some cases the encouraged uses may not be appropriate and the discouraged uses may be beneficial and merit consideration where consistent with the overall policies and goals of the Plan.

Figure 78: Future Development Map

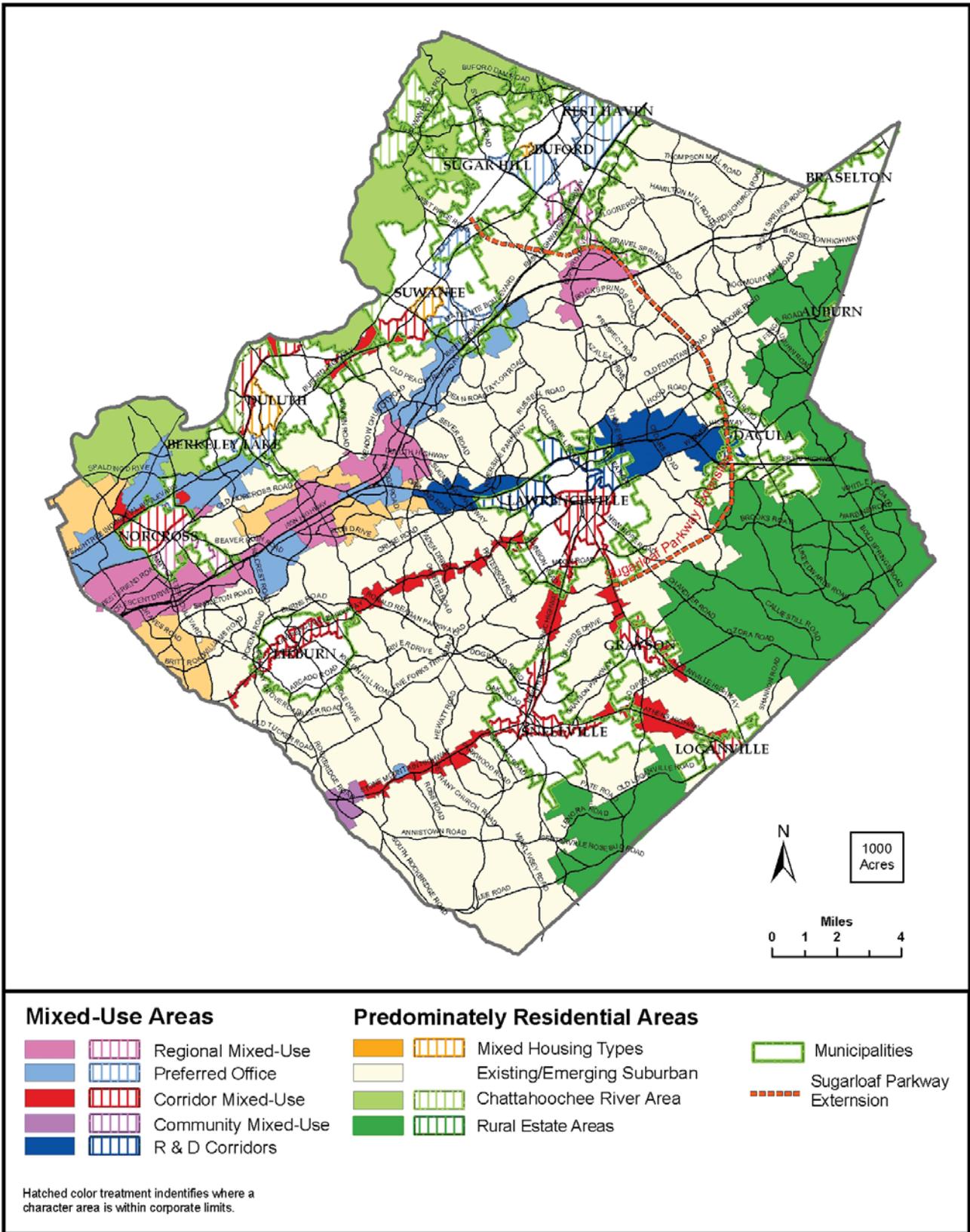


Table 53: Future Development Map and Land Use Actions

Character Area	Land Use Categories Encouraged	Land Use Categories Discouraged	Notes
Mixed Use Sectors			
Regional Mixed Use Sector	Mixed Use, Office Professional, Ultra High Density Residential, High Density Residential, Institutional Public, Public Open Space	Light Industry, Heavy Industry, Single Family Residential, Estate Residential	Free standing Commercial/Retail and Townhouses acceptable as minor components
Preferred Office Areas	Office Professional, Mixed Use	Commercial/Retail, Heavy Industry, Light Industry, All Residential, unless integrated	Commercial/Retail limited to incidental uses such as business services, food services.
Community Oriented Mixed Use Corridor	Mixed Use, Office Professional, Ultra High and High Density Residential, Townhouses, Public Open Space, Institutional, Commercial/ Retail	Heavy Industry, Light Industry, Single Family Residential, Rural/ Estate	Freestanding Commercial/Retail limited primarily to uses not easily merged into vertical or horizontal mixed use (e.g. auto repair, lumber yards)
R & D Corridor	Office Professional, Light Industry, Mixed Use, Institutional	Heavy Industry, Single family Residential, Commercial/Retail	Light Industrial related to product development, assembly. Warehousing and distribution are discouraged.
Predominantly Residential Sectors			
Mixed Housing Types Areas	All residential categories, but single family detached to be limited to 30 percent or less overall.	Employment Categories	Limited locally serving Commercial/Retail of corner store or village center variety acceptable
Existing/Emerging Suburban Sector	Public Open Space, Parks, Single family residential, Recreation and Conservation	Multifamily residential categories, all employment categories	Commercial / retail located at intersections and adequately buffered from surrounding single-family residential acceptable
River Corridor Sector	Agriculture, Estate Residential, Public Open Space, Parks, Single family Residential, Recreation and Conservation	Multifamily residential categories, all employment categories	Very limited crossroads Commercial/Retail acceptable
Rural/Estate Sector	Agriculture, Estate Residential, Public Open Space, Parks, Recreation and Conservation	Single Family (Above RA-200 level), all attached residential categories, all employment categories	Very limited crossroads Commercial/Retail acceptable

Note: Table 53 is a summary and should be used with the more detailed text in Section C.2.a-g which follows. Both these resources should be used together with the definitions of recommended Mixed use Districts in section D.1.



C.2 Using the Character Area Summaries

The following are summaries of each of the Character Areas listed in Table 53. The eight Character Areas are divided into two groupings. The first set applies to the Mixed-Use Character areas depicted on the Future Development Map. This set encourages mixed-use as a “by-right” use, meaning that approval of mixed-use in these character areas requires no plan amendment but only rezoning approval by the Board of Commissioners. The second set includes the Character Areas that are predominantly residential. In these character areas, a plan amendment by the Board of Commissioners is required to designate specific locations for mixed-use prior to rezoning.

Definitions of terms that may possibly be new to the reader are as follows:

Mixed use: A mixed use development or district consists of two or more land uses between which trips can be made using local streets, without having to use major streets. The uses may include residential, retail, office and /or entertainment. There may be walk trips between the uses.

Note: A node is a concentration of land use activity, relative to its surroundings, in a compact and defined area, as opposed to a continuous, narrow, linear development strip. A node will be deeper rather than wide. Nodes are typically located at the intersections of major roads.

C.2.1 Mixed Use Character Areas Regional Mixed Use Centers

Regional Mixed-Use Centers should be the County's most intense concentration and mix of commercial, employment and residential developments. The dominant uses of these centers are non-residential, preferably office-based employment, but the residential component of these centers is significant, taking the form of mid-rise and high-rise development. Mixed-use is a relatively new zoning concept in Gwinnett County in 2008 and tends to be accommodated in separate zoning districts. These centers are envisioned to become Gwinnett County's business core intermixed with shopping and housing opportunities. The mix of structure types may range from single story to high-rise development. High intensity development requires higher capacity infrastructure (roads, water and sewer delivery systems), therefore the County must plan carefully for these centers and coordinate development approvals with capacity availability. These centers may also serve as the principal Transit Oriented Development (TOD) locations should transit services extend to them.

To maintain the long term growth potential of these regional mixed-use centers and to make the best use of the public investment in upgrading infrastructure that may be required to serve them, regulations should encourage larger scale, integrated development in these mixed use centers (and indeed also in the Community Oriented Mixed Use areas). The various sector plans completed for sub-county areas should provide adequate guidance as to where smaller-scale nonresidential development might be encouraged.

Encouraged uses in the Regional Mixed-Use Centers include:

- Regional Mixed-Use
- Office Professional
- Ultra High Density Residential, High Density Residential, Medium Density Residential (which may include townhouses)
- Free standing Commercial/Retail uses are acceptable as minor components of these centers, but are preferably mixed vertically or horizontally with other uses.

Discouraged uses include:

- Light Industry, Heavy Industry, Single-Family Detached Residential, Estate Residential

Zoning Guidelines for Regional Mixed Use Centers

The Future Development Map indicates areas that are designated for Regional Mixed-Use Centers, which anticipates the most intensive land uses envisioned for Gwinnett County. At build-out, the Regional Mixed-Use Centers will resemble high density districts of major metropolitan cities such as Atlanta’s Atlantic Station. Buildings will have a mix of uses and be closely spaced to enhance pedestrian activity. Within this context the following guidelines for rezoning activity are offered.

1. **Location Criteria:**
 - a. Nodal development, located at the intersection of arterial roadways is the preferred location for higher intensity development; however, other non-intersection locations are acceptable, providing there is adequate inter-parcel access for both vehicles and pedestrians.
 - b. All structures must have direct public access to streets.
 - c. All developments are encouraged to incorporate an internal, grid roadway system based on the standards outlined in Part 2 of the Unified Plan.
2. **Development Size Criteria:** Developments on individual parcels or parcel assemblages of 10 acres or more are encouraged.
3. **Timing Criteria:** Major urban developments will have major service delivery needs. Therefore, proposed developments should take the infrastructure conditions into account. A use may be suitable for a particular location, but due to market and service delivery constraints the timing is not appropriate.
4. **Mixed-Use Orientation:** Regional Mixed-Use Centers are intended to develop as mixed-use. As such, proposed projects should:
 - a. Contain a mix of office, commercial, and residential uses. Employment uses rather than residential uses should predominate with an allowed range of 35 percent to 70 percent. Sufficient residences should be provided at 20 – 50 percent of the floor area in residential usage, and adequate commercial should be provided to satisfy both the neighborhood commercial/service needs of both the workforce and residents and the commercial/service needs of the community/regional market. Commercial uses can range from 10 percent to 50 percent.
 - b. Mixing of uses are encouraged to be both horizontal and vertical.
 - c. The development should be pedestrian oriented,

meaning that people living in the project should be able to satisfy all of their day to day needs comfortably without an automobile.

- d. The development should provide not only pedestrian access, but also places to exercise and recreate on foot.
 - e. The development should provide a grid street system for internal vehicular circulation with stub-outs to continue the grid to adjacent developments and with direct links to the public roadway system.
 - f. Parking lots and garages should be accessible, but not visually obvious.
5. **Land Use Compatibility:** High intensity development in the Regional Activity Center will phase in over time. Because the ultimate goal of the Regional Activity Center is high intensity development, all uses approved for development should be selected for their compatibility with the area’s future high intensity development. Small-scale developments, below the intensities recommended should be discouraged.
 6. **Neighborhood Compatibility:** Within the Regional Activity Center, neighborhood compatibility is resolved by excluding incompatible uses such as those identified in the Discouraged Uses list, mainly industrial and lower density residential uses. Between the Regional Activity Center and surrounding Character Areas, especially the Existing/Emerging Suburban Character Area transitions should be established by stepping down building heights and imposing buffers to protect residential neighborhoods or individual residences outside the Regional Activity Center.
 7. **Services/Facilities:** Proposed developments should not degrade the capacity of water/sewer, or cause drainage problems. Nor should the level of service on the roadway system be degraded to unacceptable limits. Separate level of service studies should be conducted to establish level of service standards for the County and high intensity mixed-use centers.
 8. **Recommended Pre-Application Meeting:** A pre-application meeting is recommended to guide the applicant with development standards and requirements.

Preferred Office Areas

Nationally, service-oriented industries have replaced manufacturing as the highest wage-based employment. These businesses/industries are attracted to office complexes and may include anything from the individual entrepreneur and solo attorney to corporate headquarters for Fortune 500 firms. Attracting these types of businesses to Gwinnett County is a goal of both the Unified Plan and the Gwinnett Chamber of Commerce’s Partnership Gwinnett program. Over the long-term, office development offers Gwinnett County the highest form of sustainable economic development.



Attracting a larger share of the region’s office based employment will offset the expected shrinking of the manufacturing, light industrial and warehouse and distribution components of Gwinnett County’s economy. Making office development more predominant will also reduce Gwinnett’s over-reliance on commercial development as a foundation of its tax base. Furthermore, attracting office development that features higher paying professional and other white collar jobs will help Gwinnett maintain today’s above average household income profile. For these reasons, designation and protection of areas which are suitable for attracting such office development is important for Gwinnett County’s long-term economic health.

The areas shown as Preferred Office on the Future Development Map have great long-term potential for such office development. This is due primarily to their regional accessibility, their close proximity to the economic centers of Forsyth and north Fulton Counties, and potential to be more consistently developed as contemporary employment centers. The Preferred Office areas adjacent to Regional Mixed-Use Centers are envisioned as high-rise and mid-rise developments focused on County investment in the infrastructure needed to support such development. The other Preferred Office areas should be limited to mid-rise development.

During periods of economic decline, prime office property is frequently committed to less strategically important uses. To discourage this, the County must take action to protect the value of its future tax base. In the near-term, these Preferred Office areas should be designated for office development and rezoning applications proposed for office development supported. In the long-term, additional analysis should be conducted to determine

the county for future office use through proactive area-wide rezoning and changes to the Zoning Resolution. (See Section 3. D. 2 for some recommendations.)

Encouraged uses:

- Office Professional Uses
- Mixed-use development

Discouraged uses:

- Large, free standing Commercial/Retail
- All forms of Industrial
- All Residential, except those incorporated into mixed-use

Using the Unified Plan to Make Zoning Map Changes

Those submitting and those evaluating zoning change requests should incorporate a number of references to the Unified Plan in their efforts. Guidance is provided by the five theme maps and the Major Thoroughfare Map which link general land use policies and transportation capabilities within various areas of the County. In all cases, a zoning request should be supported by reference to the policies associated with the five themes and the theme narrative on the purposes of the theme and the issues the theme polices are to resolve.

Zoning Guidelines for Preferred Office Areas

The Future Development Map indicates areas that are designated as Preferred Office Areas, one of the most intensive land uses envisioned for Gwinnett County. At build-out, the Preferred Office Areas will resemble high density business districts of a major metropolitan city, similar to Perimeter Center. Office buildings will be the predominate use, but residential and neighborhood service uses will be mixed either vertically or horizontally. Within this context the following guidelines for rezoning activity are offered.

1. **Location Criteria:**
 - a. Nodal development, located at the intersection of arterial roadways is the preferred location for higher intensity development; however, non-intersection locations are acceptable, providing there is adequate inter-parcel access for both vehicles and pedestrians.
 - b. All structures must have direct public access to streets.
 - c. All developments are encouraged to incorporate an internal, grid roadway system based on the standards outlined in Part 2 of the Unified Plan.
2. **Development Sized Criteria:** Developments on individual parcels or parcel assemblages of 10 acres or more are encouraged.
3. **Timing Criteria:** Major urban developments will have major service delivery needs. Therefore, proposed developments should take the infrastructure conditions into account. A use may be suitable for a particular location, but due to market and service delivery constraints the timing is not appropriate.
4. **Mixed-Use Orientation:** Preferred Office Areas are intended to develop with a clear emphasis on office uses. As such, proposed projects should:
 - a. Contain a mix of office, commercial, and residential uses. Office uses should be predominate with a range of 50 to 95 percent of the floor space. Residential development is not required but when present no more than 30 percent of the floor space should be devoted to residential uses. Adequate commercial (minimum of 5 percent to maximum of 15 percent of the floor space) should be provided to satisfy most of the neighborhood commercial/service needs of both the workforce and residents.
 - b. Mixing of uses is encouraged to be both horizontal and vertical.
 - c. The development should be pedestrian oriented, meaning that people living or working in the project should be able to satisfy most of their day to day

needs comfortably without an automobile.

- d. The development should provide not only pedestrian access, but also places to exercise and recreate on foot.
 - e. The development should provide a grid street system for internal vehicular circulation with stub-outs to continue the grid to adjacent developments and with direct links to the public roadway system.
 - f. Parking lots and garages should be accessible, but not visually obvious.
5. **Land Use Compatibility:** High intensity development in the Preferred Office Area will phase in over time. Because the ultimate goal of the Preferred Office Area is mid-rise to high intensity development, all uses approved for development should be selected for their compatibility with the area's future development intensity. Small-scale developments, below the intensities recommended should be discouraged.
 6. **Neighborhood Compatibility:** Within the Preferred Office Areas, neighborhood compatibility is resolved by excluding incompatible uses such as those identified in the Discouraged Uses list, mainly industrial and lower density residential uses. Buffering between uses within the Preferred Office Areas tends to impair pedestrian access, and is therefore discouraged. Between the Preferred Office Areas and surrounding Character Areas of lower intensity or those that are predominantly residential, such as the Existing/ Emerging Suburban Character Area, transitions should be established by stepping down building heights and imposing buffers to protect residential neighborhoods or individual residences outside the Preferred Office Areas.
 7. **Services/Facilities:** Proposed developments should not degrade the level of service on roadways, capacity of water/sewer, or cause drainage problems.
 8. **Recommended Pre-Application Meeting:** A pre-application meeting is recommended to guide the applicant with development standards and requirements.

Community Mixed-Use Corridors

The Foster Redevelopment theme map (Figure 72) identifies Community Mixed-Use Corridors that over time should evolve from their current predominant strip commercial status (and in some cases aging and distressed retail sites) into mixed-use corridors. Higher intensity Community Mixed-Use nodes are located at key intersections. Between these nodes, the corridors are envisioned as lower intensity mixed-use with lower maximum residential densities. These mixed use areas, unlike the Regional Mixed-Use centers, are more oriented to the needs of the areas surrounding them. These mixed-use corridors will also be the principal means within the Suburban character areas for achieving the Unified Plan’s goal for a greater variety of housing choices.

Encouraged uses at Major Nodes Where the Dominant Use is Office Professional and/or Community Mixed-Use (See page 184 for definition of ‘Node’ and ‘Mixed Use’):

- Free-standing Office Professional uses as components of these nodes, but preferably mixed with other uses
- Free-standing Commercial/Retail uses as components of these nodes, but preferably mixed vertically or horizontally with other uses
- High Density Residential

Encouraged uses between Nodes Where the Dominant Use is Residential:

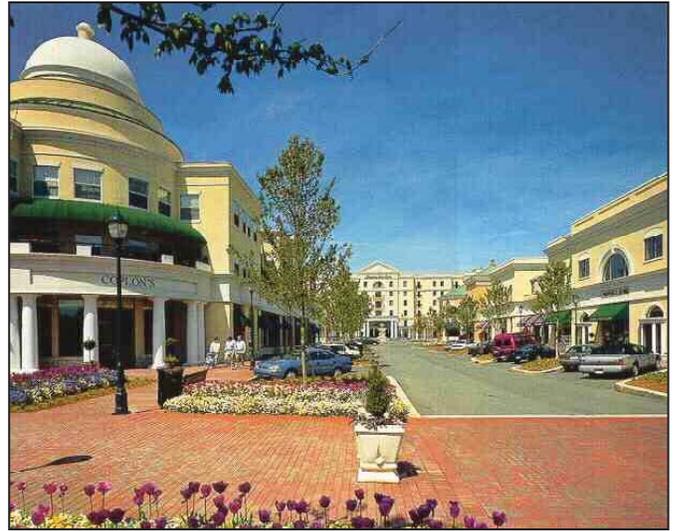
- Corridor Mixed Use development as described in Section D.1.3
- Free-standing Office Professional uses as components of these nodes, but preferably mixed with other uses
- Free-standing Commercial/Retail uses as components of these nodes, but preferably mixed vertically or horizontally with other uses
- Townhouse Residential
- Free-standing multi-family buildings

Discouraged uses at Major Nodes

- Light and Heavy Industrial,
- Single-family Residential
- Townhouse Residential

Discouraged uses between Nodes

- Light and Heavy Industrial
- Single-family Residential



Zoning Guidelines for Community-Oriented Mixed Use Corridors

The Future Development Map indicates areas that are designated for Community Mixed-Use Corridors, which anticipates moderately intense land uses that address the community commercial/service needs of most residents of Gwinnett County. At build-out, the Community Mixed-Use Corridors will have building heights of three to five stories containing commercial, office and residences. These corridors will be redeveloped on the base of existing strip development that extends along many of the County’s commercial corridors today. Buildings will have a mix of uses and be closely spaced to enhance pedestrian activity. These higher intensity uses will be buffered against the predominately residential neighborhoods that abut them. Within this context the following guidelines for rezoning activity are offered.

I. Location Criteria:

- a. Redevelopment of existing strip development is encouraged as the primary target for Community Oriented Mixed-Use, although new infill development is not discouraged.
- b. Nodal development, located at the intersection of arterial roadways is the preferred location for mid-intensity mixed-use development; however, non-intersection locations are acceptable, providing there is adequate inter-parcel access for both vehicles and pedestrians. Mid-block development should contain a higher mix of residential units.
- c. All structures must have direct public access to public streets .
- d. All developments are encouraged to incorporate an internal, grid roadway system based on the standards

outlined in Part 2 of the Unified Plan.

2. **Development Size Criteria:** Developments on individual parcels or parcel assemblages of 10 acres or more are encouraged.
3. **Timing Criteria:** Intensive mixed-use developments will have significant service delivery needs. Therefore, proposed developments should take the infrastructure conditions into account. A use may be suitable for a particular location, but due to market and service delivery constraints the timing is not appropriate.
4. **Mixed-Use Orientation:** Community Oriented Mixed-Use Corridors are intended to develop as mixed-use that serves the needs of the surrounding community. As such, proposed projects should:
 - a. Contain a mix of office, commercial, and residential uses. Office employment uses, rather than residential uses, should predominate at intersection nodes with a minimum of 20 percent to a maximum of 60 percent allowed. Sufficient residences should be provided at a range of 20 to 30 percent of the floor area, and adequate commercial (from 20 percent to a maximum of 55 percent of the floor area) should be provided at intersection nodes to satisfy both the neighborhood commercial/service needs of both the workforce and residents. Additionally, it should serve the commercial/service needs of the surrounding community market. At mid-block inter-modal locations, office uses are not required but can range up to 60 percent of total floor area, residential uses may range from 20 percent to up to 90 percent. Commercial uses to support the local businesses or local residents of this intermodal areas should range from 10 percent to 60 percent.
 - b. Mixing of uses is encouraged to be both horizontal and vertical although heights are generally limited.
 - c. The development should be pedestrian oriented, meaning that people living in the project should be able to satisfy most of their day to day needs comfortably without an automobile.
 - d. The development should provide not only pedestrian access, but also places to exercise and recreate on foot.
 - e. The development should provide a grid street system for internal vehicular circulation with stub-outs to continue the grid to adjacent developments and with direct links to the public roadway system.
 - f. Parking lots and garages should be accessible, but not visually obvious.
5. **Land Use Compatibility:** Mixed-use development will phase- in over time. Within these corridors, redevelopment to mixed-use should be encouraged. However, neighboring residential development within the corridor should be adequately buffered from non-residential uses. Buffering between uses within and between redeveloped or new developments should be kept to a minimum to encourage walkability and pedestrian activity within the mixed-use corridor.
6. **Neighborhood Compatibility:** Compatibility with neighboring residential development is key to the success of Community Mixed-Use Corridors. Buffering between the Community Mixed-Use Corridors and surrounding Character Areas, especially the Existing/ Emerging Suburban Character Area transitions should be established by stepping down building heights (no higher than three stories) and imposing buffers to protect residential neighborhoods or individual residences located outside the mixed-use corridor.
7. **Services/Facilities:** Proposed developments should not degrade the capacity of water/sewer, or cause drainage problems. Nor should the level of service on the roadway system be degraded to unacceptable limits. Separate level of service studies should be conducted to establish level of service standards for the County and high intensity mixed-use centers.
8. **Recommended Pre-Application Meeting:** A pre-application meeting is recommended to guide the applicant with development standards and requirements.

Research and Development (R&D) Corridor

University Parkway (SR 316) is characterized by industrial parks and commercial uses along much of its run between Interstate 85 and the City of Dacula. Georgia Gwinnett College and Gwinnett Technical College both are located in the corridor as is Gwinnett Medical Center. Briscoe Field, the County’s airport, which serves primarily private aviation and corporate jets, is also located adjacent to the highway. The proximity of these key elements provide the opportunity for an enterprise-type relationship between area colleges and the Gwinnett Medical Center, and other research and development firms. The combination of these uses creates the synergy for developing a potentially high tech and biotech research corridor along University Parkway.

Uses encouraged:

- Office Professional
- Light Industrial
- Community Mixed-Use at intersections of Major roadways (in conformance with guideline in Section D.1)
- Institutional Public

Uses discouraged:

- Heavy Industrial
- All Residential Categories not associated with Mixed-Use
- Free-Standing Commercial / Retail



Zoning Guidelines For Research and Development Corridor

The Future Development Map indicates areas that are designated as the Research and Development Corridor along SR 316; an area of corporate research/industrial campuses. At build-out, the Research and Development Corridor will consist of industrial parks interspersed with mixed-use nodes. Building height limits will be low to medium rise development areas with buildings averaging four to five stories. The proximity of these uses to the area colleges and the Gwinnett Medical Center creates the opportunity to attract research and development firms. Within this context the following guidelines for rezoning activity are offered.

1. **Location Criteria:**
 - a. Nodal development, located at the intersection of arterial roadways is the preferred location for medium intensity mixed-use development; Between nodal development industrial parks and research facilities are encouraged.
 - b. All structures must have direct public access to streets.
 - c. All developments are encouraged to incorporate an internal, grid roadway system based on the standards outlined in Part 2 of the Unified Plan.
2. **Development Sized Criteria:** Developments on individual parcels or parcel assemblages of 10 acres or more are encouraged.
3. **Timing Criteria:** Research and Development Centers will have significant service delivery needs. Therefore, proposed developments should take the infrastructure conditions into account. A use may be suitable for a particular location, but due to market and service delivery constraints the timing is not appropriate.

4. **Nodal and Non-Nodal Development Criteria**
 The R & D development criteria will vary depending on whether a site is at a designated node or is located between such nodes.
 - a. **Nodal Criteria**
 The mixed use orientation of nodal development in the R & D corridor will permit office development at 30 percent to 70 percent of total square footage. Residential development should be allowed at 10 percent to 30 percent of total floor area. These nodes should also accommodate commercial development at a range of 20 percent to 55 percent of total floor area.
 - b. **Inter-nodal Criteria**
 In the areas between the nodes, employment is clearly the preferred use and residential is clearly discouraged. Employment uses should account for 85 percent to 100 percent of total development square footage. Commercial uses to support the employment development can range up to 15 percent of total floor area.
5. **Land Use Compatibility:** Research and Development Corridor development will phase-in over time. Because the ultimate goal of the Research and Development Corridor is to promote a combination of uses to create the synergy for developing a bio-tech research corridor along University Parkway, development of the appropriate use and intensity should not be denied because it is not compatible with the existing development. Despite this, new development should use buffering to minimize the adverse impacts on existing residential development located within the corridor.
6. **Neighborhood Compatibility:** Within the Research and Development Corridor, neighborhood compatibility is resolved by excluding incompatible uses such as those identified in the Discouraged Uses list, mainly stand-alone commercial, heavy industrial and lower density residential uses not developed in a mixed-use setting. Between the Research and Development Corridor Areas and surrounding Character Areas of lower intensity or those that are predominantly residential such as the Existing/Emerging Suburban Character Area, transitions should be established by stepping down building heights and imposing buffers to protect residential neighborhoods or individual residences outside the Research and Development Corridor.
7. **Services/Facilities:** Proposed developments

should not degrade the level of service on roadways, capacity of water/sewer, or cause drainage problems. Transportation studies to determine appropriate levels-of-service should be conducted to establish standards for the Research and Development Corridor.

8. **Recommended Pre-Application Meeting:** A pre-application meeting is recommended to guide the applicant with development standards and requirements.

Transfer of Development Rights

A system that assigns development rights to parcels of land and gives landowners the option of using those rights to develop or to sell their land. TDRs are used to promote conservation and protection of land by giving landowners the right to transfer the development rights of one parcel to another parcel. By selling development rights, a landowner gives up the right to develop his/her property, but the buyer could use the rights to develop another piece of land at a greater intensity than would otherwise be permitted.

C.2.2 Residentially Oriented Character Areas

Mixed-Housing Areas

The areas identified as Mixed-Housing Areas are currently developed as apartments with some single-family residential development or as single-family development with zoning that would permit apartment development. Located near mixed use centers, but generally away from the primary intersections, these Mixed Housing areas have only limited potential for redevelopment as sustainable mixed-use, office or commercial properties. Allowing these areas to redevelop with a broader range of residential options including apartments, townhouses, and cluster housing interspersed with neighborhood serving commercial uses would add variety to Gwinnett’s housing stock. Also, as these areas are redeveloped, broadening the housing options will help break up large areas that are currently developed exclusively as apartments.

Encouraged uses include:

- Redevelopment as medium density single-family housing, townhouses, or cluster homes
- Redevelopment as medium density multifamily housing
- Neighborhood-serving commercial

Discouraged uses include:

- Employment Uses
- Non-residential uses such as retail that are intended to serve more than the immediate neighborhood
- All Mixed-Use types
- Convenience stores that dispense gasoline, ethanol, or diesel fuel

Existing/Emerging Suburban

The majority of Gwinnett County’s developed land is projected to continue as traditional suburban-style residential development. A primary goal of the Existing/Emerging Suburban Character area is to accommodate the needs of these extensive residential neighborhoods. These areas have developed as single-family detached communities based on extensive networks of cul-de-sacs and a limited presence of other uses within these neighborhoods. Many of these neighborhoods are less than 20 to 30 years old, especially in the area north of the SR 316 Corridor. Consequently, there is little need for significant redevelopment within many of these



northern single-family neighborhoods, which will remain some of the most stable parts of Gwinnett County.

In the southern and western parts of Gwinnett are sub-areas within the Existing Suburban area that need attention. Portions of these neighborhoods have been the focus of “Operation Fixing Broken Windows”, and have been enhanced by the Quality of Life section of the Police Services.

Residential neighborhoods that abut primary strip commercial corridors such as Lawrenceville Highway (US 29), Scenic Highway (SR I 24) and Loganville Highway (SR20) are especially sensitive to decline. As these commercial areas age and decline, such decline typically begins to affect the surrounding residential neighborhoods. Revitalizing the highway corridors by allowing the conversion of vacant and declining strip commercial centers to higher density residential development mixed vertically and horizontally with neighborhood serving commercial uses could help to stabilize the surrounding residential sector as well. (See the Community Mixed-Use Corridor discussion in section D.1.2 for additional information.)

Promoting a variety of housing options for Gwinnett County residents is one of the policy goals of the Unified Plan. Simultaneously, the Board of Commissioners has the obligation to protect the character of existing neighborhoods. Therefore, within the Existing and Emerging Suburban Character Area this Plan establishes two density caps based on the character of the surrounding area.

- Proposed new residential development within the Existing/Emerging Suburban Character Area and in the vicinity of existing low density, single-family subdivisions

- should not exceed the 3.0 units per acre density.
- Proposed new residential development within the Existing/Emerging Suburban Character Area and in the vicinity of existing medium density homes should not exceed the 3.8 units per acre density.

Within medium density neighborhoods, the introduction of “corner store” developments (see Policy A.2.5) could be allowed as infill or as components of any new development. Such corner store developments should be encouraged where such uses can be accommodated without infringing on the overall character of the surrounding neighborhoods. A special “floating zone”, which sets a number of conditions that must be met to allow such a use where it otherwise is not allowed, would need to be added to the County’s Zoning Resolution.

Roadway congestion is a major issue for most of the residential neighborhoods in Gwinnett County. Because new subdivisions are developed in isolation from one another without street or sidewalk connections to adjacent residential or commercial developments, all vehicles entering or exiting a subdivision must flow through a single entrance on to a congested road. Requirements for multiple entrances to subdivisions, including stub-outs to adjacent uses would provide alternative access routes and help reduce congestion.

Encouraged uses include:

- Single family detached and townhouse developments at low to moderate densities
- Residential in-fill development at densities and architectural character compatible with existing development
- Neighborhood-serving retail and commercial services and neighborhood serving office employment at key nodes created at major intersections (adequately buffered from surrounding single-family development)
- Public Open Space, Parks (especially neighborhood parks), Recreation and Conservation Areas

Discouraged uses include:

- Heavy Industry, Major Warehousing and Distribution
- New Community level Retail (these uses should be located in Community Oriented Mixed-Use Corridors)
- New strip retail centers along roadways
- All Mixed-Use Types Unless specifically designated by the Board of Commissioners

Chattahoochee River Area

This Character Area includes the land along the Chattahoochee River and Lake Lanier. This area combines the need for housing areas attractive to business executives and managers combined with the need to protect the water quality and environmental character of the Chattahoochee River and Lake Lanier. Consequently, this area will remain predominantly residential with future development implemented in more environmentally sensitive ways. Moderate density residential such as townhomes or very small single family detached lots should only be allowed when part of an environmental clustering strategy to preserve and buffer sensitive areas such as steep slopes or stream buffers.

The Chattahoochee River Area is close to the retail and commercial services areas of six cities: Norcross, Berkeley Lake, Duluth, Suwanee, Sugar Hill, and Buford. Consequently, there is little need to locate any retail or commercial beyond the corner store variety within this sector.

Encouraged uses include:

- Estate housing
- Single family detached
- Townhouses and Cluster homes (As part of an environmental clustering strategy to preserve and buffer sensitive areas such as steep slopes or stream buffers)

Discouraged uses include:

- All Mixed-Use Types
- Employment uses
- Conventional retail centers
- All Industrial Uses
- Multi-family housing
- All commercial uses that dispense gasoline, ethanol or diesel fuels

Rural Estate Character Area

Two large areas on Gwinnett County’s eastern border are all that remains of what was, just forty years ago, a large agrarian jurisdiction. As Gwinnett’s remaining lands of rural character, these two areas are predominantly undeveloped, with scattered subdivisions and a few remnant agricultural tracts.

There are two basic reasons to preserve rural character in eastern Gwinnett County. The first is merely to preserve the rural lifestyle and heritage which has shaped the development of the County. Preserving a rural estate lifestyle increases the housing choices offered within the County which is a major goal of the Unified Plan.

These two rural areas are Gwinnett’s last opportunity to retain some aspects of its rural heritage, a goal the Unified Plan encourages. The retention of any rural character will require new planning, zoning and subdivision development approaches. One tactic would be to withhold public sewer from these areas so that only low density development could be viable. Two other potential and complementary approaches—Transfer of Development Rights and Rural Conservation zoning—are described in Section 3.D.3.

The second reason is economic. Suburban-style single-family development costs the County more to service than it returns in tax revenue. In order to preserve the quality of life and level of service delivery that Gwinnett residents have come to enjoy, the County must reduce the cost to service single-family residential development. Studies indicate that limiting the expansion of suburban-style development and its attendant service demands in eastern Gwinnett County while shifting the area’s development potential into areas that are prime for higher intensity development will allow the county to maintain a balanced tax digest with only moderate increases in property taxes over time.

Until an approach is ultimately approved for development in this Character Area, gross development densities for all new residential development should not exceed 2.0 dwelling units per acre.

Encouraged uses include:

- Agriculture (Non-grandfathered commercial agricultural uses should require public hearings)
- Estate Residential
- Limited “crossroads” Commercial/Retail uses are

appropriate at roadway intersections or nodes, but should be limited in size and subject to site planning and design criteria that promote traditional “rural” crossroads feel.

- Public Open Space, Parks, Recreation and Conservation

Discouraged uses include:

- Single Family densities other than those specified for Rural Conservation
- All Multifamily residential categories
- All employment categories
- All Mixed-Use types unless specifically designated by the Board of Commissioners

Zoning Guidelines for Residential Character Areas

The Future Development Map indicates four Character Areas that are dominated by residential uses.

- Existing/Emerging Suburban
- Mixed Housing Types
- Chattahoochee River Area
- Rural Estate Areas

While these areas vary in the type and density of housing anticipated, they are all residential in character and non-residential uses should, therefore, meet a higher standard for approval than within the County’s designated Mixed-Use Character Areas. Non-residential uses approved within residential character areas should be neighborhood scaled developments, providing goods and services that meet the needs of nearby residential developments. Examples of neighborhood serving uses include: convenience stores, specialty grocery stores, café/coffee shops, restaurants, bakeries, hardware stores, dry cleaners, video rental shops, child or adult day care centers, pharmacies, etc. Development opportunities for community-scale shopping are amply provided for in the County’s various Mixed-Use Character Areas and in existing non-residential development already approved. Within this context the following guidelines for rezoning activity are offered.

I. **Location Criteria:**

- a. Nodal development located at the intersections of minor collector roads or higher. Mid-block development is not encouraged.
- b. Nodes should be located at least two miles from a Community Oriented Mixed-Use Corridor (or from other mixed-use Character Areas that provide Community and Regional scaled goods and services).
- c. Nodes should be located at least two miles from

another node offering non-residential goods and services.

d. Nodes should be located at signalized intersections.

2. **Development Size Criteria:** Due to their neighborhood orientation, nodes should be limited to no more than 20,000 square feet of developed non-residential floor space or on one acre, whichever is larger.
3. **Timing Criteria:** Proposed developments should take neighborhood and market conditions into account. A use may be suitable for a particular location, but due to neighborhood or market constraints, the Board may determine that the use is premature at the time of application.
4. **Land Use Compatibility:** Development intensity should transition so that in-fill development is consistent with the character of existing abutting densities. Smaller scale professional services and residential developments may serve as transition to existing neighborhoods. Staggered heights, greater rear and side yard setbacks, and/or increased buffers can help mitigate compatibility issues. Design standards for massing and articulation, roof form, and materials are desirable.
5. **Neighborhood Compatibility:** Commercial and office uses that by virtue of their scale and/or design could have a negative or blighting influence on adjacent residential neighborhoods or individual residences should not be permitted.
6. **Services/Facilities:** Small-scale developments, below the intensities recommended in the Mixed-Use Development discussion in section D.1, should be discouraged in areas that have received high levels of County and/or state infrastructure investments such as expanded water, sewer, or roadway capacity as smaller developments do not fully utilize this investment.
7. **Recommended Pre-Application Meeting:** A pre-application meeting is recommended to guide the applicant with development standards and requirements.

Neighborhood Conservation and Enhancement

Although the Unified Plan calls for a significant amount of redevelopment and changes in new development standards, it still recognizes that much of Gwinnett will likely remain largely untouched by such changes. This is true for much existing development in the Existing/Emerging Suburban, the River Corridor, and the Rural/Estate areas.

The primary approach of the Unified Plan to such areas is to promote their stability and enhance them by providing new amenities such as local parks or better pedestrian facilities wherever possible. The following policies from the ‘Keep Gwinnett a Preferred Place’ provide for sustaining and enhancing the currently high quality of these areas.

- Policy 5.1: Improve the Walkability of Gwinnett’s Activity Centers and Neighborhoods
- Policy 5.4: Enhance Development Aesthetics
- Policy 5.7: Provide Incentives for Enhanced Open Space/Trails
- Policy 5.8: Use Development Regulations to Create Local Parks
- Policy 5.9: Acquire Surplus Industrial or Commercial Sites for Open Space/Recreation

In addition to such policies, the following guidelines should be taken into consideration when new development or infill development is proposed for these areas.

- Discourage uses or densities not consistent with the Future Development Map or the five theme maps.
- Establish transitional areas between potentially incompatible uses, preferably through open space buffers but also through architectural or urban design solutions.
- Require that infill development be consistent or compatible in style and/or scale with surrounding uses.
- Encourage use of best practices for new development such as Traditional Neighborhood Design or clustering for open space and environmental resource retention.

D. CHANGES TO THE ZONING RESOLUTION AND THE LONG RANGE ROAD CLASSIFICATION MAP

Implementing the Unified Plan will require a variety of new zoning districts and/or substantial modifications to the current zoning and development regulations. One of the first follow-up actions subsequent to adoption of the Unified Plan will be to complete a list of such needed amendments and present them to the Board of Commissioners to consider adopting as part of a Comprehensive Zoning Amendment.

The following are four significant Unified Plan concepts that will require appropriate Zoning Resolution amendments.

- Different Scale and Purposes of Mixed-Use Districts
- Rural Estate Land Uses, including provisions for
- Rural Conservation Zoning
- Transfer of Development Rights

An additional concept is preserving the Preferred Office Employment Sites. This will involve research and proactive area wide rezonings by the Board of Commissioners.

D.1 Different Purposes and Scales of Mixed Use Developments

The Unified Plan anticipates at least four variants of mixed-use development in Gwinnett County that differ based on their purpose, location and character of the surrounding area. The following provides details on how these four mixed-use areas differ from each other and how they should be refined and incorporated in an updated Zoning Resolution. Below are the recommended categories. The descriptions introduce Floor Area Ratios (FAR) for non-residential development and density numbers (dwelling units per acre) for residential development. Both of these are directed at the land on which the proposed use is to occur, rather than for the tract or area as a whole. The descriptions also introduce another new concept – the notion of minimum densities – to ensure that public investments in infrastructure are used cost-effectively and that areas assume the desired character as shown on the Future Development Map.

D.1.1 Regional Mixed-Use

Where Recommended: Regional Mixed-Use (MXD) Centers are recommended in locations where the County has invested, or plans to invest, in the infrastructure capacity required to support high intensity development. Four such centers are envisioned on the Future Development Map—the Mall of Georgia area, the Civic Center area, the Gwinnett Place Mall area and along I-85 near the southwest corner of the County. These MXD sites may be key locations along future transit lines.

Recommended Uses: Full range of commercial, office and residential uses at densities making them centers of regional significance. Developments providing for transit facilities, public open space or other community amenities may be eligible for density bonuses.

Integration Pattern: Vertical and horizontal mixing is encouraged with ground level commercial uses integrated into office and high-density residential structures

Building Height Limits:

Minimum: Three stories
Maximum: No limit

Residential densities:

Minimum Dwelling Units Per Acre: 30 (net)
Maximum Dwelling Units: no limit but must conform to FAR limits.
With Transfer of Development Rights: No Maximum
Non-Residential: Floor Area Ratio (FAR):
2.0 (net) By Right (Cap for tracts of less than 10 acres)
2.5 (net) (Applies to tracts of 10 acres or more)

Higher FARs may be allowed in return for certain desirable development amenities such as significantly increased open space or LEED silver certified buildings as will be determined by adopted development criteria.



D.1.2 Community Mixed-Use

Where Recommended: These are major activity nodes recommended at intersections of major arterials located within the Preferred Office area, the R & D Corridor, and the Community Mixed-Use Corridors. Some of these Community Mixed-Use areas may be served by enhanced transit services operating on existing or proposed major roadways.

Recommended Uses: Full range of commercial, office and residential uses (except single family detached units) drawing from a wide variety of local sub-markets. Developments providing for transit facilities, public open space, shared facilities such as structured parking or storm-water facilities or other community amenities may be eligible for density bonuses.

Integration Pattern: Vertical and horizontal mixing is encouraged with ground floor commercial uses integrated into office and residential structures.

Building Height Limits:

Minimum: One story
Maximum: Seven stories

Residential Densities:

Minimum Dwelling Units Per Acre: 10 (net)
Maximum Dwelling Units Per Acre: 40 (net)

If Transfer of Development Rights are created, they may be applied to this district and allow higher densities.

D.1.3 Corridor Mixed-Use

Where Recommended: These developments are mixed-use areas recommended for locations between the Regional Mixed-Use (MXD) or Community Mixed-Use nodes cited above and along various corridors within Mixed-Use Character areas and along the corridors depicted on the Foster Redevelopment theme map and the Future Development Map.

Recommended Uses: Limited-range of retail, commercial services, office uses, and medium density residential that serve primarily markets between the larger centers. Over time, such mixed use should supersede many existing strip commercial developments.

Integration Pattern: Vertical and horizontal mixing is encouraged with ground level commercial and office uses integrated into medium density multifamily and townhouse communities.

Building Height Limits:

Minimum: One story
Maximum: Five stories

Residential Densities:

Minimum Dwelling Units Per Acre: 10 (net)
Maximum Dwelling Units Per Acre: 30 (net)

D.1.4 Neighborhood Mixed Use

Where Recommended: At less intensive areas within Community and Corridor Mixed-Use Corridors and Board of Commissioner approved Mixed-Use nodes at intersections of arterials in the Existing / Emerging Suburban Areas. (A Plan Amendment designating a Mixed-Use node would be required prior to acceptance of rezoning applications by staff.)

Recommended Uses: Limited-range of community serving retail, commercial services, office uses and medium density single-family or attached residential.

Integration Pattern: Horizontal mixing is encouraged with commercial and office uses integrated with medium density townhouse and small lot single-family neighborhoods. Some limited vertically integrated, work-live units may be allowed for independent small business

operators.

Building Height Limits:

Minimum: One story
Maximum: Three stories

Residential Densities:

Minimum Dwelling Units per Acre: 3 (net)
Maximum Dwelling Units per Acre: 12 (net)

D.2 Protected Office Employment Sites

A variety of incentives and restrictions will be needed to make this policy fully effective. The following are changes to the Zoning Resolution that should be part of the overall package of actions to protect office employment sites:

- Designation of those areas within which preferred office development status will apply as an overlay or the establishment of an Office zoning district.
- Within these designated areas, specify:
 - o Limitation on non-office by-right uses; especially retail or commercial
 - o Accelerated provision of infrastructure when office development is proposed and services are available;
 - o Back of the queue restrictions on infrastructure provision when capacities are limited and office developments are vying for similar permits



D.3 Rural Estate

The effort to keep part of Gwinnett at least rural in feel will not succeed simply by withholding public sewer. However, that policy decision may be necessary to the ultimate success of such a goal. Even without public sewer, the remaining open landscape of Gwinnett County could give way to very low density development in which all perception of a remaining rural Gwinnett is gradually eroded. To avert such a result, the Unified Plan recommends amending to the Zoning Resolution to create rural clustering and rural landscape preservation provisions with a new 'Rural Conservation' zoning district. The Unified Plan also recommends a system of Transfer of Development Rights (TDR). (See Policy A.1.4.) A TDR program would allow land owners to sell their development rights to the new mixed use corridors, through a variety of incentives, and at a slightly higher rate than their use-by-right densities without such transfers.

D.3.1 Rural Conservation Zoning

In Gwinnett, there is only one low density single family residential zoning district (R-140) with minimum lot sizes greater than one acre. Additionally, the minimum lot size of the RA-200 District establishes a comfortable margin above minimum state standards for on-site septic systems. To better protect Gwinnett's remaining rural environment, the Unified Plan recommends a new approach to rural zoning be explored. The following are some key elements on which a new Rural Conservation Zoning might be based :

- It is a separate zoning district, not an overlay

- Its purpose is "rural landscape protection," which includes maintenance of existing aesthetic and environmental characteristics and a land base for active agricultural uses.
- This district would allow as its residential component only single family detached housing at an overall density of 1 unit per 2 acres. All other non-residential uses of the current RA-200 zoning would be allowed.
- Individual developed lots would be a maximum of 40,000 square feet with the balance of the tract would remain undeveloped –either as common areas managed by a Home Owner's Association (HOA), dedicated as open space easements to the County as part of an open space system or as separately owned land used for any of the non residential uses allowed in the RA-200 zoning district.
- If shared septic systems are eventually allowed, minimum lot sizes could be reduced to 20,000 square feet to reduce the amount of land developed and to increase the amount of land that is preserved.
- All lots must front on common drives or local streets; no lots are allowed to have direct access to arterial or collector roads.
- A minimum landscape buffer of 75 feet is required along all arterial or collector roads. Standards for such buffers to encourage tree preservation or plantings should be developed. No stripping out of road with lots (i.e., need to have an internal road for more than 3 lots.
- For parcels under 5 acres, there is no maximum development lot size and normal small lot subdivision rules apply except that a variation of the landscape buffer for larger developments will also be developed.
- All Rural Conservation district properties of more than 5 acres are eligible as "sending areas" for a Transfer of Development Rights to designated "receiving" areas at a ratio of 1 dwelling unit per 1.5 acres – a 25 percent bonus over on site by-right yields.

D.3.2 Transfer of Development Rights (TDR)

Transfer of Development Rights (TDR) is a system many jurisdictions across the country use to promote rural conservation or agricultural preservation. TDR programs give landowners the option of using those rights to develop their property or to sell and transfer these rights for use on another property that has been designated to receive them. By selling and transferring development rights, landowners are justly compensated and agree not to develop their properties in the future, thus preserving the property’s existing character and resources. Buyers of such rights are able to develop their property at a higher density than would otherwise be permitted.

If one-acre zoning remains the by-right use in Gwinnett’s Rural Estate area, any TDR program would need to incorporate transfer of some bonus density above this base level to encourage landowners to go through the TDR process. Although most TDR programs to preserve rural landscapes incorporate such density bonuses, the base level is usually much lower and the amount of development rights transferred are significant enough to encourage participation but not so high that the receiving areas gain a dramatic increase in additional density.

There are well over 100 TDR programs across the US and they exhibit a variety of characteristics. In larger jurisdictions like Gwinnett, the County acts as a banker of Development Rights to ensure that there is a balanced and attractive marketplace for buyers and senders. TDR programs can also work purely through the private market, which establishes the value of the Development Rights.

The typical elements that underpin a TDR program that an updated Gwinnett Zoning Resolution should include are:

- Designation of appropriate “sending” and “receiving” areas
- Minimum size of both sending and receiving parcels (to eliminate minor subdivisions from the program)
- Criteria for limiting the amount of TDRs receiving area parcels can absorb
- Requirements for permanent recording a “no further development” easement on sending area (apart from any residual rights).

D.4 Access Management, the Major Thoroughfare Plan Map and Network Spacing

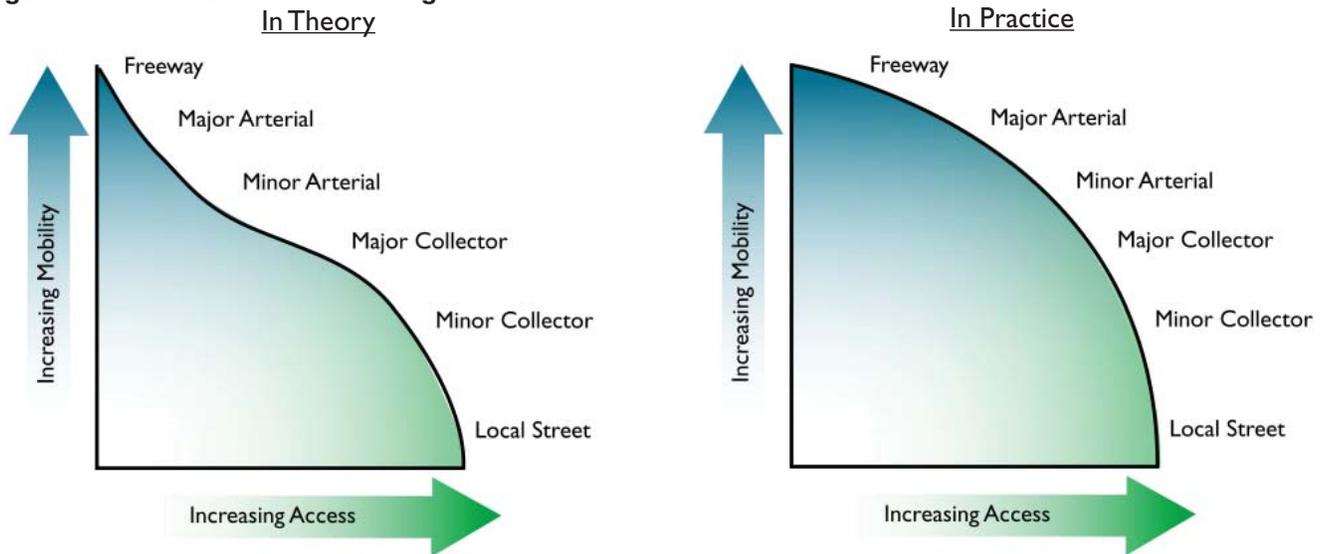
This Plan identifies the management of access on arterial roads as one of the County’s priority policies for implementation over the next two years (Policy 3.2). Its implementation involves revisiting a key regulatory tool – the Long Range Road Classification Map (LRRCM) – one that has been generally underutilized in Gwinnett. Beyond the classification of current and future roads and tying these to access controls and abutting land uses, there is the larger issue of the roadway network, discussed briefly in Part I, Section C.6. The following section addresses these items in turn.

D.4.1 Access Management

The 2008 Comprehensive Transportation Plan (CTP), included in the Appendix, describes and discusses access management at length and provides recommendations and examples for its application in Gwinnett. Local regulations can be applied to State roads if they have more stringent standards. Access management is the systematic control of the location, spacing, design and operation of driveways, median openings, interchanges, and street connections. It also encompasses roadway design treatments such as medians and auxiliary lanes, and the appropriate spacing of traffic signals.

Access management guidelines are developed to maintain traffic flow on the network so each roadway can provide mobility while providing adequate access for private properties to the transportation network. This harmonization of access and mobility is the keystone to effective access management. The left side of Figure 78 is the classic depiction of the Mobility/Access relationship by road type. The reality, however, in Gwinnett and around the country, is more like the right side of the figure, where arterials and collectors become so cluttered with driveways and other access points that they function more like local streets. Abundant research shows that travel speeds fall and accident rates rise as the number of access points increase.

Figure 79: Road Classification Diagram



With fewer new arterial roadways being built, the need for effective systems management strategies is greater than ever before. Access management is particularly significant as it offers a variety of benefits to a broad range of stakeholders. By managing roadway access, Gwinnett County can increase public safety, extend the life of major roadways, reduce traffic congestion, support alternative transportation modes, and even improve the appearance and quality of the built environment.

Access management programs seek to limit and consolidate access along major roadways, while promoting a supporting street system and unified access and circulation systems for development. The result is a roadway that functions safely and efficiently for its useful life, and a more attractive corridor. The goals of access management are accomplished by applying the following principles:

- Provide a Specialized Roadway System
- Limit Direct Access to Major Roadways
- Promote Intersection Hierarchy
- Locate Signals to Favor Through Movements
- Preserve the Functional Area of Intersections and Interchanges
- Limit the Number of Conflict Points
- Separate Conflict Areas
- Remove Turning Vehicles from Through Traffic Lanes
- Use Non-traversable Medians to Manage Left-Turn Movements

- Provide a Supporting Street and Circulation System

D.4.2 The Long Range Road Classification Map/Major Thoroughfare Plan

One way to ensure access management is through strengthening the provisions in the County's existing Long Range Road Classification Map. This map, which classifies existing and future roads into six categories, was included in the 1997 Comprehensive Plan. The map and associated text identifies right of way dimensions by road class.

This map is part of the County Development Regulations by reference where language notes that properties with 400 foot of frontage are entitled to one access point, and any fraction beyond that allows an additional driveway. The 400-foot threshold is not a spacing standard, however; and driveways are not subject to this separation. The maintenance of this map now resides within the Department of Transportation. It is used routinely in rezonings and plan review functions by planning staff.

This Unified Plan is an opportunity to set the stage for a significant upgrade of this existing tool to manage access to major roads. Such maps and their associated text are now routinely used around the country to achieve access management goals in a proactive manner. Below are some of the ways in which the map can and should be used in Gwinnett to achieve access management through the creation of an access management ordinance or via

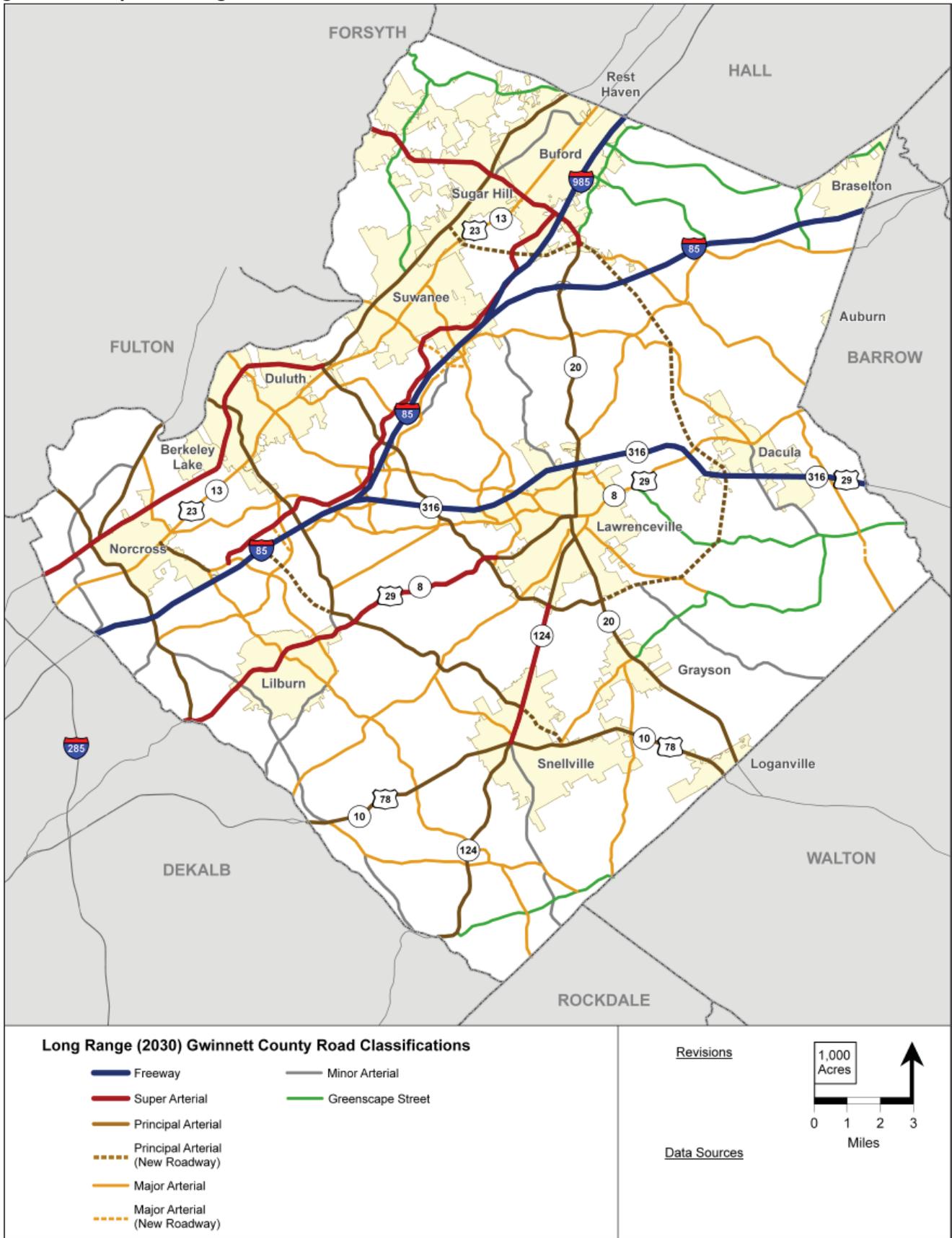
amendments to the Development Regulations:

- Limit driveway access points for all roads above a certain classification (e.g. residential arterial or major collector) so that shared driveways or interparcel connections result from new development or redevelopment
 - Require roadway access from abutting development rather than driveway access and limit roadway spacing in relation to the level of roadway class (see Road Network section below)
 - Require frontage roads or “backage roads” to achieve these same outcomes for roadway spacing, especially where major development and redevelopment is occurring
 - In most cases, require that corner lots facing major roads and minor roads only take access from the minor road
 - Extend the classification concept to include multimodal road types so that where roads are classified as ped/bike roads or transit roads additional standards may be applied (e.g. sidewalk width, bike path striping, tree planting strips etc.).
 - The County currently applies corridor overlay districts in the Zoning Resolution to selected arterials including: Buford Drive and Grayson Highway (SR 20), Stone Mountain and Loganville Highways (US Highway 78), Centerville and Braselton Highways (SR 124), and sections of Sugarloaf Parkway, Satellite Boulevard, Old Peachtree Road, Peachtree Industrial Boulevard, Peachtree Parkway, and Jimmy Carter Boulevard to name a few. These, however, do not currently govern access management but their existence provides an opportunity to do so in conjunction with the above requirements.
- are not yet known, the map can provide guidance on where such connections are intended.
 - Expand the classification types to include and account for at least the following:
 - o Super-Arterials, depicted on the Mobility Plan network
 - o Boulevards – a new class which includes landscaped medians and stronger access controls than on undivided arterials
 - o Greenscape Roads which are applied to arterials and collectors in low density, more rural areas. These types of roads permit narrower cross sections and rights of way and promote enhanced drainage.
 - o Scenic roads which share some characteristics with Greenscape Roads but are more protective of the scenic qualities of the roadway
 - o Urban Main Streets which require that arterials, when traversing the County’s traditional downtowns, have reduced right of way and roadway widths, lane widths, on-street parking allowances, and horizontal curvature standards
 - o Provisions for multimodal considerations such as pedestrians, cyclists and transit modes are now typically recognized and addressed in such maps and associated text and standards.

For the purposes of this Unified Plan, an interim update of the LRRCM has been developed (Figure 80), entitled the Major Thoroughfare Plan (draft). Figure 80 differs from the current LRRCM map in that it includes additional classifications, and shows several proposed new roadways. Figure 80 is an interim document because the Gwinnett DOT will update the existing map, and perhaps include additional categories and regulations. In relation to this overhaul, this Plan recommends several enhancements::

- Depict and classify existing *as well as* future major roads.
- Increase the map road network to include minor collectors and add future links at the collector level so as to increase road connectivity, another policy of this Unified Plan. Even if exact alignments of such roads

Figure 80: Major Thoroughfare Plan



D.4.3 Road Network Spacing

The above measures will help maintain mobility and accessibility in the County but they do not directly address the overall pattern of roadways as Gwinnett matures towards build-out. The wide spacing of County roads, described in Part 1 of the Plan, has inevitably resulted in the expansion of 4 lane arterials to 6 and 8 lanes over time and to the concentration of both short and long trips on a limited number of facilities leading to long queues at signalized intersections.

From a system-wide perspective, more frequently spaced 2 and 4 lane through roads are better than widely spaced 6 and 8 lane roads. The simplest guideline would be spacing through streets at no more than a half mile apart. For curvilinear networks the equivalent network density is 4.0 centerline miles per square mile of land area. This finer grain spacing of streets means that reverse lotting, frontage streets, looped local streets or deep setback boulevard designs are needed in the Development Regulations where residential subdivision lots would otherwise face these busier streets.

Another way of specifying network spacing systemwide and, more typically, for subdivisions is through the use of a Connectivity Index. This measure is the number of street links divided by the number of street nodes or link ends (i.e. intersections or cul-de-sac heads). The more links relative to nodes, the more connectivity. A good hybrid target is an Index of 1.40, about halfway between the gridiron and curvilinear cul-de-sac extremes.

A more case-by-case approach can be gleaned from the Transportation Research Board's 2003 Access Management Manual which recommends the access spacing guidelines in Table 54 for unsignalized conditions in suburban contexts.

Table 54: Example of Guidelines for Access Spacing (ft) on Suburban Roads

Functional Class of Roadway	Undivided Roadway	Divided Roadway		
		Full Median Opening	Right in/Out Only	Directional Median Opening*
Principal Arterial	Not applicable**	2640	Typically not permitted	Typically not permitted
Minor Arterial	2640	2640	1320	1320
Collector	660	1320	330	660
Local Road	330	Not applicable, medians typically not used		
	100			

* Typically designed for left turns from the major roadway or left turns and U-turns
 ** Not applicable; strategic arterials are divided roadways with a nontraversable median

Source: Access Management Manual, Transportation Research Board, 2003

E. KEEPING ON COURSE

It is not enough to make a plan and describe needed policies. The policies must be implemented, monitored, and corrections should be made when necessary. The Unified Plan and the recommended policies are based on many assumptions, and the Plan development process used analytical tools to arrive at its conclusions. The Plan's recommendations and the maps and policies that describe them include many ideas that are ambitious and complex to implement; they represent a break from past practices. Accordingly, it is important to monitor the assumptions on which the Plan is based, report on the Plan's progress, and make modifications to the Plan as needed.

E.1 Monitoring Current Trends

An important component of implementing the Plan is monitoring progress by examining current trends. By observing what is currently happening and comparing it to what has happened before, it is possible to gain an understanding of whether the desired changes are occurring. Listed below are several ways the County can monitor current trends. It will be necessary for the County to refine this list and develop a tracking mechanism.

- a. Monitor plans in process including subdivision plans and site plans at each stage of review and approval. Special attention should be paid to minor subdivisions, which often are overlooked but represent a significant proportion of new development in older, established areas.
- b. Monitor the assumptions made in the scenarios on the regional economy and socio-economic shifts, as presented in Parts 2.A and 2.B in the Plan.
- c. Summarize at the TAZ level acres of change by zoning and land use category by Character Area.
- d. Interpolate five year projections for the International Gateway scenario at the County and Sub-County Area levels for jobs and households and use these as benchmarks to compare with actual trends as documented by construction data, occupancy permits and other similar development data.
- e. Compare traffic counts or interim modeling results with projections in the Comprehensive Transportation Plan.
- f. Track land use or zoning changes within the cities to compare with Plan assumptions.

- g. Use PlanMaster, the web-based scenario model developed for this project, to test the fiscal effects of proposed land use changes and the land use effects of changing fiscal assumptions.

Most of the information cited above should be tracked continuously (i.e., zoning changes, new construction, redevelopment data, etc.) or at set frequencies (i.e., construction data, occupancy permits, traffic counts, etc.). While it may be difficult to obtain, arrangements should be made to have the cities within Gwinnett County report such items as zoning changes, new construction approvals and occupancy permits as they occur in order to create an overall Countywide database.

E.2 Biennial Implementation Progress Report to Commissioners

Currently, an annual Plan update that focuses on zoning and policy amendments from the prior year is sent to the Board of Commissioners. The Biennial Implementation Progress Report would, in contrast, provide a two-year assessment report that focuses on the status of the various implementation actions cited in the policy summaries and what has been achieved with regard to each policy's measures of effectiveness. The report could be prepared by the Department of Planning and Development, in conjunction with the Office of Economic Analysis, and submitted to the Board of Commissioners and all departments and agencies that report to the Board. The report would show how well (or poorly) the assumptions and expectations cited in the policy summary sheets are being realized. The report would cite reasons (e.g., lack of appropriations, delay in extension of sewer, etc.) why a policy or its key actions had not occurred as set out in the policy summary. Items for which the designated time for implementation had not yet arrived should also be noted. The information gathered for the Biennial Implementation Progress Report would also provide DCA with updates and information on progress of the Short Term Work Program.

The first biennial report should also include key information for the monitoring efforts described in Section E.1 and summarize whether current development trends correspond with Plan expectations. The report should also

convey whether any pronounced lags in key items such as job growth or housing construction are sufficient to require consideration of adjusting the Plan implementation schedule. If severe enough, such lags would indicate the need to delay implementing actions and policies that depend on a certain level of growth having already occurred (e.g., transit upgrades) or certain economic trends noticeably strengthening (e.g., growth in office based employment).

E.3 Amendments to the Unified Plan

All plans must be amended from time to time and the Unified Plan will be no different. Georgia regulations set forth criteria for major and minor amendments to the Unified Plan.

Changes to the plan are considered major amendments if they:

- Alter the basic tenets of the overall plan,
- Change a significant portion of the plan,
- Have the potential to affect another government.

All other amendments are considered to be minor.

In addition to unforeseen amendments which may arise in the future, two situations will specifically generate the need to amend this plan.

- A plan amendment shall be required prior to accepting an application for rezoning for any proposed development exceeding the state DRI thresholds or mixed-use development of any type within Predominantly Residentially Oriented Character areas. Predominantly Residentially Oriented Character areas include the Mixed Housing, the Existing/Emerging Suburban, the Chattahoochee River Area, and the Rural Estate character areas.

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STATE OF GEORGIA
COUNTY OF GWINNETT

A RESOLUTION OF
THE GWINNETT COUNTY BOARD OF COMMISSIONERS
TRANSMITTING THE
GWINNETT COUNTY 2030 UNIFIED PLAN
TO THE ATLANTA REGIONAL COMMISSION FOR
REGIONAL AND STATE REVIEW

WHEREAS, the Gwinnett County 2030 Unified Plan, hereinafter referred to as "the Unified Plan," provides a coordinated and comprehensive plan of the long-term goals, objectives, and priorities for Gwinnett County; and

WHEREAS, the Unified Plan supports five goals established by the state of Georgia pursuant to Official Code of Georgia Annotated 50-8-1 *et seq.*, as follows:

- (a) **Economic Development:** To achieve a growing and balanced economy, consistent with all resources of this state and its various regions, that equitably benefits all sections of the state and all segments of the population.
- (b) **Natural and Historic Resources:** To conserve and protect the environmental, natural and historic resources of Georgia's communities, regions and the state.
- (c) **Community Facilities:** To ensure that public infrastructure facilities serving local governments, the region and the state have the capacity and are in place when needed to support and attract growth and development and/or maintain and enhance the quality of life of the residents of the state.
- (d) **Housing:** To ensure that all people within the state and its various regions and communities have access to adequate and affordable housing.
- (e) **Land Use:** To ensure that the land resources of the state are allocated for uses required to facilitate the topical areas of economic development, natural and historic resources, community facilities, and housing as outlined above, and to protect and promote the quality of life of the people of Georgia's communities, regions, and the state; and

WHEREAS, the minimum public hearing requirements prescribed by the Unified Plan and state law have been met and exceeded; and

WHEREAS, Gwinnett County undertook an intensive public participation process including leaders representing the interests of residents, civic groups, development groups, business leaders, environmental leaders, and elected officials; and

WHEREAS, numerous public information meetings were conducted by various County departments throughout the County; and

WHEREAS, the efforts of the citizens and staff of the Planning and Development Department have resulted in an innovative and achievable Unified Plan for 2030 to guide growth for the next 20 years; and

WHEREAS, in order for the Unified Plan to remain responsive and relevant to changing conditions, it may be amended from time to time; and

WHEREAS, the Gwinnett County 2030 Unified Plan has been recommended for approval to transmit by the Municipal-Gwinnett Planning Commission following a duly advertised public hearing on November 5, 2008; and

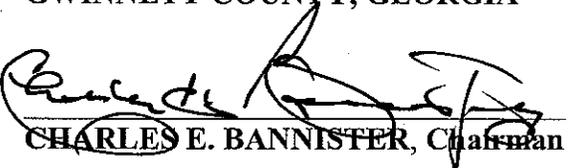
WHEREAS, the Board of Commissioners finds that the Gwinnett County 2030 Unified Plan promotes the health, safety, morals, convenience, order, prosperity, aesthetics, and general welfare of the present and future residents of Gwinnett County.

NOW, THEREFORE, BE IT RESOLVED that the Gwinnett County 2030 Unified Plan shall be utilized by the Board of Commissioners, the Municipal-Gwinnett County Planning Commission and all Gwinnett County departments, agencies, and officials as the official guide in making decisions concerning the growth and development of Gwinnett County.

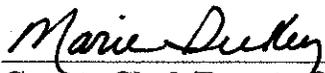
NOW, THEREFORE, BE IT FURTHER RESOLVED by the Gwinnett County Board of Commissioners that the Gwinnett County 2030 Unified Plan documents are approved for transmittal to the Atlanta Regional Commission and the Georgia Department of Community Affairs for review.

SO RESOLVED, this the 24 day of November, 2008.

BOARD OF COMMISSIONERS
GWINNETT COUNTY, GEORGIA

BY: 
CHARLES E. BANNISTER, Chairman

ATTEST:


County Clerk/Deputy County Clerk


Printed Name

(SEAL)



APPROVED AS TO FORM:


VAN STEPHENS
Chief Assistant County Attorney

Department of Planning and Development



gwinnettcounty

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November 25, 2008

Robert LeBeau
Land Use and Public Facilities Planning
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta, GA 30303

Dear Mr. LeBeau:

I am pleased to submit to you and the Atlanta Regional Commission, the Gwinnett County 2030 *Unified Plan*. The Gwinnett County Board of Commissioners approved the Unified Plan for transmittal on November 18, 2008. This Unified Plan is composed of the Comprehensive Plan, the Consolidated Plan, and the Comprehensive Transportation Plan. All these documents and appendices are on the three accompanying CDs.

Attached is a printed copy of the Unified Plan document and three CDs. Please forward on to the Georgia Department of Community Affairs after your review is completed.

If you have any questions, I can be reached at 678-518-6214.

Sincerely,

A handwritten signature in cursive script that reads "Nancy J. Lovingood".

Nancy J. Lovingood, Long Range Planning Manager
Gwinnett County Planning and Development

Attachments

c: Glenn P. Stephens, Director, Planning and Development
Bryan Lackey, Deputy Director, Planning and Development

STATE OF GEORGIA
GWINNETT COUNTY

A RESOLUTION OF
THE GWINNETT COUNTY BOARD OF COMMISSIONERS
ADOPTING THE
GWINNETT COUNTY 2030 UNIFIED PLAN

WHEREAS, the Gwinnett County 2020 Comprehensive Plan was adopted by the Board of Commissioners on October 27, 1997; and

WHEREAS, the Gwinnett County Board of Commissioners finds it necessary and appropriate to amend the Comprehensive Plan from time to time as conditions change; and

WHEREAS, the Gwinnett County Board of Commissioners is considering the adoption of *the Gwinnett County 2030 Unified Plan*, hereinafter referred to as "the Unified Plan," to provide a coordinated and comprehensive plan of the long-term goals, objectives, and priorities for Gwinnett County; and

WHEREAS, the Unified Plan supports five goals established by the state of Georgia pursuant to Official Code of Georgia Annotated 50-8-1 *et seq*, as outlined in the Rules of Georgia Department of Community Affairs, Chapter 110-12-1, *Minimum Standards and Procedures for Local Comprehensive Planning* as follows:

- (a) **Economic Development:** To achieve a growing and balanced economy, consistent with all resources of this state and its various regions, that equitably benefits all sections of the state and all segments of the population.
- (b) **Natural and Historic Resources:** To conserve and protect the environmental, natural and historic resources of Georgia's communities, regions and the state.
- (c) **Community Facilities:** To ensure that public infrastructure facilities serving local governments, the region and the state have the capacity and are in place when needed to support and attract growth and development and/or maintain and enhance the quality of life of the residents of the state.

- (d) **Housing:** To ensure that all people within the state and its various regions and communities have access to adequate and affordable housing.

- (e) **Land Use:** To ensure that the land resources of the state are allocated for uses required to facilitate the topical areas of economic development, natural and historic resources, community facilities, and housing as outlined above, and to protect and promote the quality of life of the people of Georgia's communities, regions, and the state; and

WHEREAS, in order for the Unified Plan to remain responsive and relevant to changing conditions, the Rules require an update every 10 years to review growth indicators and to provide for the preparation of a report of findings and recommendations for changes to the Unified Plan; and

WHEREAS, the public hearing requirements prescribed by the Unified Plan and state law have been met and exceeded; and

WHEREAS, a report titled *Gwinnett County 2030 Unified Plan* has been prepared following a duly advertised public hearing before the Municipal-Gwinnett County Planning Commission on November 5, 2008 and the Gwinnett County Board of Commissioners on November 19, 2008 at which Gwinnett County solicited community input on community needs and issues, as required by the state's Minimum Planning Standards and Procedures; and

WHEREAS, the Board of Commissioners finds that the proposed *Gwinnett County 2030 Unified Plan* furthers the purposes of promoting the health, safety, morals, convenience, order, prosperity, aesthetics and general welfare of the present and future residents of Gwinnett County; and

WHEREAS, the draft *Gwinnett County 2030 Unified Plan* was previously transmitted to the Atlanta Regional Commission and Department of Community Affairs in November 2008 for regional and state review for compliance with the minimum state requirements for Comprehensive Plans and coordination with the Regional Development Plan;

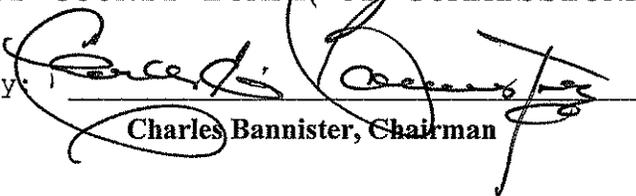
NOW, THEREFORE BE IT RESOLVED by the Gwinnett County Board of Commissioners that having met the public participation and review requirements of the Minimum Standards and Procedures, the *Gwinnett County*

2030 Unified Plan, dated February 17, 2009, which is on file with the County Clerk and which is incorporated herein by reference, is hereby adopted.

BE IT FURTHER RESOLVED that the *Gwinnett County 2030 Unified Plan* shall be utilized by the Board of Commissioners, the Municipal-Gwinnett County Planning Commission and all Gwinnett County departments, agencies and officials as a guide in making decisions concerning the growth and development of Gwinnett County.

ADOPTED this 17th day of February, 2009.

GWINNETT COUNTY BOARD OF COMMISSIONERS

By: 
Charles Bannister, Chairman

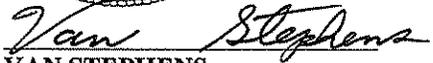
Date Signed: 2/23/09

ATTEST:


DIANE KEMP, County Clerk

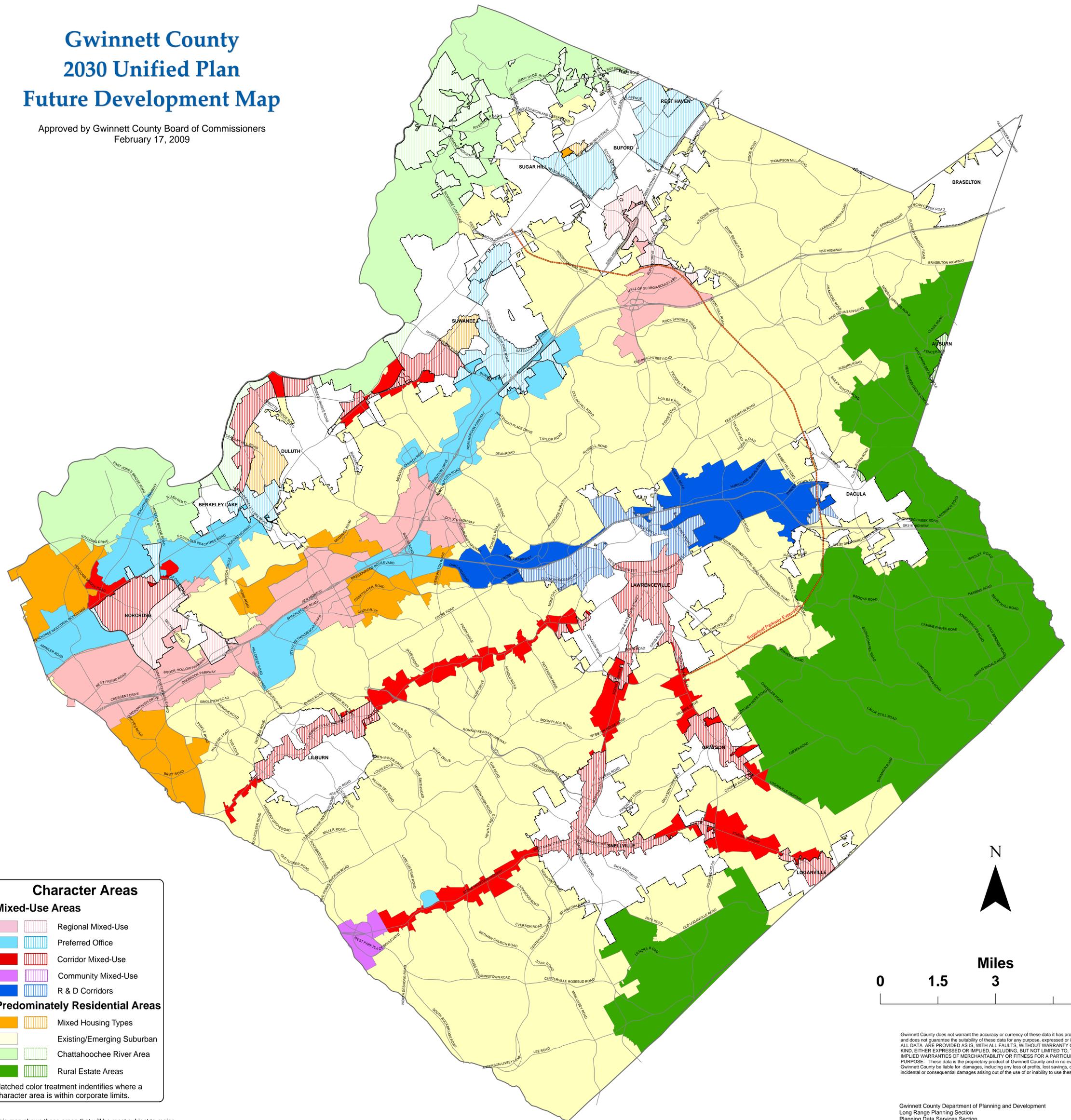


APPROVED AS TO FORM:


VAN STEPHENS
Chief Assistant County Attorney

Gwinnett County 2030 Unified Plan Future Development Map

Approved by Gwinnett County Board of Commissioners
February 17, 2009



Character Areas

Mixed-Use Areas

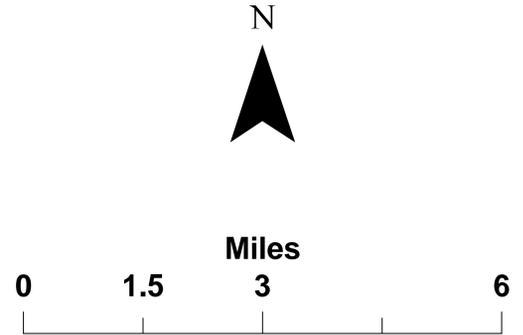
- Regional Mixed-Use
- Preferred Office
- Corridor Mixed-Use
- Community Mixed-Use
- R & D Corridors

Predominately Residential Areas

- Mixed Housing Types
- Existing/Emerging Suburban
- Chattahoochee River Area
- Rural Estate Areas

Hatched color treatment identifies where a character area is within corporate limits.

This map shows those areas that will be most subject to major policy interventions to achieve Unified Plan goals.



Gwinnett County does not warrant the accuracy or currency of these data it has provided and does not guarantee the suitability of these data for any purpose, expressed or implied. ALL DATA ARE PROVIDED AS IS, WITH ALL FAULTS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. These data is the proprietary product of Gwinnett County and in no event will Gwinnett County be liable for damages, including any loss of profits, lost savings, or other incidental or consequential damages arising out of the use of or inability to use these data.



2030 unified plan

Comprehensive Plan

Consolidated Plan

Comprehensive Transportation Plan

Technical Appendices

The following appendix presents the Gwinnett County Consolidated Plan for 2009 to 2013. Along with the Community Assessment and Technical Addendum (Unified Plan Appendix A), this document supplements the Unified Plan in providing greater detail on housing and community development issues, policies, priorities and strategies. Required by the United States Department of Housing and Urban Development, it provides specific quantitative and qualitative data needed to make fundamental decisions influencing the County's future growth and development. It also combines housing, homeless and community development planning efforts to accomplish the following overall goals for Gwinnett's low and moderate-income residents:

- 1.) Provide safe, sanitary, decent, affordable housing;
- 2.) Provide a suitable living environment;
- 3.) Expand economic opportunities.

Through the inclusion of the Consolidated Plan elements in the overall Unified Plan, housing and community development issues have been addressed in the context of the full range of land use, transportation and public investment issues that influence housing and the quality of life for county residents. This technical document much of the backup detail, including:

- 1.) Citizen Participation Plan (pg. 12)
- 2.) Anti-Displacement/Relocation Policy (pg. 18)
- 3.) Summary of Citizen Comments (pg. 22 and 33)
- 4.) Results of Consultations with Other Jurisdictions (pg. 29)
- 5.) Community Profile (pg. 34)
- 6.) Homeless (pg. 48)
- 7.) Housing - Affordable and Special Needs – (pg. 65)
- 8.) Community Development (pg. 105)

Readers wanting to focus on the housing and community issues typically addressed in the Consolidated Plan should refer to the following sections of the Unified Plan:

- Chapter C.5, Housing and Community Services of the *Unified Plan's Part I, Gwinnett: Trends and Challenges* discusses housing and community issues.
- Chapter C.4, Economic Well Being and Opportunity of the *Unified Plan's Part I, Gwinnett: Trends and Challenges* addresses economic development opportunities.
- Chapter D, The Central Themes of the *Unified Plan's Part II* identifies the overriding themes of the Unified Plan, including several that relate to housing and community development.
- Chapter A, Policies and Their Implementation of the *Unified Plan's Part III* provides specific strategies for implementing policies associated with each of the central themes. While housing policies are focused in A.4, Theme 4: Provide More Housing Choice, policies in all five themes relate to housing, community development, quality of life and other issues covered by Consolidated Plans.
- The *Community Assessment and Technical Addendum* (Appendix A) provides the detailed housing needs assessment and market analysis foundation for the Unified Plan housing and community development strategies and priorities.

GWINNETT COUNTY, GEORGIA **CONSOLIDATED PLAN - 2009-2013**



PREPARED FOR SUBMISSION TO:
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ATLANTA OFFICE OF COMMUNITY PLANNING AND DEVELOPMENT
FIVE POINTS PLAZA
40 MARIETTA STREET, 15th FLOOR
ATLANTA, GEORGIA 30303-2806

SUBMITTED BY:
THE GWINNETT COUNTY BOARD OF COMMISSIONERS
GWINNETT JUSTICE AND ADMINISTRATION CENTER
75 LANGLEY DRIVE
LAWRENCEVILLE, GEORGIA 30045-6900
SUBMISSION DATE: DECEMBER 15, 2008

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VISION STATEMENT

The Gwinnett County Board of Commissioners adopted the following Gwinnett County vision statement in 1995:

Gwinnett County will reflect a safe well-balanced, quality of life for people of all backgrounds and economic circumstances. The county should be a place where all people can feel good about where they live, have the opportunity for employment, have a sense of community spirit and are concerned for their future and the well being of their neighbors.

The Consolidated Plan process required by the U.S. Department of Housing and Urban Development (HUD) is designed to help the residents of Gwinnett County work as partners with the County Government to assess needs, to develop solutions to meet the needs, and ultimately to help the County fulfill the County's adopted vision. The resulting plan provides a framework to establish priorities for the County's investment in housing and community development over the next five years. It combines housing, homeless and community development planning efforts to accomplish the following overall goals for Gwinnett's low and moderate-income residents:

- 4.) Provide safe, sanitary, decent, affordable housing;
- 5.) Provide a suitable living environment;
- 6.) Expand economic opportunities.

This Unified Plan represents a break in the historic pattern of Consolidated Plans developed independent of many of the land use decisions and transportation investments that impact the lives of low- and moderate-income residents. By merging the Consolidated Plan into the Unified Plan, housing and community development policies and strategies are integrated into the many fundamental decisions influencing the County's future growth and development.

Gwinnett County has incorporated five (5) overall housing and community development goals, with a number of associated priority objectives for each goal, to be addressed during the Plan period:

- AH Increase access to affordable housing for low and moderate-income persons.
- HR Eliminate substandard housing for low and moderate-income individuals, families, and households.
- HML Increase housing options for homeless and near-homeless individuals and families.
- SNH Increase housing and supportive services for individuals and families with special needs.
- CD Acquire, construct or rehabilitate public facilities, provide equipment purchased through public service activities, and provide overall program administration and management, resulting in improvements in the social, economic and physical environment for low and moderate-income individuals.

The Unified Plan's Part I, Gwinnett: Trends and Challenges, profiles the county and highlights issues and concerns. Housing and community issues are discussed in Section C.5. The Community Assessment and Technical Addendum (Appendix A) provides the detailed housing needs assessment and market analysis foundation for the Unified Plan housing and community development strategies and priorities.

This technical appendix annotates the HUD checklist to refer readers to the relevant sections of the Unified Plan that answer traditional Consolidated Plan questions. It also provides much of the backup detail, including:

- Citizen Participation Plan
- Anti-Displacement/Relocation Policy
- Summary of Citizen Comments
- Results of Consultations with Other Jurisdictions
- Selected Additional Maps
- Institutional Structure
- Governmental Coordination
- Public Housing Resident Initiatives/Public Housing Needs

The checklist used by HUD to review the Consolidated Plan is included in Appendix 5 of this document. The checklist contains specific pages of the Unified Plan which address individual Consolidated Plan requirements.

INTRODUCTION

A. What is the Consolidated Plan?

The United States Department of Housing and Urban Development (HUD) initiated a new planning process, beginning in 1995, which consolidated the plans, applications, and program descriptions for the grants which it makes directly to Entitlement Cities and Urban Counties [over 200,000 population]. HUD approved incorporation of the Gwinnett County Consolidated Plan into this Unified Plan as a pilot demonstration project to encourage closer coordination with other County planning efforts and to reduce duplication of effort. This Consolidated Plan produced by Gwinnett County, Georgia, covers Program Years 2009-2013.

As stated in the regulations for the Consolidated Plan, codified in the Code of Federal Regulations at 24 CFR 91,

"The overall goal of the community planning and development programs covered by this part (24 CFR 91.1, Subpart A) is to develop viable urban communities by providing decent housing and a suitable living environment and expanding economic opportunities principally for low- and moderate-income persons". The primary means to this end is to extend and strengthen partnerships among all levels of government and the private sector, including for-profit and nonprofit organizations, in the production and operation of affordable housing.

- (i) Decent housing includes assisting homeless persons to obtain appropriate housing and assisting persons at risk of becoming homeless; retention of the affordable housing stock; and increasing the availability of permanent housing in standard condition and affordable cost to low-income and moderate-income families, particularly to members of disadvantaged minorities, without discrimination on the basis of race, color, religion, sex, national origin, familial status, or disability. Decent housing also includes increasing the supply of supportive housing, which combines structural features and services needed to enable persons with special needs, including persons with HIV/AIDS and their families, to live with dignity and independence; and providing housing affordable to low-income persons accessible to job opportunities.
- (ii) A suitable living environment includes improving the safety and livability of neighborhoods; increasing access to quality public and private facilities and services; reducing the isolation of income groups within a community or geographical area through the spatial deconcentration of housing opportunities for persons of lower income and the revitalization of deteriorating or deteriorated neighborhoods; restoring and preserving properties of special historic, architectural, or aesthetic value; and conservation of energy resources.
- (iii) Expanded economic opportunities includes job creation and retention; establishment, stabilization and expansion of small businesses (including micro businesses); the provision of public services concerned with employment; the provision of jobs involved in carrying out activities under programs covered by this plan to low-income persons living in areas affected by those programs and activities; availability of mortgage financing for low-income persons at reasonable rates using nondiscriminatory lending practices; access to capital and credit for development activities that promote the long-term economic and social viability of the community; and empowerment and self-sufficiency opportunities for low-income persons to reduce generational poverty in federally assisted and public housing."

In this Unified Plan, Gwinnett County addresses the HUD "decent housing" and "suitable living environment" goals in Part I Section C5, Housing and Community Services. The Plan also addresses economic development opportunities in Part I: Section C4, Economic Well Being and Opportunity. The private sector, through the Gwinnett County Chamber of Commerce, is taking the lead to implement the economic development strategy to foster "expanded economic opportunity."

In conformance with 24 CFR 91.1, (b), the Gwinnett County Unified Plan serves the following functions:

- (1) A planning document for Gwinnett County which builds on a participatory process at the lowest levels;
- (2) An application for federal funds under HUD's formula grant programs for each respective year within the five-year Plan period;
- (3) A strategy to be followed in carrying out HUD programs; and
- (4) A document that provides a basis for assessing performance.

The Gwinnett Unified Plan [hereinafter referred to throughout this document as the "Unified Plan," the "UNIFIED PLAN," or the "Plan"] will be the blueprint used by Gwinnett County to pursue these goals, according to the needs and strategies developed by Gwinnett County in consultation with its participating cities, non-profit organizations, adjacent governments, and most importantly, in consultation with its citizens.

Gwinnett County recognizes and acknowledges that the Unified Plan is the "yardstick" by which its community development and housing performance will be evaluated by HUD and by the citizens of Gwinnett County. Every effort is being made to insure that the Unified Plan reflects the most current locally identified needs, and that it contains suitable and reasonable strategies which mirror the adopted public policies of Gwinnett County.

B. HUD Grant Programs Affected by the Unified Plan

Gwinnett County receives the following Entitlement grants directly from HUD:

- (1) The Community Development Block Grant (CDBG) Program;
- (2) The Home Investment Partnership Act (HOME) Program;
- (3) The American Dream Downpayment Initiative; and
- (4) The Emergency Shelter Grants (ESG) Program.

Gwinnett County and nonprofit organizations within Gwinnett County also receive HUD funds indirectly from other local governments:

AID Gwinnett, Inc., a nonprofit organization based in Lawrenceville, receives funds from the Housing Opportunities for Persons With AIDS [HOPWA] Program. AID Gwinnett has been assisting persons who have AIDS or the HIV Virus to help prevent them from becoming homeless and to provide supportive services to these individuals. For the 1992 HOP WA grant, Gwinnett County applied through Fulton County for these funds and offered them to AID Gwinnett. Beginning with 1993 funds, the City of Atlanta is the grant recipient, and AID Gwinnett now receives its HOP WA funds directly from the City of Atlanta.

The City of Atlanta's Consolidated Plan includes all the HOPWA Program related needs, objectives, strategies, resources, and projects located in 20 counties in the metropolitan Atlanta. Public Hearings are held by the City of Atlanta to receive citizen reactions/comments on its Consolidated Plan.

THE PLAN DEVELOPMENT AND CONSULTATION PROCESS

Gwinnett County prepared its Unified Plan utilizing data (1) collected through a local public participation process and from the Consultation Process with adjacent local governments; (2) data from the Gwinnett County Unified Plan Community Assessment and its periodic updates; (3) data from Census 2000 and extrapolated information provided by HUD.

The needs assessment process for the Plan began in March, 2006 and will continue annually throughout the Plan period until the Plan period ends in 2013.

During 2007 and 2008, interviews were held with organizations on the Gwinnett County Community Development Program contact list. Needs assessment information was also collected at a series of public information meetings/hearings, listed immediately below. The meetings/hearings were advertised on the Gwinnett County Website, through notices distributed throughout the County, and through a Public Notice which was published in the *Gwinnett Daily Post* on October 17, 2006, which included a public comment period of October 16, 2006 – November 20, 2006. The appendices contain more detail about the comments received.

NEEDS ASSESSMENT PUBLIC INFORMATION MEETINGS/HEARINGS

Dates	Locations	Times
November 1, 2006	Lenora Park Activity Building – Snellville	4:00-7:00 P.M.
November 1, 2006	Crossroads Center, Suwanee	4:00-7:00 P.M.
November 2, 2006	Activity Building, Mountain Park Aquatic Center	4:00-7:00 P.M.
November 2, 2006	Dacula City Hall	4:00-7:00 P.M.

Under the Consolidated Plan regulations, citizen comments on a proposed Consolidated Plan are received for not less than thirty (30) calendar days prior to submission of the Consolidated Plan or Action Plan to HUD. Thirty (30) day public comment periods are used for all years during the Plan period, for each year’s Action Plan period. These annual needs assessment processes are described in the individual Annual Action Plans prepared by Gwinnett County and submitted to HUD.

Public comments were solicited by Gwinnett County on the draft components of the Unified Plan 2030 at the following Public Information Meetings/Hearings:

Dates	Locations	Times
August 11, 2008	George Pierce Park Community Center– Suwanee	4:00-7:00 P.M.
August 11, 2008	Pinckneyville Community Center – Norcross	4:00-7:00 P.M.
August 14, 2008	Activity Building, Mountain Park Aquatic Center	4:00-7:00 P.M.
August 14, 2008	Bogan Park Community Center, Buford	4:00-7:00 P.M.

In addition to these public meetings, a formal public hearing was held on October 21, 2008 in the Gwinnett Justice and Administration Center, Conference Center, Room C. The public hearing was held during a 30-day public comment process: October 1, 2008 – October 31, 2008.

The proposed plan documents were available during the 30-day public comment period on the Gwinnett County Website [www.gwinnettcounty.com], and printed copies were available for review at the Gwinnett Justice and Administration Center and at the Gwinnett County Community Development Program. Copies were also distributed for comment to the fifteen (15) participating cities in Gwinnett County and to the nearly 100 public and non-profit organizations on the Gwinnett County Community Development Program Contact List.

Public comments received during the Public Comment periods for Needs Assessment and for proposed plans were provided to the Gwinnett County Board of Commissioners before their consideration of the plans on November 25, 2008.

A. Intergovernmental/Interagency Consultation [24 CFR 91.100]

The Consolidated Plan regulations stress the need to consult not only with the citizens themselves -- but also to consult with agencies which serve these citizens. Gwinnett County used data collected from such agencies as basic data elements for the Consolidated Plan. Also, upon completion of this Consolidated Plan, the draft document was disseminated among the agencies which serve low-income and very low-income persons. A summary of comments received in the review process for the Needs Assessment and for the Proposed Consolidated Plan 2009-2013 is contained, herein.

The plan development/review/consultation comment process involved the following entities:

The nonprofit agencies in Gwinnett County whose activities are primarily housing and homeless problems for low income persons include:

The IMPACT! Group - which serves as the Gwinnett County Community Housing Development Organization (CHDO) under the HOME Program.
Gwinnett County Habitat for Humanity
Salvation Army, Gwinnett County
Cooperative Ministries in Duluth, Lawrenceville, Lilburn, Norcross, and Southeast Gwinnett Rainbow Village
Distinguished Women With a Purpose
Asian-American Resource Center

Public and private health and social service agencies involved in Consolidated Plan development/review consultation included:

Gwinnett County Department of Family and Children Services
Gwinnett County Health and Human Services Coalition
Gwinnett County Department of Community Services -
Human Services Partnership for Community Action
Ninth District Economic Opportunity Authority - Head
Start Program Sheltering Arms Child Development -
Child Care Centers
GRN Community Service Board - Mental Health, Mental Retardation, Substance Abuse
Gwinnett County Health Department
Housing Authority of the City of Buford
Housing Authority of the City of Lawrenceville
Housing Authority of the City of Norcross
Barrier Free Gwinnett - Architectural Barriers Removal/Services to Persons with Disabilities
Gwinnett County Public Schools
Partnership Against Domestic Violence
Gwinnett Children's Shelter
Gwinnett County United Way
Boys and Girls Clubs of Metropolitan Atlanta
Gwinnett Council for Seniors - Senior Citizens
NAACP, Gwinnett Chapter
Gwinnett Sexual Assault Center, Inc.
Creative Enterprises, Inc.
Latin American Association
Gwinnett Human Relations Council - Fair Housing and Civil
Rights Issues Gwinnett Association for Retarded Citizens
[d/b/a Hi Hope Center] AID Gwinnett - Housing/Services
for Persons with AIDS/HIV
Creative Enterprises - Job Training/Employment for Persons
with Disabilities Atlanta Legal Aid
The Foundation for Northeast Georgia

Travelers Aid of Metropolitan Atlanta
disAbility Link

Other citizens/agencies/organizations are invited to participate in the Consolidated Plan process throughout the five-year period. The involvement of these additional individuals and organizations will further enhance the ability of Gwinnett County to refine its Unified Plan to reflect the needs of the community as a whole.

Governmental Consultation

General Purpose Local Government Consultation

The following adjacent general purpose local governments were consulted during the Unified Plan development process:

Barrow County, DeKalb County, Forsyth County, Fulton County, Hall County, Jackson County, and Walton County

The cities located, wholly or partially, in Gwinnett County consulted in the Unified Plan development process include:

Auburn	Berkeley Lake	Braselton	Buford	Dacula
Duluth	Grayson	Lawrenceville	Lilburn	Loganville
Norcross	Rest Haven	Snellville	Sugar Hill	Suwanee

Consultation - Lead Based Paint Hazards (LBP)

Of particular significance is the need to develop a plan which addresses problems in our society which inhibit the abilities of citizens to be able to achieve the goals of providing decent and safe housing. One of the major threats to pregnant women, young children (age six and younger), and women of child-bearing age -- particularly low-income children -- is the danger present in paint which contains toxic lead compounds. Gwinnett County gathered information in the Unified Plan development process on this issue and has included information later in this document addressing this issue in some detail. This data indicates that Gwinnett County has relatively few housing units with the potential for incidence of LBP, i.e. constructed before 1978 (50,007) which represents twenty-four percent (24%) of the total housing units in Gwinnett County at the time of Census 2000. This low level is reflective of the relative newness of the housing stock in Gwinnett County. More than 80% of the housing units in Gwinnett County were built after 1980. Neither the Gwinnett County Health Department nor the Gwinnett County Department of Family and Children Services indicated that they have current caseloads of individuals with elevated levels of lead based paint in their blood.

HOPWA Consultation

The Consolidated Plan regulations state (see 24 CRR 91.100) that the largest city in each metropolitan area -- the City of Atlanta -- is eligible to receive a HOP WA formula allocation, and must consult broadly to develop a metropolitan-wide strategy for addressing the needs of persons with HIV/AIDS and their families living throughout the metropolitan area. Gwinnett County will continue to participate with the City of Atlanta and the other general-purpose local governments in Metro Atlanta to carry out this process. The HOP WA needs for the entire twenty county area are presented in the City of Atlanta's Consolidated Plan component for HOP WA.

Public Housing

Public housing needs, as obtained directly from cooperating local Housing authorities and from HUD are contained in this Unified Plan. Gwinnett County coordinates with its Public Housing Authorities (Gwinnett County, Buford, Lawrenceville, Norcross, and Sugar Hill), thereby seeking to insure that the authorities and their residents (excluding the authorities for Gwinnett County and Sugar Hill which own no Public Housing) are aware of the governmental and private provided services for which these entities and individuals may qualify. Moreover, the consultation process is also geared toward the coordination of other programs/projects funded by the local governments and/or the housing authorities to maximize programmatic effectiveness.

Public Housing Authorities (PHA) in Gwinnett County which own/operate public housing (Buford, Lawrenceville, and Norcross) now prepare their own PHA Plans as required by HUD. The Gwinnett County Community Development Program reviews the PHA plans for consistency with the Gwinnett County Unified Plan.

Consultation Timetable and Public Access To Proposed Unified Plan

The proposed Unified Plan 2009-2013 was made available to all the listed government agencies, nonprofit organizations and all other interested parties or citizens for public review and comment for thirty (30) calendar days (October 1, 2008 - October 31, 2008). The public notice of availability of the original proposed Consolidated Plan was published in the Gwinnett Daily Post on October 1, 2008 and appeared on the Gwinnett County Website [www.gwinnettcountry.com] on the same date.

The Gwinnett County Community Development Program (CDP) is staffed by a Program Management consulting firm, W., Frank Newton, Inc. (WFN), which works under the administrative supervision of the Gwinnett County Department of Financial Services. Bay Area Economics and WFN prepared the Needs Assessment and Consolidated Plan development processes for the County.

B. Consolidated Plan Preparation

Process/Revisions/Amendments Consolidated Plan

Process

The Consolidated Plan Regulations (24 CFR Part 91) and additional guidance from HUD stipulate the required minimum contents of the Consolidated Plan prepared by an Entitlement Grantee. However, each city or county which prepares a Plan must structure the format and contents of the plan based on their respective problems, needs, goals, objectives, etc.

The period covered by a Consolidated Plan is selected by each Grantee. Following suggested guidelines prepared by HUD, Entitlement grantees select three (3) or five (5) year plans. Gwinnett has prepared a five (5) year Plan (2009-2013) with five separate Annual Action Plans, per HUD requirements.

Consolidated Plan Amendments

During the course of implementing projects and activities using HUD Entitlement Grant funds, it may be necessary to amend the Consolidated Plan or to amend individual Action Plans which provide the grant funding for individual years. Gwinnett County follows the same advertisement/public hearing/public review/comment process for revisions or amendments that it uses for the preparation of a new Consolidated Plan. The process involves a 30-day public review and comment period, including at least one Public Hearing. Comments received on the proposed amendments are provided to the Gwinnett County Board of Commissioners prior to their consideration of proposed amendments. A summary of public comments received are included in the amendment documentation submitted to HUD.

CITIZEN PARTICIPATION PLAN

NOVEMBER 25, 2008 [ADOPTION DATE]

The Consolidated Plan Regulations require grantees to adopt a citizen participation plan. The Plan contains the required elements listed in the Consolidated Plan regulations at 24 CFR 91.105.

1 & 2. ENCOURAGEMENT OF CITIZEN PARTICIPATION AND INFORMATION TO BE PROVIDED

Gwinnett County has taken specific actions to provide for, and encourage, increased participation in its housing and community development programs, particularly by persons of low and moderate-income. Some of the actions include:

- Identify geographic areas in the County with concentrations of low- and moderate-income persons and concentrations of minorities;
- Prepare Project Proposal Application forms, and the Consolidated Plan in a manner so as to afford low and moderate-income persons, and other affected citizens, the opportunity to examine its contents;
- Inform the citizens through such methods newspaper articles and advertisements, local contact persons, public hearings, the Gwinnett County Website [www.gwinnettcounty.com], cable television announcements, etc., of the amount of HUD grant funds available for proposed activities, the potential activities to be funded, the availability of applications for funding, the actual projects recommended for funding, and the availability of the proposed Consolidated Plan, proposed Action Plan, proposed plan amendments, or annual progress reports for public review and comment;
- Review of all citizen comments and incorporation of such comments in the Consolidated Plan, as applicable;
- Analyze the impact of Consolidated Plan program activities on neighborhood residents, particularly very low income, low income, and moderate-income residents;
- Conduct Needs Assessments, on-site visits, and site analysis for proposed projects, before inclusion in the Proposed Consolidated Plan;
- Meet with individual citizens, neighborhood organizations, and other groups to inform them about the Consolidated Plan, project eligibility, the program planning process, project selection and funding, and the project implementation process.

Gwinnett County will continue to provide a dialogue for open communication with its citizens, particularly very low income, low income and moderate-income persons, concerning its HUD funded programs, and the ways that such persons might benefit from these funding programs. Utilizing various communications techniques, including but not limited to, meetings with church, neighborhood and civic associations, public hearings, newspaper articles and advertisements, radio and television announcements and feature stories, and individual personal contacts, Gwinnett County will strive to continuously increase citizen participation in its housing and community development programs.

- Gwinnett County provides timely and accurate information about the housing and community development program to all participating municipalities in the Gwinnett Urban County program. Numerous meetings are held and written documents transmitted to all the cities (participating and non-participating). Many of the heaviest concentrations of low and moderate-income persons reside within the boundaries of these municipalities -- particularly Buford, Lawrenceville, and Norcross. Active participation by these cities in the Gwinnett County housing and community development programs helps to insure that all low and moderate-income city residents can participate fully in these HUD-assisted activities.

All cities within the County have joined, including the split cities of Loganville and Auburn (beginning in 1998). Every year, all split cities (including any non-member cities) are eligible to join.

3. ACCESS TO RECORDS, LOCAL MEETINGS AND INFORMATION

Gwinnett County will continue to provide reasonable and timely access to all public hearings and local public meetings. All information and records relating to Gwinnett County housing and community development program activities are made available to the public for review and comment, according to the requirements of Federal, State and local laws and regulations.

Each municipality participating in the Gwinnett County Urban County program provides a forum for citizen input on proposed projects during one or more of its Council meetings. Projects are discussed and approved by the respective participating cities prior to submission to the Gwinnett County Community Development Program.

Notices of public hearings are widely publicized throughout the County. Before the hearings are held, at least one advertisement is placed in the local newspaper of general circulation. The advertisements are "display ads" or "legal ads" which appear in the sections of the newspaper most likely to be read by citizens, particularly low and moderate-income citizens. In an effort to make newspaper advertisements as "reader-friendly" as possible, the advertisement language may present essential information, in summary fashion. Citizens are encouraged to obtain copies of documents referenced in the advertisements for additional information.

Before the Gwinnett County Board of Commissioners approves a Consolidated Plan, Action Plan, or amendment, a summary of the proposed Consolidated Plan, Action Plan, or amendment is published in the official "County Legal Organ," a local newspaper of general circulation, and copies of the proposed plan or amendment are made available to the public by U.S. Mail, email, and/or by posting the information on the Gwinnett County Website [www.gwinnettcountry.com]. The summary contains the contents and purpose of the Consolidated Plan or amendment and lists locations where copies of the entire plan or amendment can be examined (24 CFR 91.1 05[b] [2]). The Consolidated Plan, Action Plan, or amendment documents include the amount of financial assistance the County expects to receive from HUD, the range of activities which the County expects to undertake -- including the amount which will benefit persons of very low and low income and the plans to minimize displacement of persons and to assist any persons displaced (24 CFR 91.1 05[b] [1]).

Copies of public hearing notices, descriptive information concerning the HUD-assisted housing and community development programs, proposed Consolidated Plan, proposed Action Plan, [and any proposed Consolidated Plan or Action Plan amendments] and Consolidated Annual Performance and Evaluation Reports are placed in accessible locations in Gwinnett County to permit public review and comment. Local housing and community development contact persons/organizations are informed of the availability of these documents if they wish to disseminate them to neighborhood groups and to low and moderate-income persons. Documentation is maintained in the Department of Financial Services and the Community Development Program Office, indicating the opportunities provided to citizens to insure that all meetings, records, and documents are readily accessible to the citizens of Gwinnett County.

Gwinnett County will notify citizens, all participating municipalities, nonprofit organizations, county departments, and other interested parties of the availability of the Consolidated Plan, and/or Action Plan as adopted, any amendments, and its performance report, as these documents are developed, to provide a reasonable opportunity to examine their contents (24 CFR 91.105 [b] [2]).

Public Comment Periods: Consolidated Plan or Amendments

As required by the HUD regulations, Gwinnett County will provide a period, not less than 30 calendar days, from the date of public notice, to receive comments on a proposed Consolidated Plan, proposed Action Plan or proposed Consolidated Plan or proposed Action Plan substantive amendments (24 CFR 91.105 [c] [2]).

Reports and Other Documents

Not less than 15 calendar days will be provided to receive public comments on annual reports, Environmental Notice of Release of Funds (24 CFR 58.45), and other documents, which are to be submitted to HUD (24 CFR 91.105 [d]).

Gwinnett County will provide citizens, public agencies, and other interested parties with reasonable and timely access to information and records relating to the Consolidated Plan and the County's use of HUD housing and community development assistance [including all assistance provided to Gwinnett County under 24 CFR 91 during the preceding five years. Interested parties should contact the Gwinnett County Department of Financial Services or the Gwinnett County Community Development Program for such information. Reasonable requests may be satisfied at the time of the request. If more detailed information is requested which requires some form of compilation of data which does not exist in HUD-prescribed format(s), such requests will be handled in accordance with the Open Records Act (OCGA, 50-18-70) and Gwinnett County procedures for compliance, therein.

4. PROVIDE TECHNICAL ASSISTANCE TO CITIZENS

The Gwinnett County Community Development Program provides technical assistance to Gwinnett County citizens, particularly to persons of very low income, and low income, who request such assistance in developing project proposals or who request other information (compliance requirements, program performance, funding information, etc.) covered by the Consolidated Plan. Project application forms are available for anyone and are distributed, at no cost, to requestors. A one-on-one meeting will be arranged for individuals and/or groups -- particularly persons of very low income and low income or groups representing such persons, when requested or necessary, to explain the project eligibility, application, and approval process and the implementation requirements. The Gwinnett County Community Development Program staff and/or the Department of Financial Services Grants staff will attend neighborhood meetings, and will meet with nonprofit organizations or individuals to provide other specific technical assistance related to housing and community development programs, as requested and as needed.

5. PUBLIC HEARINGS

Gwinnett County will hold public hearings to obtain citizens comments and concerns, and to respond to proposals and questions. All activities proposed for funding with HUD homeless, housing, and community development funds, through the Gwinnett County Consolidated Plan and Annual Action Plan will be carefully reviewed and appropriate recommendations will be made to the Board of Commissioners by the Department of Financial Services. Notice of public hearings will be published in the local newspaper of general circulation at least once prior to the hearing(s). The hearing(s) will be held at location(s) and time(s) convenient for potential or actual program beneficiaries. The public hearing(s) will be held at a site(s) with accessibility and parking facilities which will accommodate persons with disabilities. All public hearings will be properly documented, and will include as appropriate, lists of attendees, public comments, available funds, proposed objectives and projects. At least one public hearing during each year shall present a report on performance of the use of Entitlement HUD Grants. Written minutes of the public hearing(s) will be maintained on file in the Community Development Program Office and will be available to the public for review during normal business hours, or at other times by appointment.

Annually, Gwinnett County will conduct a minimum of two (2) sets of public hearings for the Community Development Program, held at different stages of the program year, as described, herein. Public hearings are held primarily at the Gwinnett Justice and Administration Center, and may also be held, at other locations, to ensure the locations are accessible to residents of the County.

1. Needs Assessment/Applications Received Public Hearing(s)

At the Needs Assessment Public Hearing(s), citizens, agencies, and other interested parties are invited to share with Gwinnett County their views on housing, homeless, and community development needs. This Public Hearing is held following an open application cycle, which is advertised as described, herein. The purpose of the Public Hearing is to receive public input on needs, and to receive comments on all projects submitted to Gwinnett County which are requesting funding from Gwinnett County's HUD grant funds to address housing, homeless, and community development needs.

2. Proposed Consolidated Plan or Proposed Action Plan or Proposed Amended Consolidated Plan or Proposed Amended Action Plan Public Hearing(s)

A Proposed Consolidated Plan or amendments; a Proposed Action Plan or amendments are presented to the public in later and separate public hearing(s), including all the housing, homeless and non-housing community development needs, goals, proposed priority objectives, strategies, potential resources available to address these needs, and proposed projects.

Utilizing citizen input from the second set of public hearing(s), Gwinnett County will develop the final Consolidated Plan or Action Plan or amended Consolidated Plan or amended Action Plan for consideration by the Gwinnett County Board of Commissioners. Citizen comments received are presented to the Board of Commissioners prior to their taking action on the documents. A summary of citizen comments is included in the Consolidated Plan or Action Plans submitted to HUD.

Provisions for Non-English Speaking Residents

Gwinnett County has made arrangements with multi-lingual county personnel who act as interpreters, when required, at public hearings. Local contact persons are asked to identify non-English speaking residents, prior to the public hearings, so that adequate arrangements can be made to accommodate such citizens.

Non-English speaking persons or their community representatives should contact the Community Development Program at least five (5) working days prior to the public hearing date to allow time to make arrangements to have a translator at the Public Hearing(s) in question.

Provisions for Persons With Hearing Impairments

Persons who are deaf or have hearing impairments who wish to participate in Public Hearings and who need to have a person to "sign" for them at the Public Hearing should contact the Community Development Program via **[TDD/TTY 770- 822-5195]**, or via the Georgia Relay Center **[TDD/TTY 7-1-1 or 1-800-255-0056]** at least five (5) working days prior to the public hearing date. The Georgia Relay Center is operated, free to users, by AT & T.

Provisions for Persons With Speech Disabilities

Persons who have a speech disability can utilize a service called Speech-to-Speech (STS) Relay through the Georgia Relay Service, operated free of cost to users by AT&T. Speech-to-Speech service enables a speech-disabled person to use the Georgia Relay Service with his/her own voice synthesizer, rather than using a TDD/TTY device. Callers using the STS service can call either **[7-1-1 or 1-888-202-4082]** to use the service.

Persons with who are deaf, hard of hearing or speech disabled may also use a relay service over the internet at www.hamiltonrelay.com to connect to a specially trained Communications Assistant. This service may also be accessed by calling hipvrs.com from a D-Link videophone to access video relay service, where a certified American Sign Language (ASL) interpreter will relay your signed conversation to the hearing party.

This statement shall be published in advertisements announcing public hearings.

6. COMMENTS AND COMPLAINTS

Gwinnett County will consider any comments or views of citizens, agencies, or other interested parties received in writing, or orally at public hearings, in preparing the final Consolidated Plan, final Action Plan, amendments to the plans, or other report or documents. A summary of these comments or views not accepted and the reasons for non-acceptance will be attached to the final Consolidated Plan, final Action Plan, amendment to the plans, or reports.

Non-Discrimination Policy/Complaint Review Process

It is the policy of Gwinnett County to provide equal opportunity for services without regard to race, color, sex, age, national origin, religion, political affiliation, presence of handicap or disability, or familial status.

It is the policy of Gwinnett County that no person shall, on the grounds of political affiliation, religion, race, color, sex, handicap status, age, financial status, or national origin, be excluded or, be denied the benefits of, or be subjected to discrimination under any program or activity administered by the Gwinnett County Community Development Program.

Persons who feel they have been discriminated against or have a complaint pertaining to the Gwinnett County Consolidated Plan, plan amendments, or performance report may file a complaint, in writing, with:

Official Representative, HUD Grant Programs
Gwinnett County Department of Financial Services
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, Georgia 30045-6900

The Complaint must contain the following information:

- (1) Name and address of the Complainant (person[s] filing the complaint);
- (2) A description of the act or acts considered to be in violation;
- (3) Other available pertinent information which will assist in the investigation of the complaint.

Such complaints should be filed within 60 days of the alleged discriminatory act. A written response as to the disposition of the complaint will be issued not later than 15 working days after the receipt of the complaint. The response will include information concerning the right of appeal, should the complainant disagree, in whole or in part with the resolution. A complainant who is dissatisfied with the response to a complaint. Such complaints should be filed within 60 days of the alleged discriminatory act. A written response as to the disposition of the complaint, or if the response is delayed more than 15 working days, may appeal in writing to:

Director
Gwinnett County Department of Financial Services
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, Georgia 30045-6900

A written response as to the disposition of the complaint will be issued by the Director, Gwinnett County Department of Financial Services, not later than 30 working days after the receipt of the appeal. If the complainant is dissatisfied with the response of the Director, he/she may submit the complaint, in writing, to:

Director
Atlanta Office of Community Planning and Development
United States Department of Housing and Urban Development
Five Points Plaza, 15th Floor
40 Marietta Street
Atlanta, Georgia 30303-2806

No person shall intimidate, threaten, coerce, or discriminate against any person because he/she has made a complaint, testified, assisted, or participated in any matter in an investigation, proceeding, or hearing related to a complaint.

The identity of complainants shall be kept confidential, except to the extent necessary to carry out or conduct investigations, hearings, or judicial proceedings arising out of the complaint.

7. CRITERIA FOR CONSOLIDATED PLAN SUBSTANTIVE AMENDMENTS

The Gwinnett County policy regarding substantive amendments to the Consolidated Plan requires that any changes in the Consolidated Plan meeting the Criteria described below requires Public Hearings (as described above), and official approval by the Director of the Department of Financial Services, or the Gwinnett County Board of Commissioners.

- 1.) To make a change in the allocation priorities, or a change in the method of distribution of funds;
- 2.) To carry out an activity, using funds from any program covered by the Consolidated Plan (including program income), not previously described in the Action Plan; or
- 3.) To change the purpose, scope, location, or beneficiaries of an activity.

The Director of the Department of Financial Services can approve amendments that meet the criteria 1 and 2 below, while all others require approval by the Board of Commissioners.

- 1.) Request for Cities to transfer budget amounts between projects, not to exceed Board approved allocation; and
- 2.) Changes to uses of CDBG/ESG/HOME/ADDI funds that do not alter the total of Board approved budgets, or any major changes in the scope of projects.

8. ADOPTION OF THE CITIZEN PARTICIPATION PLAN AND PUBLIC COMMENT PROCESS

The Gwinnett County Board of Commissioners adopted this Citizen Participation Plan as a part of the Consolidated Plan, 2009-2013. No comments were received from citizens on this Proposed Citizen Participation Plan. Any proposed amendments or revisions to the Citizen Participation Plan will be advertised in the current legal organ of the County and copies will be distributed as with proposed amendments to the Consolidated Plan or Annual Action Plans and the public will be provided 30 calendar days to provide written or oral comments on any and all Citizens Participation Plan amendments/revisions.

The Citizen Participation Plan is made available to citizens, upon request, in formats appropriate for persons with disabilities.

Gwinnett County will make every possible effort to comply with applicable HUD requirements, and will provide for and encourage increased citizen participation in its HUD-assisted programs. Particular emphasis is given to persons of low and moderate-income.

For further information concerning the Gwinnett County Community Development Program contact:

Official Representative
HUD Grant Programs
Gwinnett County Department of Financial Services
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, GA 30045-6900
Telephone: (770) 822-7873
Fax: (770) 822-7887
Email: tanikia.jackson@gwinnettcountry.com

OR

Director
Gwinnett County Community Development Program
[Administered by W. Frank Newton, Inc. Program Management Firm]
575 Old Norcross Road, Suite A
Lawrenceville, GA 30045-4367
Telephone: (770) 822-5190
Fax: (770) 822-5193
TDD: (770) 822-5195
[Email: gchcd@gwinnettcountry.com](mailto:gchcd@gwinnettcountry.com)

9. PLAN FOR MINIMIZING DISPLACEMENT/ASSISTANCE FOR DISPLACED PERSONS

No displacement should occur as a result of the activities to be undertaken by Gwinnett County under this Plan. However, federal regulations require that each recipient provide a plan of action to assist persons in the unlikely event of displacement. If displacement should occur, Gwinnett County will implement the provisions required by 24 CFR Parts 42, 92 and 570, and as outlined in the County's residential anti-displacement and relocation assistance plan originally implemented in 1988, which follows:

GWINNETT COUNTY
HOUSING AND COMMUNITY DEVELOPMENT PROGRAM
RESIDENTIAL ANTIDISPLACEMENT AND RELOCATION PLAN [RARAP]
1988 - UPDATED 2004, 2008

Gwinnett County's policy to make all reasonable efforts to insure that activities undertaken through the use of Entitlement Grant Funds awarded by the United States Department of Housing and Urban Development [Community Development Block Grant (CDBG) Program, HOME Program/American Dream Downpayment Initiative, and the Emergency Shelter Grants (ESG) Program funds will not cause unnecessary displacement or relocation. In fact, Gwinnett County's policy is to provide HUD grant financial assistance to projects which contain no plans for displacement. The County will continue to administer its HUD Entitlement Grants Programs in this manner. Careful consideration will be given during the planning phase with regard to avoiding displacement. Displacement of any nature shall be reserved as a last resort action necessitated only when no other alternative is available.

If displacement is precipitated by activities which require the acquisition (either in whole or in part) of real property directly by Gwinnett County, all appropriate benefits required by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (84 Stat. 1894; 42 U.S.C. 4601 et. seq.; Pub. L. 91-646), as amended, and referred to as the "Uniform Act", shall be provided to any displaced person(s). Persons displaced by rehabilitation, or "Non-Uniform Act" acquisition, financed (in whole or in part) with HUD Entitlement Grant funds shall be provided relocation assistance in accordance with one of the following: (1) the acquisition and relocation requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as required under Section 570.606(a) and HUD implementing regulation at 24 CFR Part 42; (2) the requirements in Section 570.606(b) governing the Residential Anti-displacement and Relocation Assistance Plan under Section 104(d) of the Housing and Community Development Act of 1974, as amended; (3) the relocation requirements of Section 570.606 (c) governing displacement subject to Section 104(k) of the Act; (4) the relocation requirements of Section 570.606(d) governing optional relocation assistance under Section 105(a)(1) of the Act; and/or, (5) the provisions of 24 CFR Part 92.353 for the HOME Program and for the FY 2003 funds for the American Dream Downpayment Initiative (ADDI). Note: Beginning with FY 2004, ADDI funds are not subject to the URA.

Residential Anti-Displacement and Relocation Assistance Plan

A. Provisions for One-for-One Replacement

Gwinnett County will replace all occupied and vacant occupiable low/moderate-income dwelling units demolished or converted to a use other than as low/moderate income housing as a direct result of activities assisted with funds provided under the Housing and Community Development Act of

1974, as amended, and as described in 24 CFR Part 570.606(b). Low/moderate income replacement units may include public housing or existing housing receiving Section 8 certificate or voucher assistance.

All replacement housing will be provided within three years of the commencement of the demolition, or rehabilitation, relating to conversion, and will meet the following requirements.

1. The units will be located within the County.
2. The units will meet all applicable County housing, building, and zoning ordinances.
3. The units will be designed* to remain low/moderate income dwelling units for at least 10 years from the date of initial occupancy.

* Design refers to fiscal structure as well as building structure.

Before obligating or expending HUD Entitlement Grant funds that will directly result in such demolition or conversion, the County will make public and submit to HUD the following information in writing.

1. A description of the proposed assisted activity.
2. Once identified, the general location on a county map, including the approximate number of dwelling units by size (number of bedrooms) that will be demolished or converted to a use other than low/moderate income dwelling units.
3. A time schedule for commencement and completion of the demolition or conversion.
4. Once identified, the general location on a county map and the approximate number of dwelling units by size (number of bedrooms) that will be provided as replacement units.
5. The County will identify the source of funding at the time of submittal, and will provide the replacement dwelling units within three years of demolition or conversion.
6. The basis for concluding that each replacement dwelling unit will remain a low/moderate income dwelling unit for at least 10 years from the date of initial occupancy.

Consistent with the goals and objectives of activities assisted under the Act, the Gwinnett County Community Development Program will take the following actions as a result of HUD Entitlement Grant assisted activities:

1. If a major housing demolition program is ever contemplated, it will be structured so that only vacant, dilapidated units will be inspected and considered for demolition.
2. If the Gwinnett County Housing Rehabilitation Program which involves demolition and reconstruction on the site, Gwinnett County will meet its one-for-one replacement requirement once the housing units are fully reconstructed. The County may choose to provide temporary relocation assistance for the families involved.
3. Provide information to and keep citizens involved in the process regarding pending zoning and rezoning actions that threaten the preservation of residential areas.

B. Provisions for Relocation Assistance for Residential Anti-Displacement

Gwinnett County will provide relocation assistance, as described in 24 CFR 570.606(b)(2) and in 24 CFR 92.353 to each low/moderate household displaced by the demolition of housing or by the conversion of a low/moderate-income dwelling to another use as a direct result of HUD Entitlement Grant-assisted activities. Persons that are relocated are entitled to:

1. A choice between actual reasonable moving expenses as described in the Federal regulations, or a fixed expense and dislocation allowance, as described in the Federal regulation.
2. Advisory services as described in 24 CFR Part 42, Subpart C.
3. Reimbursement for reasonable and necessary security deposits and credit checks.
4. Replacement housing assistance which may include a Section 8 housing

voucher/certificate and referral to an assisted unit; cash rental assistance to reduce the rent and utility costs or lump sum payment equal to the present value of rental assistance installments to be used toward purchasing an interest in a housing cooperative or mutual housing association for a period of up to five years.

II. Section 104(k) Relocation Requirements

Gwinnett County will provide reasonable relocation assistance to persons (families, individuals, businesses, non-profit organizations, or farms) displaced (moved permanently and involuntarily) as a result of the use of HUD Entitlement Grant assistance to acquire or substantially rehabilitate property. Assistance to displaced persons may include:

- A. Payment for actual moving and relocation expenses, documented by receipts and/or vouchers from service providers and utility companies. The documents shall be submitted to the Gwinnett County Housing and Community Development Program prior to the disbursement of payment.
- B. Advisory services necessary to help in relocating.
- C. Financial assistance sufficient to enable the displaced person to lease and occupy a suitable, decent, safe and sanitary replacement dwelling where the cost of rent and utilities does not exceed 30 percent of the household gross income for a period of up to twenty-four months.

III. Optional Relocation Assistance

At its discretion, Gwinnett County may provide relocation payments and other relocation assistance for individual families, businesses, non-profit organizations, and farms displaced by HUD Entitlement Grant-assisted activities, not subject to the provision of the Uniform Relocation Act, Residential Anti-Displacement and Relocation, or Section 104(k) Relocation Requirements. Person(s) voluntarily participating in a HUD Entitlement Grant-assisted activity may, but not necessarily, be provided benefits at the County's option, contingent upon the nature and amount of the benefits derived by the person from the assisted activity and the availability of other resources to the person(s). When suitable public housing or governmental rental assistance (Section 8 Housing Certificates or vouchers, etc.) is not available, or appropriate, the following benefits may be provided if it is determined by the County that such benefits are warranted and appropriate:

A. Temporary Relocation Benefits

If it is determined by the Gwinnett County Community Development Program that the occupant(s) of a dwelling should be relocated temporarily in order to permit rehabilitation or replacement of a dwelling, the Gwinnett County Community Development Program may locate a decent, safe and sanitary dwelling for their temporary use. Benefits, if provided, will be limited to increases in monthly housing costs incurred by the occupant in an amount equal to the lesser of twelve (12) times the increase, or \$2,000, and reasonable moving and storage expenses. Gwinnett County may waive the maximum limits or costs for Temporary Relocation benefits, on a case-by-case basis.

B. Permanent Relocation Benefits

If it is determined by the Gwinnett County Community Development Program that occupants of a dwelling should be permanently relocated, the Gwinnett County Community Development Program may assist in the relocation to a decent, safe, and sanitary dwelling unit. Benefits, if provided, will be limited to increases in monthly housing costs incurred by the occupant in an amount equal to the lesser of 24 times the increase, or \$3,600, and reasonable moving and storage expenses.

C. Moving and Storage Expenses

For dwelling occupants temporarily or permanently displaced, fixed benefits for storage and moving may be allowed. Those benefits may include:

1. Utility connection fees up to \$500- only if the fee is the responsibility of the tenant.
2. Storage expenses, not to exceed \$500.
3. Moving costs based on the latest published schedule published in the Federal Register by the United States Department of Transportation, Federal Highway Administration. [See Attachments, under the Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended, Fixed Residential Moving Cost Schedule, under 49 CFR Part 24.302:

[Moving costs would be allowed per the same schedule for both moves required for temporary relocation.]

4. Insurance for the replacement value of the property in connection with the move, and storage up to \$500.
5. Gwinnett County may waive the limits on costs for temporary moving and storage expense on a case-by-case basis.

IV. Tenant Assistance Policy/Rental Rehabilitation

- A. It is not the County's policy to displace families in rental units. Participating landlords warrant that the proposed rehabilitation will not cause any tenant to be permanently displaced unless the owner will be able to relocate the tenant displaced in accordance with HUD/Gwinnett County relocation criteria. Rental Rehab funds will not be used to rehabilitate any structures, if the rehabilitation will cause displacement of very low income families.
- B. If it becomes necessary for an owner to move a tenant from a unit as a direct result of rehabilitation assisted through rental rehabilitation funds, the owners will assure that the tenant is offered a decent, safe and sanitary dwelling unit at an affordable rate, as described in the applicable regulation. No tenant will be considered displaced if the owner has offered the tenant a decent, safe, sanitary and affordable unit.
- C. Should displacement become necessary for a lower income family as a result of the rental rehabilitation assistance, the owner will assure that tenants will be provided the necessary financial assistance, information, counseling, and referrals, housing location options, information regarding Federal Fair Housing rights, and other relocation services as needed, without regard to race, color, religion, sex, age, handicap, or national origin, so as to enable the family to obtain decent, safe and sanitary housing at an affordable rent.

SURVEY OF NEEDS – NEEDS ASSESSMENT PROCESS

Gwinnett County elected to interview organizations serving low and moderate-income individuals directly in early 2008 on issues and needs which should be addressed in the Unified Plan. Phone interviews were conducted with several agencies, municipalities, and neighboring counties that may or may not have given input during the preparation of the 2009-2013 Consolidated Plan. Stakeholders discussed their current needs, concerns and issues related to housing and community development and any noticeable changes experienced since the 2005 survey. Appendix 1 highlights three key questions posed during each interview. Some additional questions are shown herein.

Interviews were held with public and non-profit organizations, as follows:

- disAbility Link of Metro Atlanta
- Partnership for Community Action
- Gwinnett County Senior Services
- Gwinnett County Community Services
- Gwinnett County Habitat for Humanity
- GRN Community Service Board
- Gwinnett County Association for Retarded Citizens, Inc. [d/b/a Hi-Hope Service Center]
- Partnership for Domestic Violence
- Rainbow Village, Inc.
- The Sheltering Arms, Inc.
- AID Gwinnett
- The IMPACT! Group, Inc. [Formerly Gwinnett Housing Resource Partnership, Inc.]
- United Way Gwinnett
- Gwinnett Coalition for Health and Human Services
- Housing Authority of the City of Lawrenceville
- Norcross Housing Authority
- City of Norcross
- City of Duluth
- City of Lawrenceville
- Forsyth County
- Walton County
- Hall County

Comments Received at the Needs Assessment Interviews:

January / February 2008

Rebecca Ramage-Tuttle, disABILITY Link

disABILITY Link offers a multitude of services for the Atlanta Metro's disabled resident community. These include: nursing facility transition services; consulting services on ADA compliancy for businesses; training, advocacy and awareness; case management; employment placement; home modification; leadership training; and independent living assistance.

The main needs/problems identified were: (1) the provision of accessible, affordable transportation, (2) provision of accessible, affordable housing, and (3) in-home community and supportive services.

In terms of transportation, more integrated systems are needed particularly at job centers in the larger cities: Duluth, Lawrenceville, and Norcross. Key for the disabled community is accessible transportation and connectivity links. There is a need for ADA-compliant bus shelters, safe curb and sidewalk infrastructure, and sensitive street improvements. These links are vital to connect the disabled population to employment opportunities and foster a more independent lifestyle.

Accessible affordable housing is an ongoing concern. disABILITY Link only serves the local population in a piecemeal fashion due in large part to a limited budget capacity. For home modifications, disABILITY link really needs a full-time staff person that can modify homes or manage a crew for multiple home modifications. Recommendations for the County include instituting design guidelines for new disabled housing and home modifications (i.e., – no-step entrances, wide entryways, plank doorknobs, wheelchair ramps, etc.), allowance of smaller one-level homes, denser housing development at job centers and commercial nodes, and stricter code enforcement to ensure ADA-compliance in new home construction and rehabilitated units. If a number of these practices were put in place, more independent living options could become available for disabled residents not necessarily needing institutional care. This in turn could allow more spots to be available for those in true need of institutional care.

Disabled residents of prime working age are the population sect that could benefit most from in-home support. Many working-age disabled residents could potentially earn a living if they had the spectrum of support services and/or housing choices.

Measurable outcomes could include an increase in the number of disabled residents living independently, an increase in the amount of available ADA-compliant housing options, and improved economic status of disabled population due to increased transportation options.

Mohammed Saleem, President/CEO, Partnership for Community Action

The main foci for Partnership for Community Action, Inc. are early childhood education and childcare, family self-sufficiency support, employment services, small business support, and low-income housing/weatherization services for their target constituency. PCA is an independent organization, not a grantee of Gwinnett County. PCA does, however, work with the County on low-income housing and weatherization needs of their target population.

The challenges faced currently are coordination among various County organizations, including Gwinnett Coalition for Health and Human Services and Gwinnett County Department of Family and Children Services. PCA desires to work with the County more regularly, in particular for housing needs and programs, but also for employment services (job training and readiness). PCA has a deep network of partners, including cooperative ministries, other religious organizations, and Georgia Power.

PCA is currently located in Lilburn, but looking to move into a larger facility in Lawrenceville if possible. Lawrenceville allows for more direct access to their target population and may offer larger space accommodations to serve various needs.

PCA is in agreement that denser housing, housing choices in proximity to other goods and services, and better transportation networks are useful actions that can support their client base.

Linda Bailey, Gwinnett County Senior Services

Gwinnett County struggles to keep pace with the demand for additional senior facilities and programs. GCCS encompasses not only facilities, but also the health and wellness of seniors. It offers resources to prolong the self-sufficiency of seniors until they reach the point of dependency. It also offers centers with commercial kitchens in Lawrenceville, Buford and Norcross. Additional senior facilities are a definite need, as the senior population is expected to almost triple by 2010. The small senior spaces attached to larger recreational facilities are not sufficient. They need full-service senior centers that allow for the proper programmatic needs to serve this age group.

Transportation is another area of need for seniors. The current fleet of vehicles to transport seniors to medical appointments and existing senior centers is not enough. There are currently 80 people on the waiting list for

transportation to medical appointments, up from 50 in 2005. Gwinnett's existing public transportation infrastructure is inadequate.

Housing is also a major concern for seniors. They have a number of 55+ communities, but those are not affordable to many seniors with limited means. Plus, many of the seniors served by Community Services are looking to downsize to smaller units with minimal property maintenance. Many of the facilities reserved for senior are obsolete or falling apart. Some are towers, which give the impression of institutional housing. More livable communities within a mix of uses and located at transportation nodes would suit this community very well. Denser development (either low-rise senior apartments or small homes—1200 to 1500SF—with minimal lot sizes) are preferable. Redeveloping obsolete shopping centers into mixed-use or senior communities is another possible option. There is also the issue of prevailing homelessness among seniors and the strain to support them. Many of the shelters are for families (women and children) and unless the seniors are caregiving grandmothers, they are not eligible.

Measurable outcomes include a healthier senior community, better self-sufficiency and more housing options, better accessibility to points of interest and nodes of activity, and fewer burdens on nursing homes and assisted living institutions.

Phil Hoskins, Gwinnett County Community Services

Gwinnett County Community Services (GCCS) is the umbrella agency for senior services and health and human services. They also affiliate with Gwinnett County Department of Family and Children Services, the Georgia Board of Health, Parks and Recreation and Meals on Wheels.

The problems GCCS faces now are infilling parkland in established communities like Norcross. Not a lot of open space is left in these communities because of their growth over the past few decades. Some facilities serve at capacity. Others need to be renovated. The SPLOSTs have been instrumental in providing financial resources to build new parks and facilities in other areas of the County.

GCCS relies heavily on the contributions of nonprofits and faith-based communities to assist with health and human service needs, homelessness, and affordable housing. Cooperative ministries in Lilburn, Norcross, Lawrenceville, Buford, and South Gwinnett offer food pantries, clothing needs, emerging housing, and utility assistance.

Gwinnett County's explosive cultural growth over the past few years caught the County off guard. The growing ethnic populations changes the demand and need for housing, economic development and transportation. The County is trying to respond accordingly to meet the needs.

GCCS has a joint-use agreement with the Board of Education, in which public facilities are used for both school and neighborhood purposes.

Charles Craig, Gwinnett Habitat

Gwinnett Habitat's biggest challenges are finding contiguous pieces of land to build houses and developing amidst the rising costs of land. Gwinnett Habitat is very much in favor of regulatory amendments that allow for smaller home square footages, smaller space requirements for parking, and more units per acre. In Lawrenceville, an affordable townhouse project is underway—their first project of this kind. Much of Gwinnett County's workforce is blue-collar. They need all the help possible to afford housing, transportation to their jobs and services, and nearby community services. Promotion of mixed-use nodes and integrated transportation networks would alleviate some of the issues created from the existing separation of uses.

The County allocates HOME funds annually to finance development costs, though the annual allotment varies due to specific spending needs of the year. Habitat supports mostly families, but do have "visitable" floor plans that align with the needs of the disabled and elderly.

David Crews, GRN Community Services Board

GRN Community Services Board is a public mental health agency, providing a full range of services to substance abusers, adults with developmental disabilities, adults with mental illness, and youth and adults with severe-persistent behavioral problems. GRN attempts to be the low-cost answer to assisting the aforementioned target population with living independently and remaining employed. Their constituency are usually severely mentally ill individuals, addicts, and on Medicare. They receive funding from the State Department of Human Resources for those they serve that are uninsured.

GRN runs outpatient centers, residential services (group homes), supervised apartments, crisis stabilization center (adults only) and a substance abuse center. The locations of these centers are proportionate to the socioeconomic distribution of Gwinnett County.

GRN does apply for HUD funding annually. Recent allocations of CDBG fund helped to construct a 16-bed 7,500 square-foot Crisis Stabilization Center. In the past, GRN has typically received roughly \$5,000 for mentally ill homeless or homeless with substance abuse problems through HUD's Emergency Shelter Grant. This allocation was used for temporary hotel space and transitional housing options. GRN has also received funds in the past for vehicle purchases to transport their constituency to medical services.

Regarding existing needs, transportation and housing are most paramount. There is a growing need for a handicap equipped fleet of vehicles in addition to the replacement of older vans or shuttles. The biggest challenge with housing is the rising costs of rents. GRN operates 24-hour care facilities, provides residential placement in privately owned properties (apartment communities, etc.) and develops their own housing when possible. GRN has its own campus of facilities in Newton County, including a 20-bed apartment complex and 36-bed group home facility. The campus is about 5 to 7 acres. Something similar in Gwinnett County would be particularly very useful. Such a campus can be a redevelopment option for an existing, obsolete use.

No specific design or architectural considerations are necessary for their housing needs. New construction just needs to be durable in terms of the materials used and building maintenance. The turnover of space is frequent.

One growing issue is the charge to provide housing for people with addictions who are coming out of prisons. Private properties do not allow those with a criminal record to live on their premises. Gwinnett's growing population brings increasing crime issues. Thus, it will be particularly difficult to care for this specific client base.

Alice Cunningham, Hi-Hope Service Center

The Hi-Hope Service Center is a private, nonprofit organization geared to serving residents with developmental disabilities. The Center offers daily employment services, in-home healthcare, and residential services. HiHope receives about \$137,000 annually to subsidize their residential programs and service their six group homes. The Center had to add nursing services to assist with some aging long-term clients. It currently serves about 140 individuals in addition to 16 individuals via in-home health care and 25 in specific residential programs. Other centers include Annadale Village, which houses and care for 80 to 90 developmentally disabled and severe brain trauma individuals, and Creative Enterprises, which cares for approximately 80 to 100 individuals in job training and day services.

Respite services and afterschool programs are two areas of need currently. Respite services are offered monthly and allow families to take a break from their child or adult child for a day. Additional funds could allow for this program to occur more frequently and/or for more staff to accommodate the need. Afterschool programs for severe special needs kids currently serve approximately 20 children under the age of 12. Programs for kids 12 and older are of great need within the County. Typically, 12 years of age is the cut off point for afterschool care. Additional funds could allow existing facilities (schools, community centers, etc.) to be open past usual hours and pay staff to look after children. The afterschool care would be bare bones (i.e., no special programs or use of teachers) to keep costs down. Participating families would need subsidy (perhaps sliding scale) to help them pay for costs of care.

Transportation is another area of need. Gwinnett County has very limited public transportation. The problem has become even more apparent with the population growth and the growing needs of various ethnic groups. There is a need all across the county for additional paratransit vehicles and wheelchair-accessible vans. A certain amount of wheelchair-accessible busses are required per every certain number of regular busses. The mandate to provide

wheelchair-accessible busses instead of vans contributes to the expense of this service. Paratransit in the form of vans would be much less expensive and could assist in transporting those in need. Gwinnett County hires a subcontractor to run the paratransit vehicles. Typically drivers wait until there is a call for services, which is an inefficient way of operating transportation services. There needs to be better coordination with paratransit and the service providers that need it for their populations. There is also no replacement plan for vehicles and a number of the fleets are old. Discussions with Partnership Gwinnett are planned to talk and resolve some of these issues. Solutions could help not only those served by Hi-Hope Service Center, but all of Gwinnett County's growing disabled and senior populations.

Affordable accessible housing is another issue. Hi-Hope Service Center is about to deliver two brand new and three renovated accessible dwellings, but it has been a hard road. NIMBYism is widespread. Residents do not like the idea of additional group homes in their neighborhoods, fearing it could inhibit their quality of life, despite the presence of full-time healthcare staff. In addition, group homes are considered "commercial properties" so the requirements in terms of water/sewer and fire codes are a lot more extensive than residential properties, which in turn makes projects more expensive and more time-consuming. Septic tank requirements make sitework more expensive as well. Even the search for adequate sites has become much more challenging and it is difficult to find adequate existing housing that meets the needs of disabled persons. Development inside of Gwinnett's cities also comes with challenges due to inhibiting codes and ordinances. Currently, Hi-Hope Service Center is fortunate if they get one unit per year up and running due to these barriers. They would love to do as many as four or five a year.

Cathy Willis Spratz, Partnership for Domestic Violence

PADV helps 20,000 women in crisis annually. Their shelters serve approximately 750-800 women. Women in crisis are usually given a 90-day deadline to stay in the shelter, but if they are showing true promise and progress, PADV extends it if necessary. Their current emergency shelter in Gwinnett needs to be torn down and rebuilt. It is an old, converted farm house that can house 32 women and children, but it is very obsolete. More capacity in the new facility is also desirable.

Most of their attention currently is committed to a capital campaign for Fulton County. PADV are constructing a new shelter there, which will likely take 1.5 years to complete. Gwinnett County is next.

PADV also have a transitional housing program, in which current monies come through a HUD grant. However, GA Coalition Against Domestic Violence is the grantee and it disburses funds among all of its partners. PADV manages nine apartments in different locations. Though dispersion into the community is best practice, PADV does prefer housing to be together in order to serve their population more easily. If funding ever allowed the opportunity to develop their own transitional housing facility, PADV would be interested in option as well.

Nancy Yancey, Rainbow Village, Inc.

Rainbow Village's mission is to assist homeless families with children to become self-sufficient. Rainbow offers life skills training, counseling services, youth programs, furnished housing, etc. North Atlanta Metro is the target area, which includes all counties north of 285, but the physical office is located in Gwinnett. Rainbow Village owns eight units in Duluth and four in Norcross, but there is still a substantial need for additional transitional housing. The IMPACT! Group provides fourteen transitional housing units and Traveler's Aid provides four transitional housing units. The biggest gap is emergency shelter for women and children.

Rainbow Village requires families to be employed and have a means of transportation. Families are accountable for rent on a sliding scale and contribute a minimum of \$300 a month into an interest-accruing savings account, which becomes unfrozen when they finish the program. The program is typically one to two years, but Rainbow provides assistance for up to five years if need be.

The top three County issues are lack of affordable housing (mainly family housing), lack of adequate transportation, and lack of affordable childcare.

Elaine Draeger, Sheltering Arms

The mission of Sheltering Arms is to provide children with 0 to 5 years of age with high-quality early childhood education. Sheltering Arms also works with parents to provide the best educational environment for children of low- to moderate-income families. The organization does provide services for some market-rate families as well, but their percentage of market-rate families to low- to moderate-income families is 15 percent. For adults, they provide a comprehensive network of services, including life skills training, self-sufficiency seminars, goal setting, financial literacy and transportation.

The organization serves seven counties in the Metro Atlanta region and has three centers in Gwinnett County: Norcross, Duluth, and Lawrenceville. The Norcross facility holds space for Sheltering Arms (16,000SF) and the Boys and Girls Club (30,000SF) and Sheltering Arms recently received CDBG funds to retrofit the facility. The Lawrenceville facility is owned by the county and was built with CDBG funds in 1993. The facility in Duluth is leased space through 2010. The owner of this facility wants to sell the property and Sheltering Arms has elected not to purchase the facility due to its site configuration, inefficient layout, and difficulty with future expansion. Sheltering Arms could use CDBG funds to purchase a new facility in Duluth. A facility with at least seven classrooms that can hold at least 100 kids would be most feasible for their operations. All of their facilities hold adult training and childcare programs and serve as hubs within the County. They also serve smaller childcare facilities throughout the county with educational resources and information.

Recently a study was completed to evaluate the need for more early childhood centers within Gwinnett County. The result came to roughly 20 centers based on the assessment of population, school enrollment, and income status. If more funds were available to build additional centers in other incorporated and unincorporated areas, they would consider it.

Transportation is a constant issue within Gwinnett County. Sheltering Arms currently holds a fleet of minibuses to transport their students to and from the facilities. The current fleet of vehicles is well-maintained and no huge need for additional vehicles at the present time. There is a need to replace the utility van, which is used by their custodian to perform maintenance on their three facilities within the County.

Larry Lehman, AID Gwinnett

AID Gwinnett is a grassroots not for profit organization founded in 1990 in Gwinnett County by family members and friends of those living with HIV and AIDS. The primary focus is to provide supportive services and prevention education/outreach. Services expanded out to Rockdale and Newton Counties as the need grew for additional services.

AID Gwinnett has assisted over 900 clients and their families. Cumulative caseload in 2007 was 563 clinic/client services for all three counties and 24,000 for prevention outreach. About 80 percent of this caseload is in Gwinnett County, while the Newton and Rockdale Counties collectively compose the remaining 20 percent. Most of the need among those with HIV and AIDS is equally distributed across Gwinnett County, with Duluth having a slightly higher percentage due to the city having more multifamily units than other areas.

Some of the challenges facing those with HIV and AIDs are a lack of transitional housing supply. The Count aggressively targeted the pay-per-night motels to halt operations, but no resolution was made to turn these problem properties into affordable housing solutions for those with HIV and AIDS, substance abuse problems, or low-income individuals. Though it is not good practice to concentrate such individuals, these problem properties may be able to alleviate the strain on affordable shelter options.

Another challenge is high rent ceilings. Many of those with HIV and AIDs are young (not seniors) with very limited means and/or at risk of homelessness. The lack of affordable housing and accessible affordable housing for this clientele is a real problem. There is only one children shelter and one women shelter in the County. No shelter for men exists.

A better transportation network is a definite need in Gwinnett County. The AID Gwinnett facility must be located along a bus route, so that clientele can have access to their services. They use funding from HOPWA to provide

last-resort taxicab services and bus passes and to operate their own transportation vehicle. They operate their vehicles only for medical purposes and are steadfast in their policy for using their vehicle as a last resort. Even if conditions were ideal to operate and own additional vehicles, AID Gwinnett would not want to participate in providing transportation services. It is a real challenge to provide such limited service for such a great need. Better transportation links within the County itself should be the solution to answering resident mobility issues.

The constraints put on by zoning also make it difficult to increase the supply of smaller, affordable housing. The effects of immigration within Metro Atlanta have created social complexities not evident in previous decades. But the region needs to collectively embrace this change in the social, economic and physical fabric. Gwinnett County and the region have real problems that need real attention and real solutions.

Tony Mitchell, IMPACT! Group

IMPACT!'s foreclosure prevention program has experienced an influx in potential participants given recent market trends. IMPACT! averages eight to nine new cases per month. Many more than nine households apply monthly, but some cases are too far into foreclosure to save or provide adequate preventative assistance. IMPACT! also does not have enough staff capacity to handle more volume. The foreclosure momentum will likely continue through the late 2009.

The transitional housing program currently serves only women and children. There are about 20 to 25 units reserved for transitional housing and they are always full. These units exist on scattered sites. IMPACT! Group has helped 24 former homeless persons become homeowners via the transitional housing program and homeownership counseling. But there is definitely a need for more shelters as an alternative to extended stay hotels.

CBDG funding allows foreclosure prevention and downpayment assistance, but it can be an administrative challenge.

In terms of the provision of housing, rising construction and land costs cause a large strain affordable housing. Regulatory requirements also challenge the provision of housing either for time lost from permitting/inspection schedules or additional site preparation mandates from zoning. The County would benefit from requiring set-asides from new housing developments to fund or produce affordable housing projects. Affordable and accessible senior housing is in large demand as well.

Demetrius Jones, United Way Gwinnett

The United Way serves the Atlanta Metro region with an emphasis on policy development related to early childhood education and eliminating homelessness. United Way does not run programs, but rather supports strategic initiatives to develop effective early learning childcare and eradicate homelessness.

The initiatives on homelessness look at a comprehensive, regional approach to ending persons and families in crisis. United Way is part of the Continuum of Care and the agency shares responsibility in identifying gaps in service (transitional housing, emergency housing, shelter capacity, etc.). Concentrations of homelessness reside in Norcross, Lawrenceville, and Duluth. The recent homeless count will provide more information on the magnitude of homeless.

Early learning childcare benefits from great support from the community and local public school systems. Childcare providers work frequently alongside the school system administration, standardizing the curriculum and creating daycare programs that meet the needs of the growing population. The goal is to have kids ready to read by six years of age. United Way assists in a holistic manner, assessing accomplished goals and achievable strategies. United Way would like to expand support for early learning childcare through better connection with parents, HUD and other agencies, and expanding programs such as SPARC to broaden their reach.

Ellen Gerstein, Gwinnett Coalition of Health and Human Services (GHHS)

GHHS' focus is on positive youth and child development (early childhood education, youth development, high risk behaviors), strengthening individuals and families (independent living for seniors/disabled, optimum mental and

physical health), and strengthening the community (environmental health, housing/homeless, economic self-sufficiency). GHHS' 2008 budget breakdown is as follows: \$163,000 for the Helpline; \$50,000 for Family Connection; and GNLI (\$52,000). In 2007, the total number of referrals to the Helpline was 18,125 with the majority (10,850 or 60 percent) being for emergency assistance. Most of the referrals for emergency assistance (75 percent) were for help with rent or utility assistance, emergency shelter or housing. Due to the limited resources for emergency assistance, many calls still go unsatisfied.

Regarding youth and child development, statistics on critical risk factors for youth (teenage pregnancy, youth drop-out rates) in Gwinnett County are lower on average than the state as a whole, though the percent of children receiving free or reduced lunch in Gwinnett as doubled since 2000 to 40 percent.

The number of Gwinnett residents declaring bankruptcies doubled from 1998 to 2005. Health costs are one of the main reasons county residents file for bankruptcy. The number one reason for homelessness in Gwinnett has been displacement by way of eviction and foreclosure. In 2000, there were 1,677 evictions and foreclosures within the County. By 2006, the number increased to 6,130 countywide.

One of the biggest challenges to progress is community denial. Some residents do not think Gwinnett has any community development problems, which can create an obstacle to meeting the needs. Groups like GHHS struggle to meet such large needs of the growing population.

Crime stemming from domestic violence and families without health insurance represent a growing problem within the County. Costs of those under-insured put a strain on area hospitals and clinics. Inadequacies in public health funding formulas further limit the amount of reach of state health dollars.

GHHS' cluster centers are located in Buford, Norcross and Centerville with an additional center in talks for Lawrenceville. GHHS has a number of community clinics throughout the county as well. GHHS has also established the Gwinnett Neighborhood Leadership Institute, which is a program to train grassroots leaders on how to take an active role in their communities. This institute focuses on a volunteer interpreter program, children's shelter building/recreation project, neighborhood beautification, community playground projects, and pedestrian safety crossing events.

GHHS has had many accomplishments, but needs increases in funding for Emergency Assistance (EFSP), a redirection of funds from community providers like Gwinnett County Government and United Way, and an overall increase in funding for Health and Human Services to be even more effective over the long-term. In addition to funding resources, GHHS want to continue to level public/private partnerships from businesses, agencies, nonprofits and others.

Josh Campbell, City of Suwanee

The City of Suwanee received CDBG funds for sidewalk improvements about 10 years ago and has not used entitlement funds since then. The problem is that the amount given previously was not substantial and administration costs ate up a lot of the grant. The City has typically relied upon general obligation bonds, tax allocation district financing, and SPLOSTs for capital funding and other needs. That being said, the City welcomes the opportunity for more coordination with the County to resolve countywide and citywide issues related to housing and community development.

Cliff Cross, City of Duluth

The City of Duluth is receptive to better coordination with Gwinnett County on issues of housing and community development. The City's biggest push has been economic development, specifically the creation of jobs and additional businesses. The City wants to get more involved with Partnership Gwinnett's regional approach and definitely has something to gain from coordination with the county and other jurisdictions. The establishment of revolving loan funds and other monies to foster commercial investment are instrumental to the City's long-term economic prowess. This can spur jobs and create opportunities for a variety of individuals.

Jennifer Peterson, City of Norcross

The City of Norcross consists of approximately 10,000 residents. The biggest needs for CDBG funds were sidewalk improvements to accommodate those with disabilities and retrofitting some historic properties to make sure they

were ADA-compliant. No other major issues pending at the present time.

Johnnie Mabe, Norcross Housing Authority

Norcross Housing Authority has 44 units, some of which are vacant. The authority uses HUD allocations for renovations of existing facilities. If any additional funding allotments were issued, NHA would use them for new windows and weatherization of their existing scattered site housing. Labor costs are the most challenging aspects of renovation and weatherization.

Lejla Prjlaca, Lawrenceville Housing Authority

High on LHA's list of priorities is capital fund improvements (i.e., repaving streets, replacing the roof of existing public housing units, systems modernization, etc.). They have 212 housing units with a waiting list of 189 families (e.g., 90-1BR [majority elderly], 47-2BR, 38-3BR, 10-4BR, 4-5BR). The largest demographic served are single mothers with children and elderly residents. LHA has a great need for senior services and try to also serve the homeless where possible. LHA can use HUD entitlement funds for unit/systems modernization, rehabilitation and maintenance. LHA would like to develop its own public housing in the future if possible.

Carol Haag, Forsyth County

Forsyth County responses to questions:

What are some pressing issues/needs/problems your county faces in regard to:

Provision of affordable housing?

The county has limited affordable housing. Many individuals that need affordable housing live in neighboring counties.

Provision of adequate special needs housing (accessible to disabled and aging residents)?

Growing senior population needing affordable, accessible housing, as the county has limited affordable housing for elderly. In addition, seniors who need affordable housing oftentimes need housing modified to accommodate wheelchairs or other ADA requirements. Transportation can be another problem if housing is not within easy walking distance (or located in a high traffic area) to a grocery store, drug store, medical services or other services that seniors typically need.

Economic development?

The Cumming-Forsyth Chamber of Commerce takes the lead on economic development efforts in the county. The county has an appointed staff person to work with the chamber and the state on project selection.

Workforce development?

The county has not implemented any workforce development programs. Lanier Technical College is located in Forsyth County and provides an alternative to traditional higher education.

Regional/area public transportation?

The only public transportation in the county is the GRTA Express Bus and the county's Dial-A-Ride service, used by many of the seniors.

Growing infrastructure needs

Forsyth County is one of the fastest growing counties in the nation. Roads and water are primary needs.

Additional needs for community facilities

Forsyth County residents have recently approved a SPLOST VI referendum and a \$100 million bond for parks and greenspace. A senior center is planned in south Forsyth and \$1 million was designated for a community meeting space at Lanier Technical College. Two fire stations were approved in SPLOST VI and a revenue bond referendum is planned for a Sheriff's Administration building. Many existing park buildings will be updated and new ones will be added.

What issues should be a regional priority over the next five years?

Water resources and the expansion of SR 369 as an East/West corridor.

Melinda Quinn, Walton County

Walton County responses to questions:

What are some pressing issues/needs/problems your county faces in regard to:

Provision of affordable housing?

Walton County has a concentration of low-income housing primarily within the City of Monroe, which is causing negative spillover effects countywide in relation to quality of life and neighborhood stabilization. Walton County would be in favor of a plan to better mix housing at all income levels throughout the county and possibly even regionally.

Provision of adequate special needs housing (accessible to disabled and aging residents)?

Special needs (disabled, supportive services) is not a particular problem, but there has been a growing senior/elderly population throughout the past decade.

Economic development?

The County suffers somewhat from a lack of economic diversity and is looking to competitively reposition itself to remain economically sustainable over the long-term.

Workforce development?

Partnerships with area schools and higher educational institutions have fostered enhancements in workforce development throughout the county.

Regional/area public transportation?

The lack of public, affordable transportation in Walton County is of paramount concern and a constant topic at various strategy meetings. This issue crosses the entire spectrum of barriers for accessing health care; seeking & maintaining employment; parental involvement; workforce development; housing accessibility; etc

Growing infrastructure needs

Water is an ever-pressing issue. The County is entering into a regional agreement for watershed.

Additional needs for community facilities

There is a need for additional family and youth centers.

How can some of the above issues be mitigated through regional coordination and/or regional assessment of needs and mismatches?

Transportation---van service between & within counties

What issues should be a regional priority over the next five years?

Better transportation and water resources

What barriers currently exist in addressing these issues in a regional context? How might they be overcome?

The biggest regional challenges are lack of adequate financial resources, political will, and turf guarding among jurisdictions, school districts, and police districts.

Randy Knighton, Hall County

Hall County is receptive to better regional coordination among adjacent counties to combat shared issues and needs related to housing and community development. The County is currently preparing an affordable housing study to assess the housing needs and disparities within Hall County. This report will provide a detailed synopsis on the adequacy of existing stock, the nature of new projects, and the income levels in which housing is out-of-reach among other things. The County wants to merge good affordable housing with quality design, ensuring that the provision of new, affordable housing options is seamlessly integrated into neighborhoods. The County also wants to

diversify its housing options. There is a limited number of multifamily projects available, which excludes potential residents looking for options beyond single family units. The existing residential landscape is quite singular. Subdivisions do not connect and provide a very limited walkable, outdoor experience for the pedestrian.

Hall County has transit and the Metropolitan Planning Organization is undertaking a transit study to examine the efficiency and operations of the existing system. The County wants to also expand its employment centers and create more jobs.

Lead Agency – Consolidated Plan Preparation

The Unified Plan was prepared by PBAmericas and assistance from a number of subcontractors, including Bay Area Economics (BAE0 which prepared the Consolidated Plan appendix of the Unified Plan.

The Gwinnett County Department of Financial Services is responsible for the Consolidated Plan preparation, through its Program Management Firm, W. Frank Newton, Inc. (WFN Inc.). Staff of WFN, Inc. reviewed the BAE prepared documents prior to their completion.

Summary of Citizen Comments on the Proposed Unified Plan

Note: The following is a summary of Citizen Comments received for the proposed Unified Plan:

The Gwinnett County Proposed Unified Plan was made available for public comment from October 1, 2008 – October 31, 2008. The official publication of the proposed plan occurred on October 1, 2008 in the Gwinnett Daily Post. The Plan was distributed by mail and delivered to cities, non-profit organizations and county departments in Gwinnett County, consistent with the requirements of the Consolidated Plan regulations.

Printed copies of the plan were available, in Gwinnett County, for public review and comment at:

1. The Gwinnett Justice and Administration Center;
2. The Community Development Program Office;

To make the Proposed Unified Plan most accessible to citizens, the documents were also compiled in Adobe Acrobat® format and placed on the Gwinnett County Website [www.gwinnettcounty.com.]

A Public Hearing were held on the Proposed Unified Plan during the 30-day Public Comment Period as follows:

Public Hearing Location	Address	Date	Time
Gwinnett Justice and Administration Center 2nd Floor, Conference Center, Room C	75 Langley Drive, Lawrenceville, GA	October 21, 2008	6:00 PM

A summary of public comments received on the proposed Unified Plan follows:

October XX, 2008 Public Hearing – Gwinnett Justice and Administration Center, Lawrenceville

Insert Comments Here

In addition to comments received at the public hearing, the following comments were received on the Proposed Unified Plan by mail, by telephone or by facsimile transmission.

Insert Comments Here

COMMUNITY PROFILE

The Community Assessment Technical Addendum (Unified Plan Appendix A) provides a detailed profile of current conditions and trends in the county. The following maps supplement that analysis and illustrate the locational trends in the county's changing ethnic population. Also mapped are concentrations of low and moderate-income households.

Figure 1
1990-2000 Minority Population Net Change

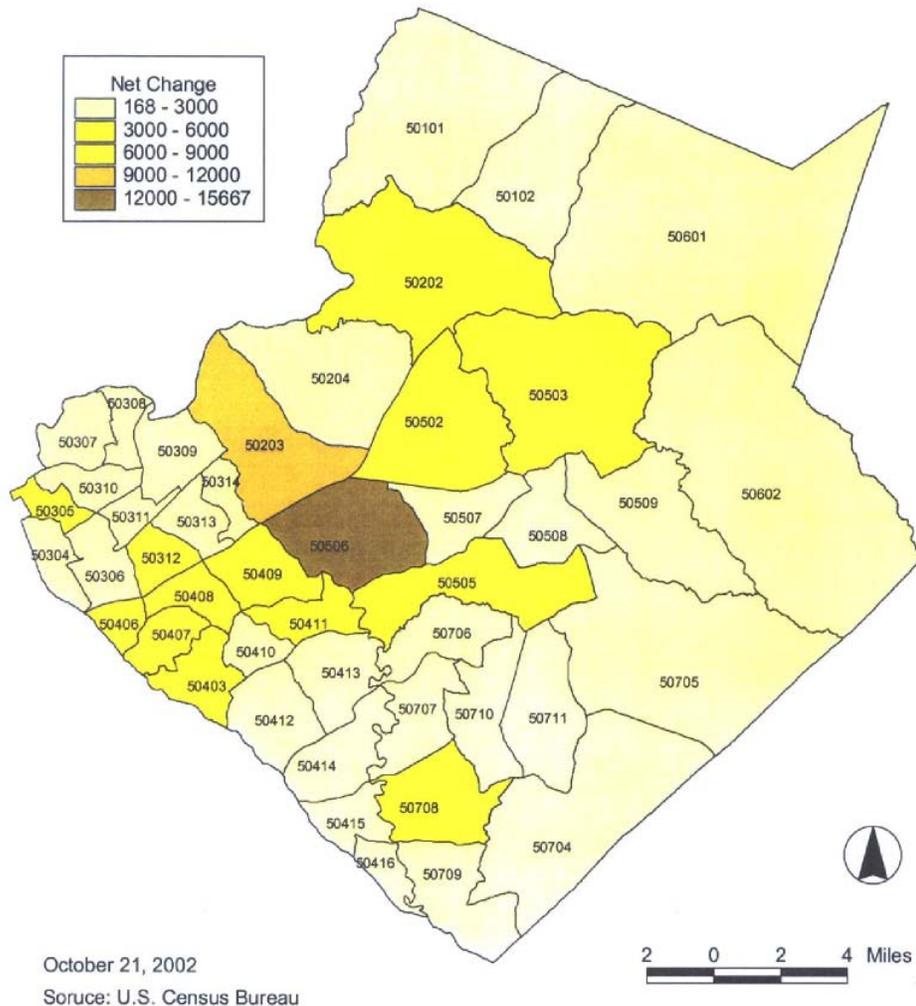


Figure 2 2000 Minority Population Proportion Of Total Population

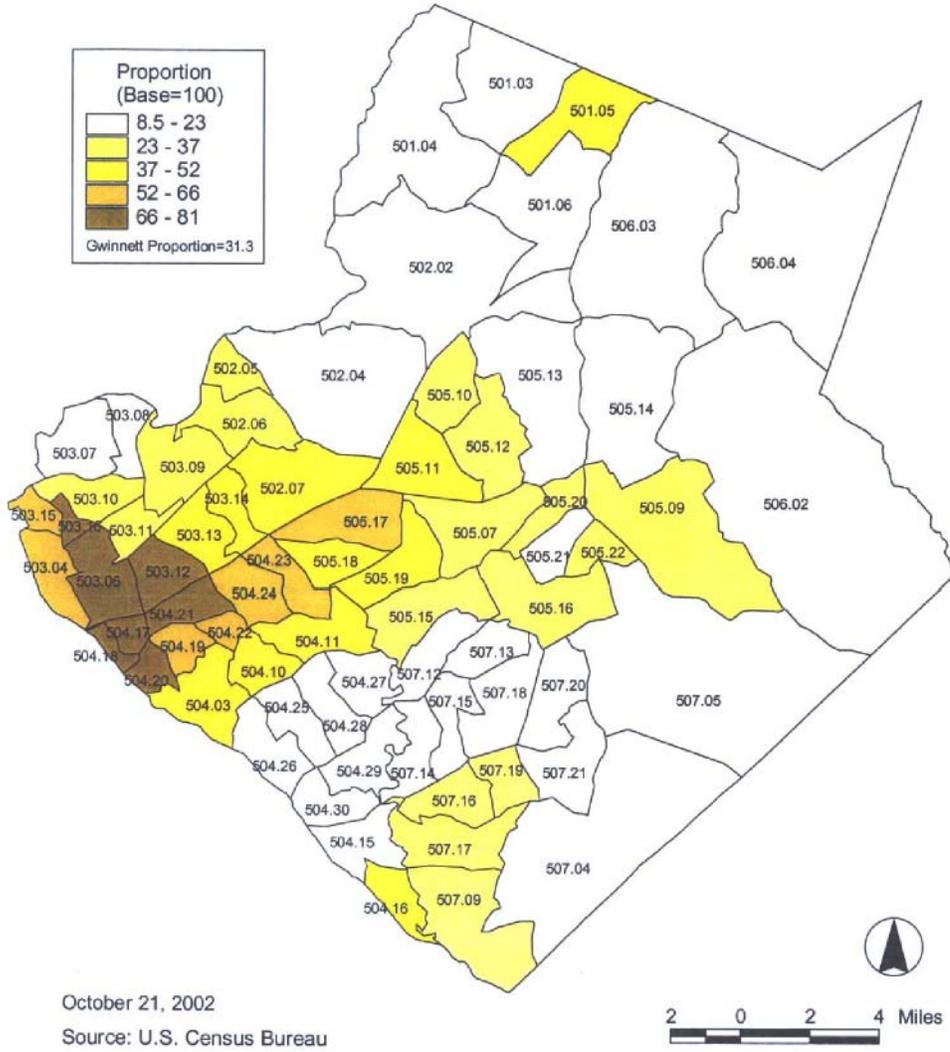


Figure 3
1990-2000 Net Change in Minority Population
Proportion Of Total Population

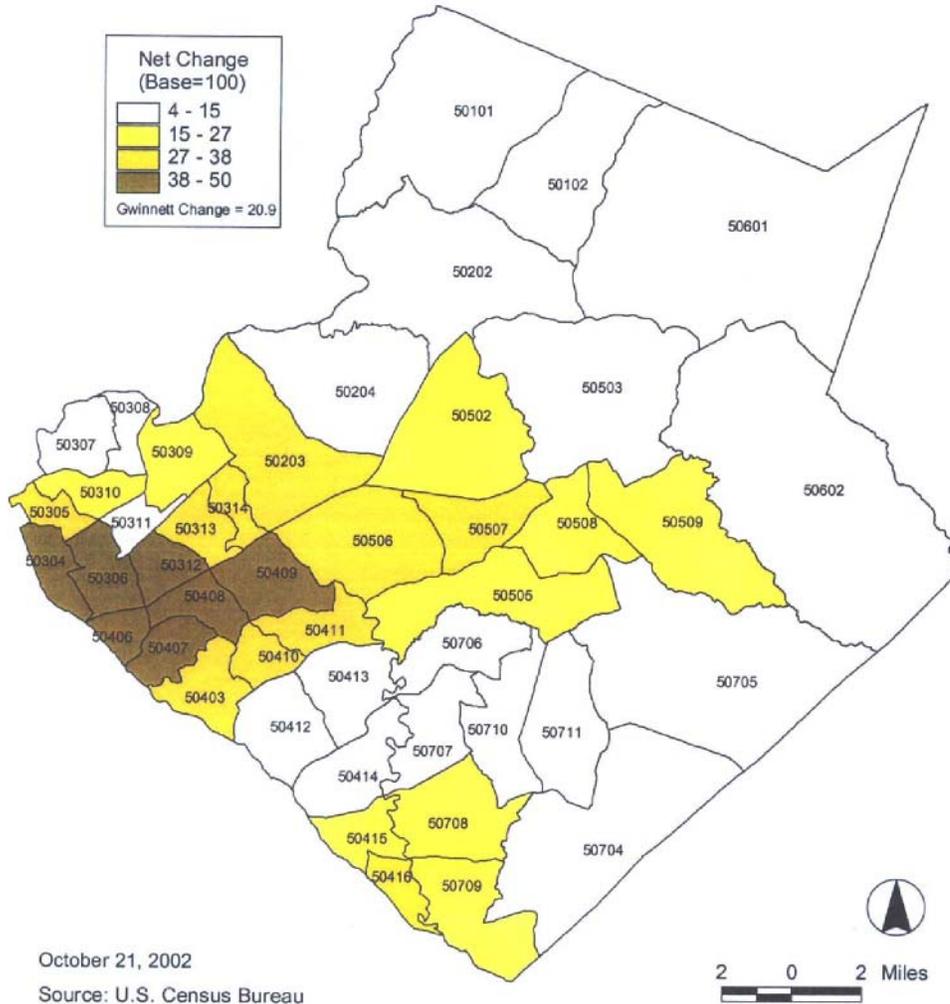


Figure 4 1990-2000 Black Population Net Change

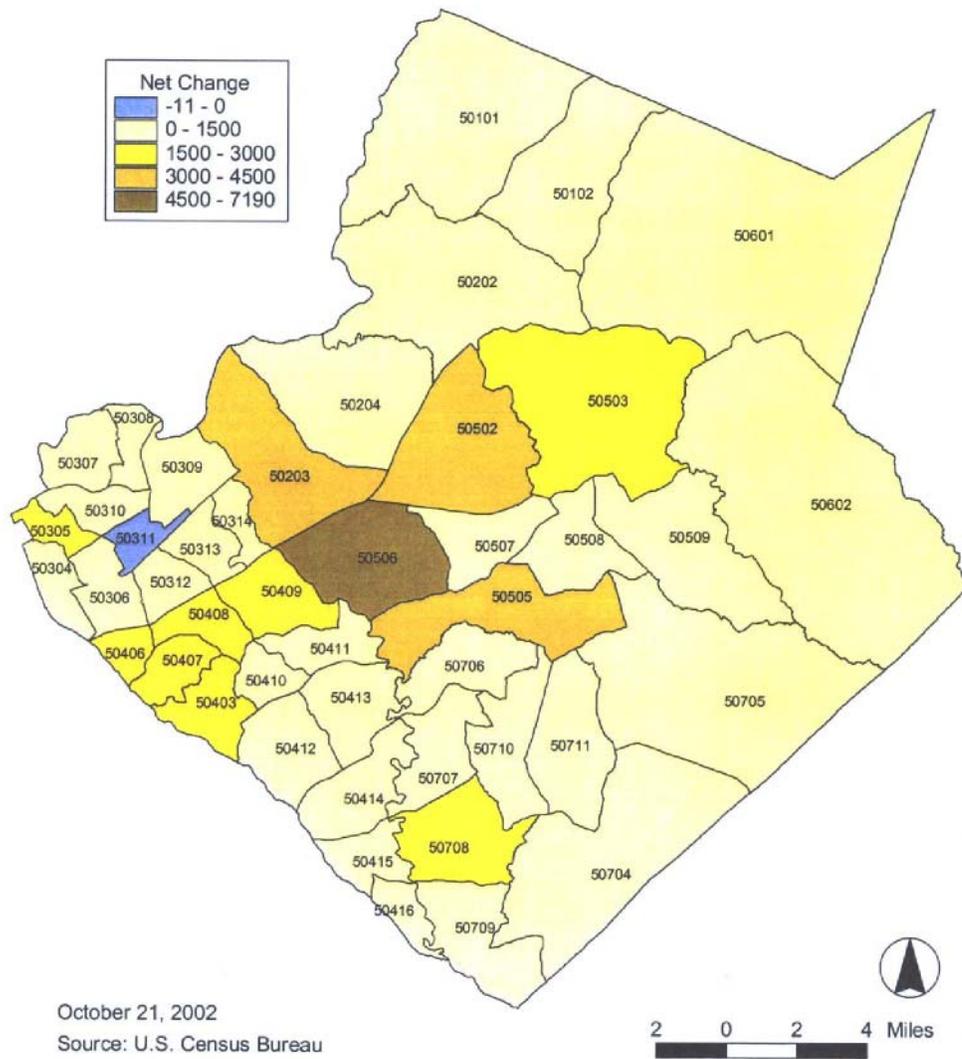


Figure 5
2000 Black Population Proportion Of Total Population

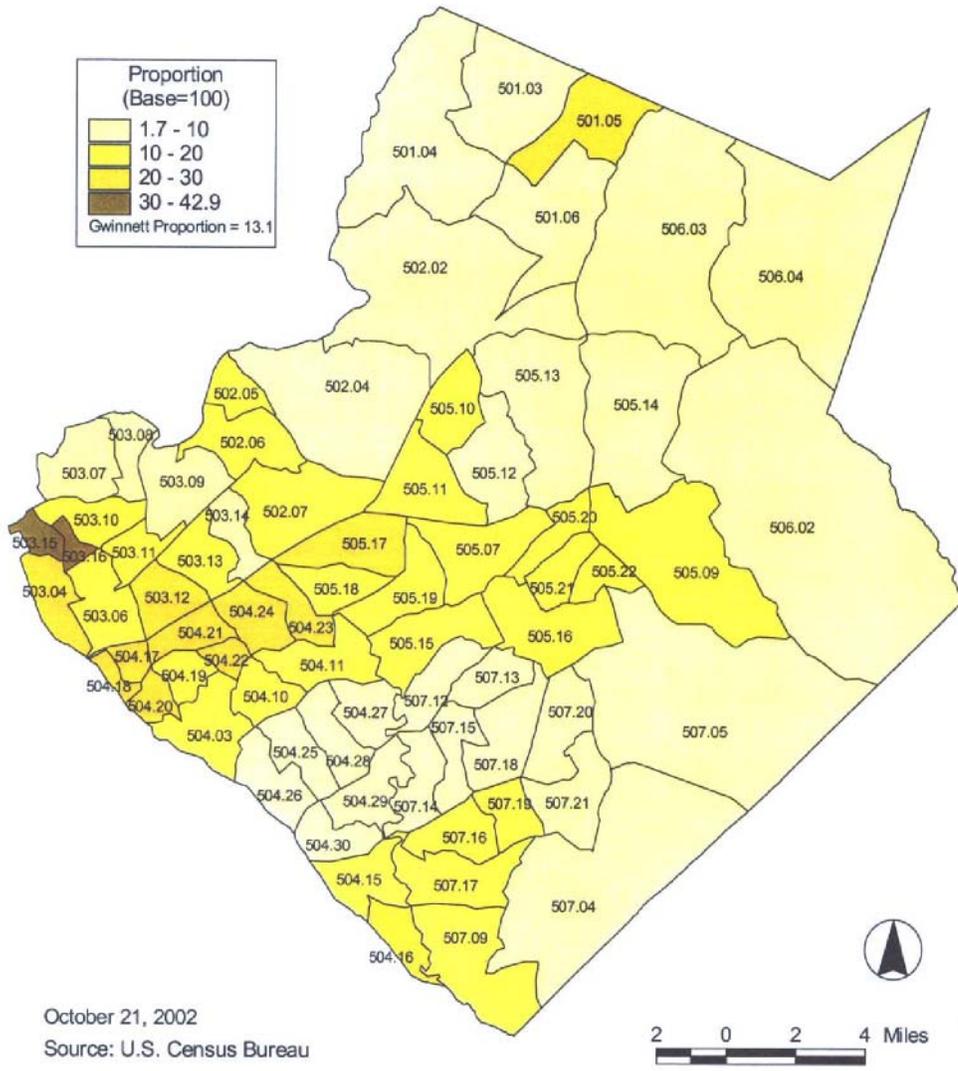


Figure 6
1990-2000 Hispanic Population Net Change

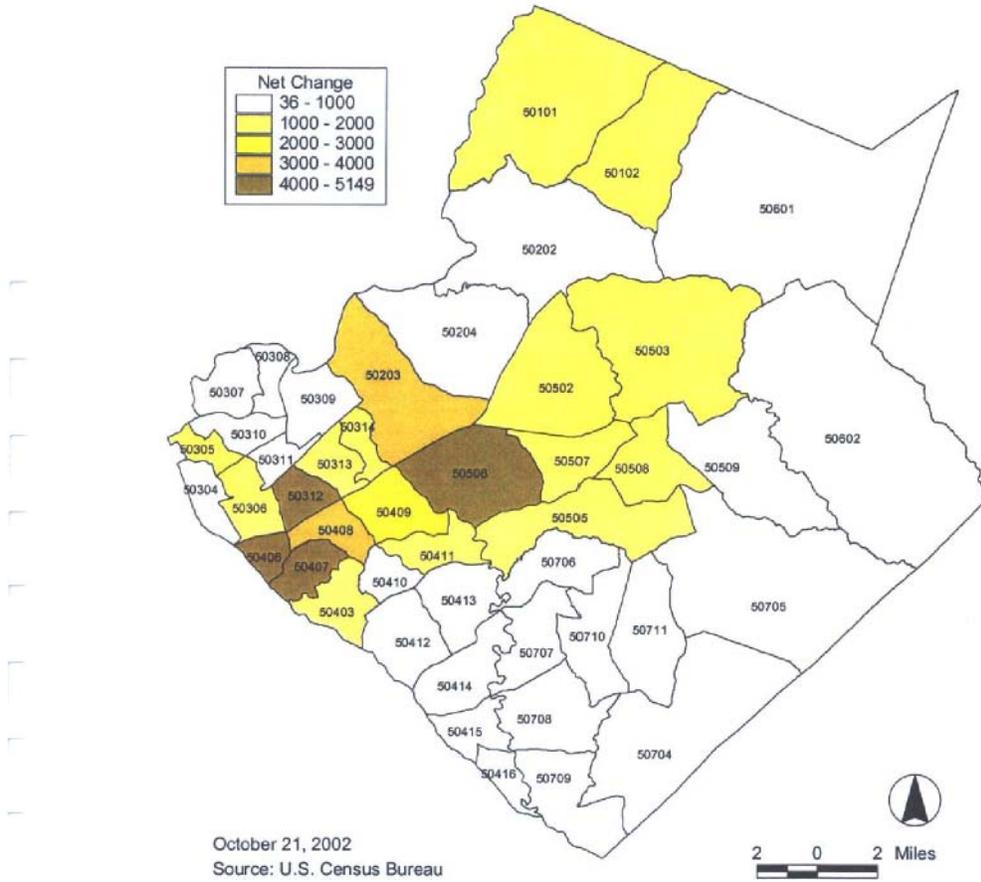


Figure 7
2000 Hispanic Population Proportion Of Total Population

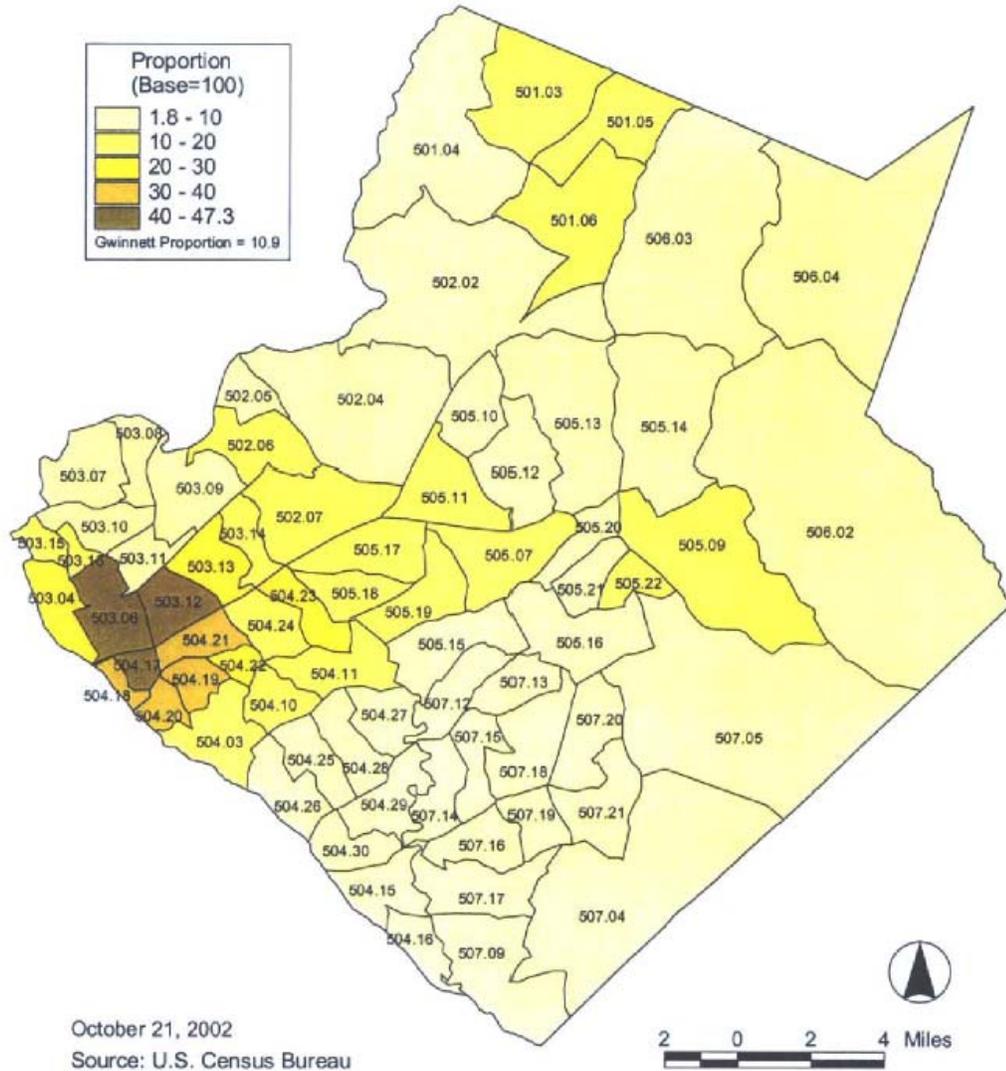


Figure 8
1990-2000 Asian/PI Population Net Change

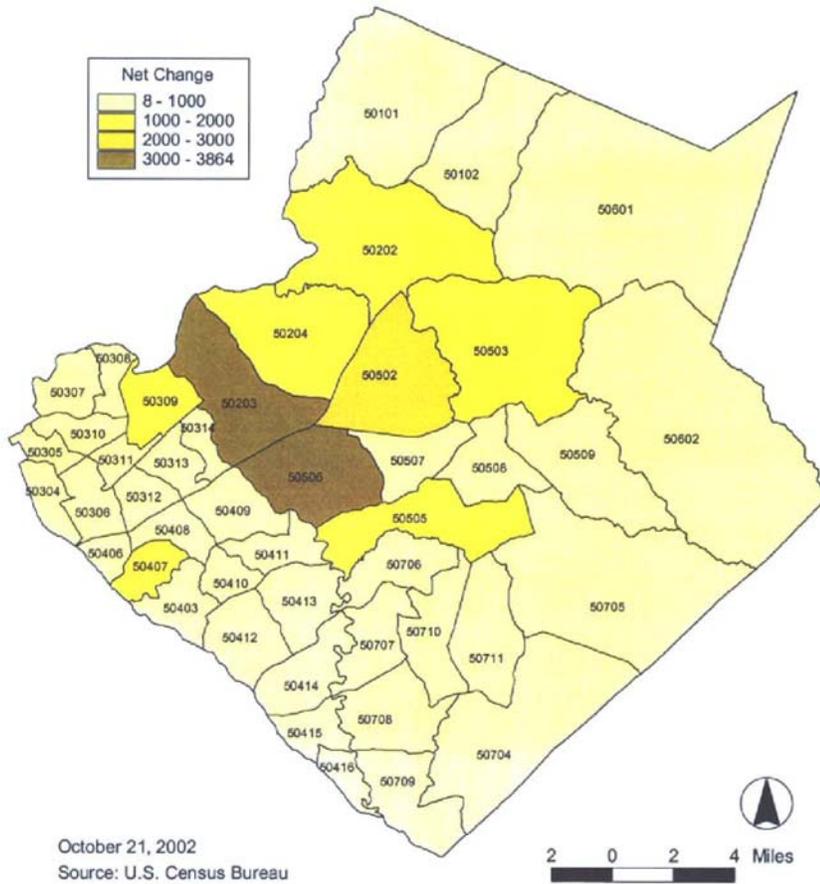


Figure 9
2000 Asian Population Proportion Of Total Population

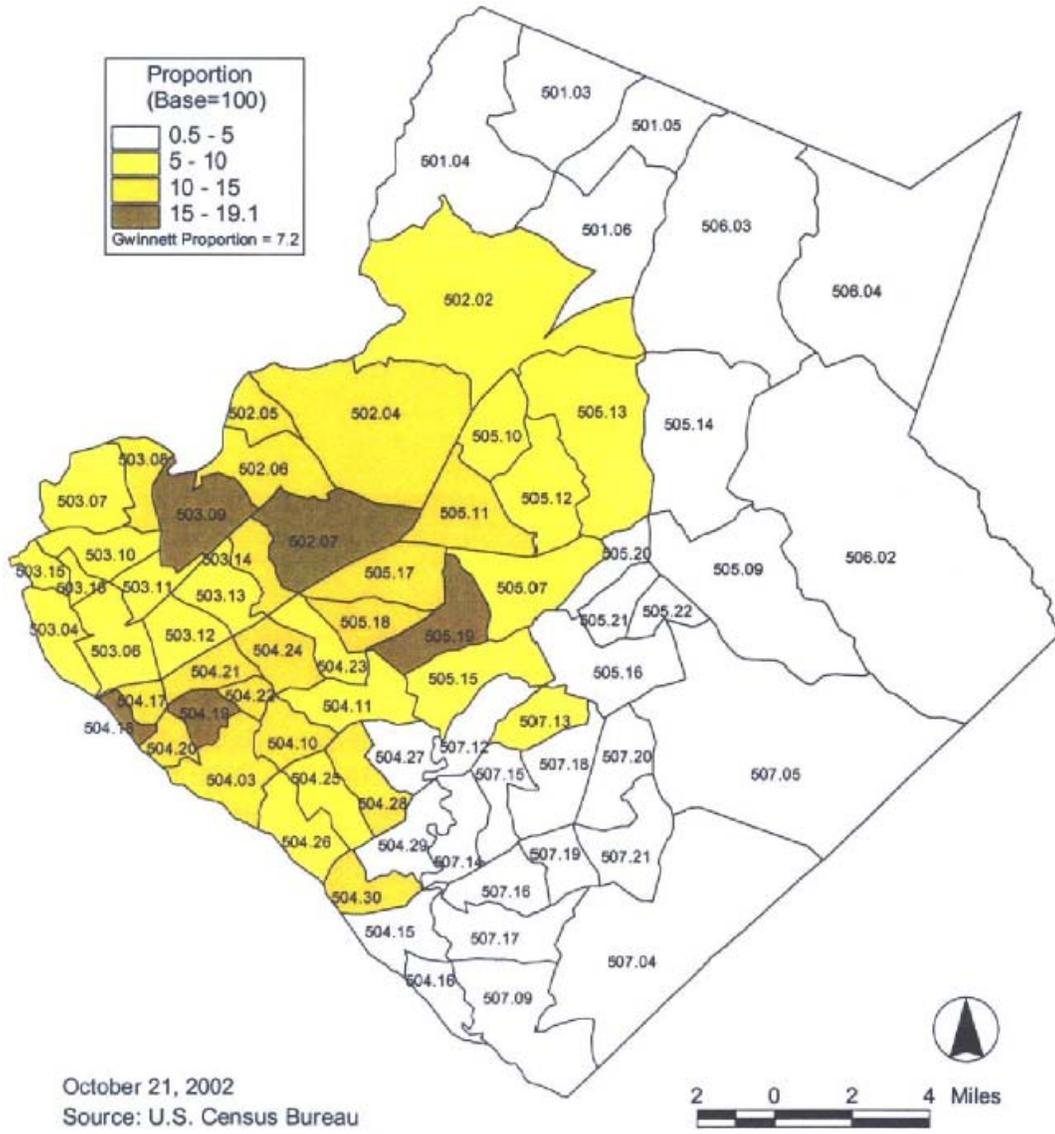


Figure 10
1990-2000 Non-Hispanic White Population Net Change

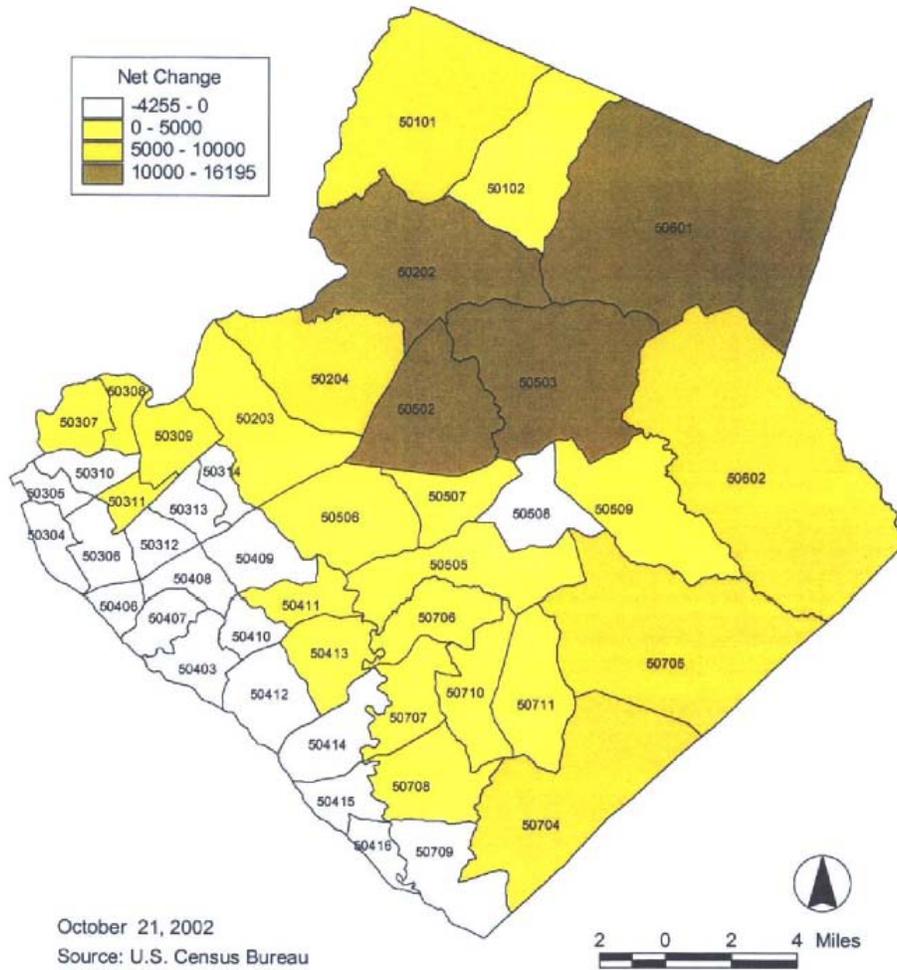


Figure 11
2000 Non-Hispanic White Population
Proportion Of Total Population

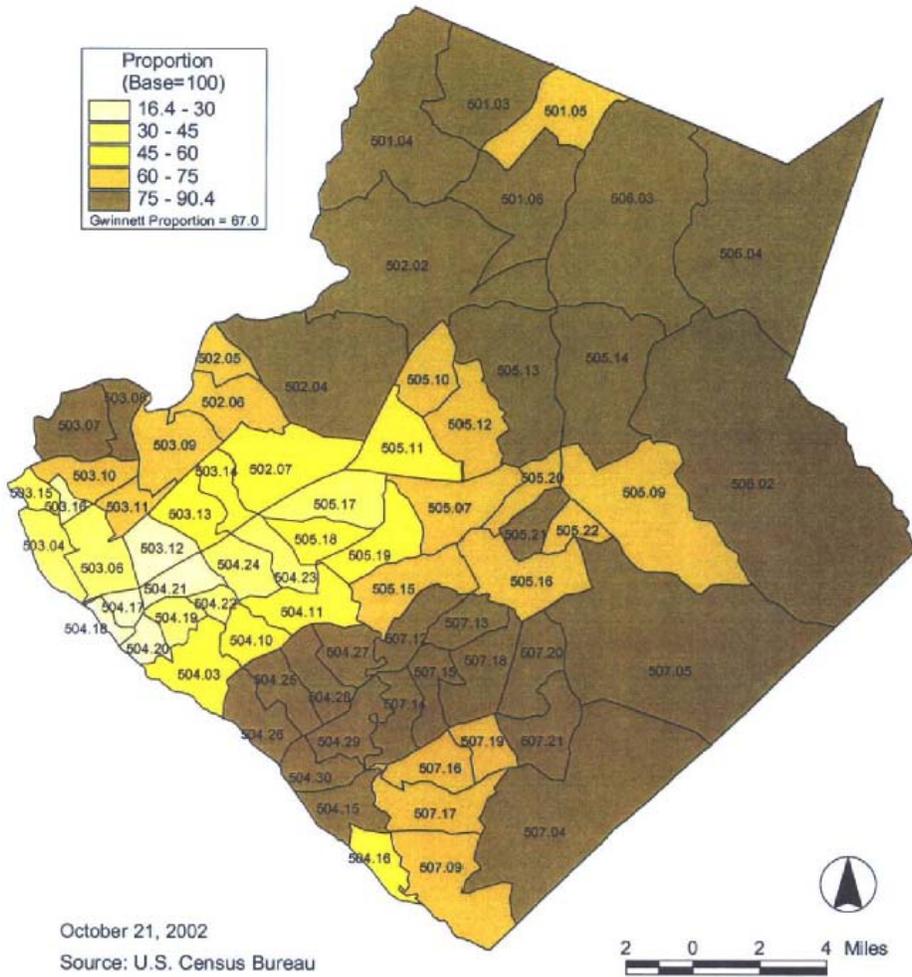


Figure 12

2000 Median Family Income

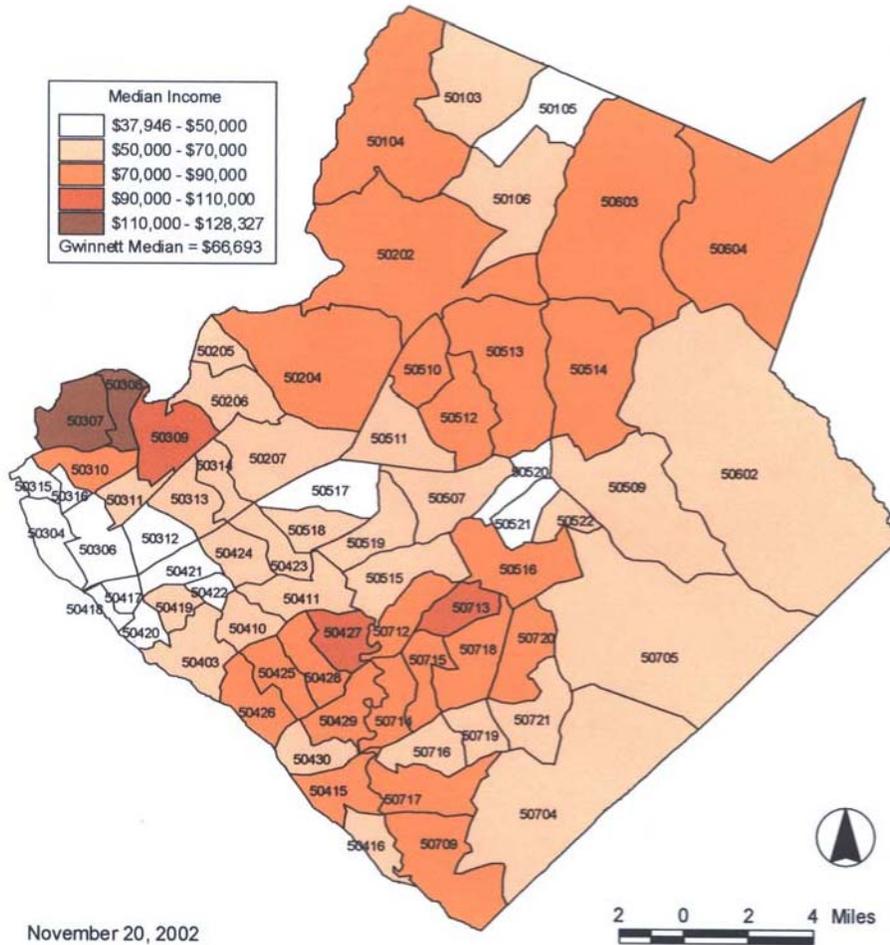


Figure 13

2000 Median Household Income

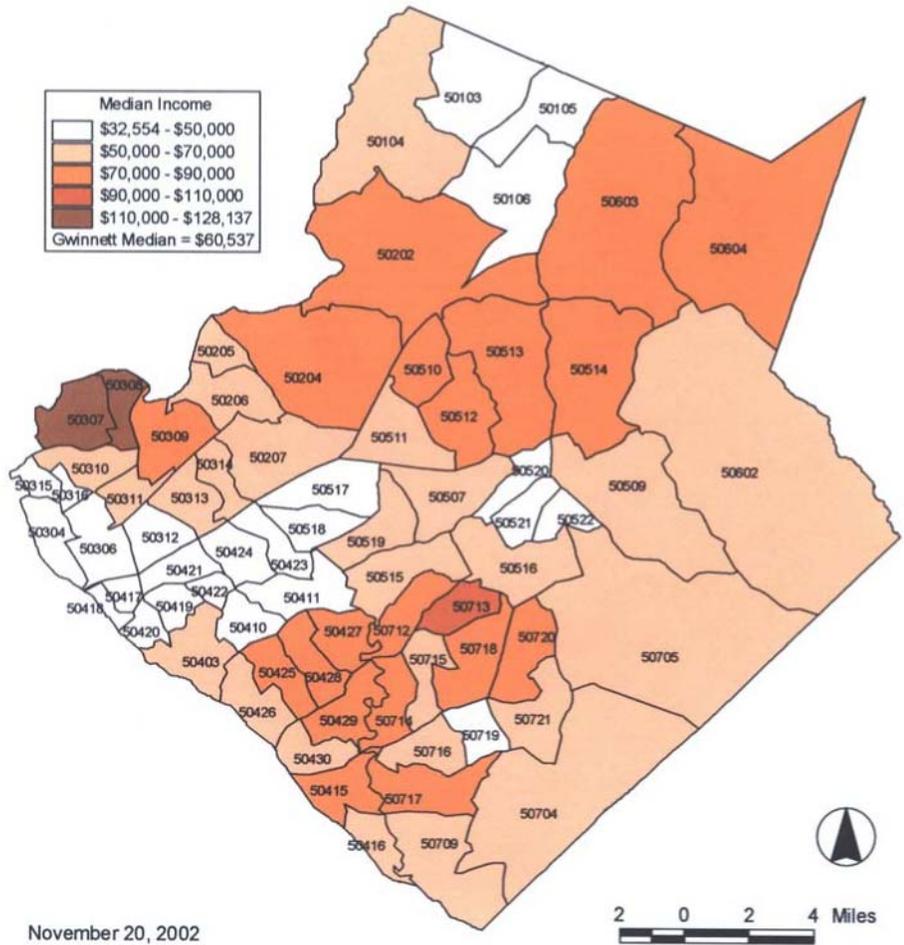
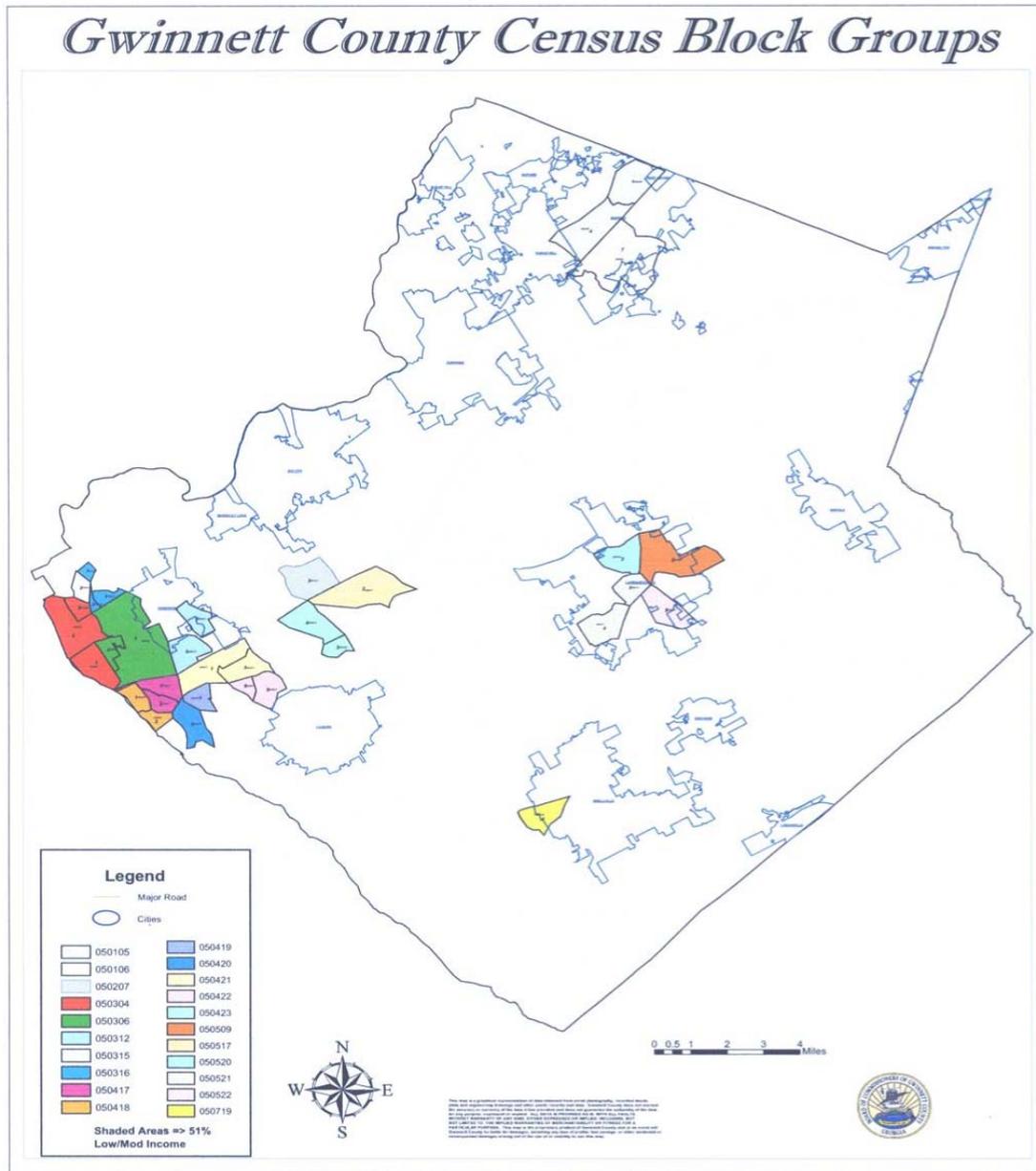


Figure 14
Census Block Groups
51% or More Low/Moderate Income



STRATEGIC PLAN

The strategic plan component of the Consolidated Plan contains three main elements [**homeless, housing, and community development**], which are the primary topics addressed by the Consolidated Plan. Each major component includes a presentation of data and data analysis, goals and priority objectives, needs, strategies and techniques, and resources. All activities for funding under the Consolidated Plan in the Action Plans for each of the years 2009-2013 address these goals and their respective priority objectives.

GOAL: HML Increase Housing Options for Homeless and Near-homeless Individuals and Families

HOMELESS

The homeless goal and priority objectives are presented, followed by a description of the the Continuum of Care model, including data addressing the needs of the homeless and near-homeless in Gwinnett County, resources available, gaps in the Continuum of Care, and strategies to close the gaps.

Priority Objectives:

- HML1** Support non-profit, private and public entities that provide housing opportunities for at-risk populations
- HML2** Address the emergency shelter needs of homeless persons, including individuals, families, adults, and youth
- HML3** Provide outreach to homeless persons for assessment of their individual needs
- HML4** Address the transitional housing needs of homeless persons, including individuals, families, adults, and youth
- HML5** Help homeless persons make the transition to permanent housing and independent living
- HML6** Help prevent homelessness of low-income individuals and families

CONTINUUM OF CARE

Description of the Continuum of Care

Gwinnett County relies on the Continuum of Care model as a tool for attacking and solving the problem of homelessness, as a participant in the State of Georgia Balance of State Continuum of Care administered by the Georgia Department of Community Affairs, which addresses all four components of the model:

1. Outreach and assessment to identify the needs of individuals and families and to connect them to facilities and services.
2. Emergency shelter as a safe, decent alternative to life on the streets of the community.
3. Transitional housing with various appropriate services.
4. Permanent housing or permanent supportive housing.

Process for Participation in the Georgia DCA Balance of State Continuum of Care

The continuing process of developing the Continuum of Care is closely tied to the Consolidated Plan process, having been developed within the strategies, goals and priority objectives of the Consolidated Plan. Likewise the Consolidated Plan reflects and contains the components of the Continuum of Care. The same process of data gathering/analysis and

"gap" identification occurs concurrently in Consolidated Plan and Continuum of Care and the results are shared and utilized in both of these interrelated community planning processes.

The Gwinnett Coalition for Health and Human Services (referred to hereinafter as the GCHHS or the Coalition), serves as the linkage among all the Gwinnett entities which serve homeless persons or near-homeless persons in need of various types of assistance. The GCHHS brings together all the public and private entities serving persons with housing, emergency assistance, physical health and mental health, and similar needs. The GCHHS provides a hotline for citizens through which they can obtain referrals to appropriate service providers.

The Coalition serves as the convenor for activities affecting housing and services for low income and homeless citizens. The Council works closely with Gwinnett County through the Consolidated Plan development process.

The Parties Involved in the Gwinnett County Continuum of Care Process

The Continuum of Care Strategy was developed using a collaborative roundtable approach by stakeholders who worked together for goal-setting, establishment of measurable objectives, and in the selection of priorities and projects. All participating member organizations have met and have agreed to abide by the consensus decision-making process of the Council.

Non-profit and government agencies which are providers of services to the homeless which participate and cooperate with the Coalition and/or participate by Gwinnett County agencies in the Georgia DCA Balance of State Continuum of Care:

The IMPACT! Group [formerly Gwinnett Housing Resource Partnership, Inc. (GHRP)]
Rainbow Village
Travelers Aid of Metropolitan Atlanta
Division of Health and Human Services, Gwinnett County Department of Community Services
Gwinnett County Department of Family and Children Services
Gwinnett/Rockdale/Newton (GRN) Community Service Board
Gwinnett County United Way
East Metro Health District/Gwinnett County Health Department
The Partnership for Community Action Latin American Association
Gwinnett County Community Development Program
Lawrenceville Housing Authority
Norcross Housing Authority
Lilburn Cooperative Ministries
Southeastern Gwinnett Cooperative Ministries Norcross Cooperative Ministries
North Gwinnett Cooperative Ministries Duluth Cooperative Ministries
Gwinnett County Habitat for Humanity Gwinnett County Police Department Gwinnett County Juvenile Court
Asian American Resource Center
Center for Pan Asian Community Services Georgia Department of Labor
Georgia Department of Community Affairs Salvation Army, Gwinnett
Distinguished Women With A Purpose Partnership Against Domestic Violence

Strategy or Vision To Combat Homelessness

Gwinnett's vision to combat homelessness requires that the root economic causes of homeless be addressed - **insufficient numbers of decent, safe, and sanitary low-cost housing units [limited housing stock] combined with limited financial capacity of homeless households (low wage jobs, depleted savings, excessive debt).**

The strategies to address the limited housing stock include:

- acquisition and rehabilitation of units for affordable rentals; and
- creative homeownership initiatives for low-income households.

Strategies for helping the homeless households include:

- self-sufficiency initiatives;
- supportive services;
- follow-up; and
- secure affordable permanent housing.

The strategy in Gwinnett County's mission to reduce homelessness:

- help each individual move toward the goal of self-sufficiency.

The overwhelming majority of homeless persons in Gwinnett County are single mothers with children, and the case management and supportive services network is geared primarily toward serving them.

The long-term goal of self-sufficiency requires:

- intensive counseling;
- job readiness and job training;
- child care;
- educational improvement;
- management of finances; and
- various health and mental health issues.

Breaking the cycle of homelessness for the long-term homeless can be a daunting task..but for the homeless mother and children, the hope is to rescue the children from a lifetime of homelessness by quick and effective intervention. Attention to details brings about results and can keep the family unit from becoming permanently "on the street."

The homeless often suffer from many problems, including:

- lack of proper nutrition;
- absence of preventative health care;
- lack of regular shelter;
- alcohol and/or drug abuse;
- mental illness; and
- other related difficulties.

Improvements in Intake/Client Processing

The focus of the Coalition has always been to move the person or family in need to the appropriate service(s). The approach also includes appropriate evaluation, assessment, and case management to deal with the underlying problems of the individual or family which has caused homelessness.

Gwinnett organizations are working under difficult conditions with rapid population growth bringing a corresponding growth in the numbers of homeless. Continuing improvements are being made in the process of bringing the homeless into the assessment/evaluation and case management system [HMIS] provided through PATHWAYS in Atlanta. Individual attention must be given to each client to ensure their needs are met.

One of the primary objectives of the coordinated approach followed by the GCHHS has been to simplify the process of accessing services by calling one telephone number (the Gwinnett Helpline) which helps the caller make contact with the correct service provider for that caller's specific needs.

Common intake/referral procedures for all clients, utilized by the Coalition, allow the citizen to focus on obtaining the appropriate assistance, rather than attempting to determine if they are calling the right organization for the help they need. The GCHHS citizen access process represents a logical method to connect citizen with service at a minimum loss

of efficiency, while reducing the "agency shuffle" and by maintaining personal dignity for every person accessing the service assistance network in Gwinnett County.

Inadequate Supply of Emergency Shelter

Homelessness and emergency shelters are issues that are more visible and apparent in urban settings than in suburban ones such as Gwinnett. However, analysis by the Coalition and the Gwinnett County Community Development Program point to a growing problem of poverty and homelessness in the County. At this time, there is no designated organization which has agreed to provide more shelter for the homeless population. Gwinnett County and the Coalition are continuing their focus special on this issue during this Plan period (2009-2013).

Only one general emergency shelter operates in the County: the Quinn House, a privately funded and operated facility serving approximately 20 families per year. A few nonprofit organizations provide shelter for battered women, children, and adults. In addition, a few local churches assist with emergency housing needs through shelters and sponsorship of needy families. Most homeless families are housed in "extended stay" economy motels with funding provided by Gwinnett County's Emergency Shelter Grants Program and by the Georgia Department of Community Affairs [ESG and State Housing Trust Fund monies]. Unfortunately, there are no other general emergency shelters for families or individuals who have lost their housing due to economic or physical disaster. The existing shelter services do not meet the growing demand for emergency shelter in Gwinnett County, and the possibility exists that the primary shelter resource – the extended stay motels – may not remain a long-term solution.

During the 2003 -2005, Gwinnett County and the Coalition requested and received approval from the Salvation Army for the preparation of a feasibility study for that organization to possibly construct and/or operate a homeless shelter in Gwinnett County. At the time this Plan was being developed, the study was complete but no decision had been made by the Salvation Army in response to the feasibility study recommendation that a shelter should be built. Gwinnett County and the Coalition will continue to encourage the Salvation Army to build and operate a homeless shelter in Gwinnett County. Gwinnett County will encourage the Salvation Army to request CDBG funds to assist with acquisition/rehabilitation or construction costs for the shelter.

Inadequate Supply of Transitional Housing

Twenty-seven (27) units of general purpose transitional housing exist in Gwinnett County. The enclosed gap analysis [Table 1 – HUD Table 1A] demonstrates the need for more transitional housing. This need must continue to receive attention and investment. Gwinnett County plans to continue to appropriate CDBG and HOME funds for this purpose during this Plan period when eligible and fundable projects are selected through the County's annual competitive application processes.

Inadequate Supply of Permanent Affordable Housing

The rapid population growth in Gwinnett County has attracted housing developers, but primarily in the upper income market. Limited numbers of new affordable multi-family housing is being constructed and no housing has been constructed recently for use as emergency shelter, transitional housing, or permanent housing for the homeless. Additional permanent housing is needed at a price affordable to persons who may be moving from transitional housing.

Limited Access to Public Transportation

One of the major obstacles for homeless persons in Gwinnett County is the limited availability of public transportation. The County initiated the operation of its public transit system in November 2000. The system consists commuter service to Atlanta, local route services, and para-transit service. The access to a public transportation system will permit persons who are homeless or at-risk of becoming homeless to travel to jobs or job training, thus moving toward self-sufficiency. Many of the supportive service providers included in the Gwinnett County Continuum of Care, and listed in this application, provide transportation to their clients.

Gwinnett County has experienced rapid population growth since 1970. Future growth projections will bring additional citizens without homes and without sufficient job skills to obtain employment quickly. Such growth brings demands for services which are typically created by low-wage workers. From its 1970 population of 72,349, Gwinnett County has now grown to 588,488 persons, as reported in Census 2000. Populations which continue to increase, bringing citizens at all levels of income to a Gwinnett. The community should and must provide appropriate services for all citizens. The objective of the GCHHS Coalition is to provide a community-based/community-wide mechanism to reach all the citizens and to provide them a "one-stop-shop" for referral to all service-providers. Gwinnett County, like many communities, is challenged to identify the exact population count of homeless persons. However, through the use of data maintained by the Coalition and its member agencies, the most current information has been compiled in the "Needs-Inventory-Gaps" analysis.

Table 1 (HUD Table 1A)

**Homeless and Special Needs Populations
Continuum of Care: Housing Gap Analysis Chart**

		Current Inventory	Under Development	Unmet Need/ Gap
Individuals				
Beds	Emergency Shelter	295	0	705
	Transitional Housing	255	0	345
	Permanent Supportive Housing	0	0	25
	Total	550	0	1075
Persons in Families With Children				
Beds	Emergency Shelter	615	0	698
	Transitional Housing	130	0	257
	Permanent Supportive Housing	0	0	50
	Total	745	0	1005

Continuum of Care: Homeless Population and Subpopulations Chart

Part 1: Homeless Population	Sheltered		Unsheltered	Total
	Emergency	Transitional		
Number of Families with Children (Family Households)	500	200	500	1200
1. Number of Persons in Families with Children	2000	200	3000	5200
2. Number of Single Individuals and Persons in Households without Children	2000	200	1200	3400
Total (lines 1 + 2a)	4500	600	4700	9800
Part 2: Homeless Subpopulations	Sheltered		Unsheltered	Total
1. Chronically Homeless		700	500	1200
2. Seriously Mentally Ill		50		
3. Chronic Substance Abuse		50		
4. Veterans		125		
5. Persons with HIV/AIDS		50		
6. Victims of Domestic Violence		2500		
7. Unaccompanied Youth (Under 18)		2000		

The data in Gwinnett County are consistent with surveys conducted in other communities. Needs far exceed resources, and it is difficult to decide where to invest scarce funds when needs are so great throughout the Continuum of Care, from emergency shelter to permanent housing for the homeless. In Gwinnett County, factors which are causal or contributory toward homelessness include transient living lifestyle, marital problems and domestic violence, mental illness, physical disabilities, no employment, inadequate or no child care, absence of available affordable transportation, and substance abuse and addiction. In many instances, the same individual may be suffering from a number of causal factors which result in short-term or long-term homelessness.

Gwinnett County has structured its services to the homeless around the Coalition HELPLINE and referral service to get the individual into the case management system. Once a person has accessed the system, appropriate agencies perform intake and begin the evaluation and referral process to help the homeless person access the services appropriate for the need(s).

Fundamental Components of the Continuum of Care Currently in Place

The fundamental components of the Continuum of Care are already in place, including:

1. Outreach to homeless and near-homeless individuals and families, combined with a comprehensive intake, assessment, and referral system.

Common intake/referral procedures for all clients, utilized by the Coalition and its member organizations, allow the citizen to focus on obtaining the appropriate assistance, rather than attempting to determine if they are calling the right organization for the help they need. The GCHHS citizen access process represents a logical method to connect the citizen with services with a minimum loss of efficiency, while reducing the "agency shuffle" and by maintaining personal dignity for every person accessing the service assistance network in Gwinnett County.

2. Emergency Shelter as a safe, decent alternative to life on the streets. The Partnership Against Domestic Violence has a 32 bed facility for women and children fleeing domestic violence. The IMPACT! Group [formerly Gwinnett Housing Resource Partnership [GHRP] uses local budget-priced motels to provide shelter for homeless families, elderly, or disabled. Travelers Aid of Metro Atlanta uses local low-cost motels for newcomers who are homeless.
3. Permanent Transitional Housing with Supportive Services is provided by The IMPACT! Group [12 units], Rainbow Village (14 units), and Travelers Aid (1 unit). All twenty-seven (27) units serve families with children. The GRN Community Service Board leases apartments of various sizes for residential use by persons with mental illness, substance abuse, and disabilities. Two additional organizations [Asian-American Resource Center – 4 units; Distinguished Women With a Purpose – 4 units] are now utilizing HUD Supportive Housing Program grant funds to lease transitional housing units.
4. Permanent housing or permanent supportive housing is provided by The IMPACT! Group, which owns and operates more than 250 low cost rental units for low income families. GHRP also maintains a list of apartments which are "more affordable" and refers clients to facilitate placement.
5. Follow-up with families is performed by each of the housing-related agencies (The IMPACT! Group, Rainbow Village, Travelers Aid, Partnership Against Domestic Violence, and GRN Community Service Board), once the families secure permanent housing. This includes tracking their progress and offers additional support or referrals, when needed.

With these components in place, the Gwinnett County partners seek to expand the capacity and resources of this system to meet the growing demand. The areas of focus in the SHP proposal are the actual transitional housing units and funding for essential supportive services for transitional housing residents.

How Homeless Persons Receive or Access Assistance

Clients access the homeless assistance network by contacting the Gwinnett Helpline, operated by the Gwinnett Health and Human Services Coalition. Referrals are made from the Helpline to the appropriate provider of services, client intake is performed by the Department of Family and Children Services, case management by the Partnership for Community Action, housing placement by The IMPACT! Group, mental health services or substance abuse problems by the GRN Community Services Board, physical health services by the Gwinnett County Board of Health, and Travelers Aid for new arrival assistance. The Coalition is the coordinating entity which oversees the participation of organization serving the homeless in Gwinnett County in the Georgia DCA Balance of State Continuum of Care in Gwinnett County, in cooperation with its member agencies and organizations.

If homeless individuals or families contact a participating agency or organization of the Coalition directly, without using the HELPLINE, staff assist the person access the homeless assistance system by obtaining intake, case management, and the appropriate service or services for the individual or family.

How Each Subpopulation Is Reached or Will Be Reached

Subpopulations of homeless persons [veterans, persons with mental illness, substance abuse, or HIV/AIDS] represent a very small part of the Gwinnett County homeless problem. The predominant homeless population in Gwinnett County is families, mostly headed by a single- parent, usually female. Although Gwinnett's homeless population is predominantly families, the Continuum of Care network has been structured to respond to the needs of all the homeless.

Veterans

Veterans are currently receiving priority assistance through the Georgia DCA Balance of State Continuum of Care. Among local service providers, housing, supportive services and case management are not provided to veterans as a specific subpopulation at the current time. Problems are dealt with, but a person's status as a veteran is not the primary issue in assisting a homeless person. It should be noted that the largest number veterans who are homeless are served by the GRN Community Service Board in Gwinnett County.

Persons with Mental Illness or Substance Abuse

The Gwinnett/Rockdale/Newton (GRN) Community Service Board provides comprehensive mental health and substance abuse services to all citizens of Gwinnett County. Housing for persons with such conditions is provided by the GRN, using leased facilities.

The agency has been serving the homeless mentally ill and substance abuse populations since 1973. Service delivery, including housing, began in 1981. The GRN Housing activities include residential services for this special population through family care homes, halfway houses, self-help placements and emergency homes.

The GRN currently offers an array of housing services which includes structured 24 hours/day care to individuals in transitional housing. GRN provides 24-hour group home services to adult individuals diagnosed with chronic mental illnesses in different Adaptive Group Residences in Gwinnett County. Along with group home services, GRN leases apartments to house clients who are suited to supportive independent living. The GRN staff provide on-site support to the individuals in 24 hour group home living and in 24 hour supervised care. Daily or weekly supervision and services is provided to those in semi-independent apartments.

Along with community housing services, GRN provides 24 hour-per-day crisis intervention, case management services, psychosocial rehabilitation, mental health inpatient and outpatient services, partial hospitalization, employment services, clinical evaluation/assessments and a variety of alcohol and other drug services.

The GRN receives referrals from a number of agencies and individuals within Gwinnett County. GRN provides services to Gwinnett County residents who meet specific criteria for services [major mental illness or substance abuse diagnosis] and are homeless, indigent, or have very low incomes. Under the Continuum of Care process in Gwinnett County, GRN will continue to receive referrals from all participating agencies.

Persons with AIDS/HIV

AID Gwinnett, Inc. was created in 1991 to provide services to individuals with AIDS/HIV and to their families and friends. Using current national statistics, one (1) in every two hundred fifty (250) persons is HIV-positive. When applying the national statistics to Gwinnett County, the estimated number of HIV-positive persons in Gwinnett County is 1,800.

Since 1992, AID Gwinnett, Inc. (AGI) has been the recipient of funds from the HUD HOP WA (Housing Opportunities for Persons With AIDS) Program administered by the City of Atlanta since 1993. Services provided by AGI include counseling, case management, transportation, medical services, and most importantly -- housing. HOPWA funds are

utilized by AGI to help prevent persons with AIDS/HIV from becoming homeless by paying rent or mortgage payments when the AIDS client is unable to work and provide their own funds to obtain housing.

Currently, Gwinnett County has no specific housing facility for persons with AID/HIV, and provides housing assistance funds to persons with AIDS/HIV. It is likely that any permanent housing is provided in the future for these clients will be provided on a scattered-site basis to preserve the privacy of persons living with AIDS/HIV. However, additional resources are needed to assist such persons with housing costs.

If a homeless client accesses the HELPLINE or requests assistance from another service delivery or housing agency and the client indicates that AIDS/HIV is a primary causal factor in their homelessness, all agencies refer the clients to AID Gwinnett, Inc., if the client wishes to receive services and assistance from AGI. The collaborative connection in Gwinnett County is utilized to assist homeless persons with AIDS/HIV as well as other homeless individuals and families.

Needs of Persons Threatened with Homelessness

As reported in the 2000 Census, Gwinnett has 11,428 households in the 0 to 30% of Median Family Income (MFI) category, and 13,923 households in the 31 to 50% of MFI category. Of the 25,351 households in the 0%-50% MFI, 16,604 are renters who are the most likely to become homeless. Of the total 16,604 renters, 39% (6,490 households) have a cost burden of 50% or more of their income for rent. Most of these families are one or two paychecks away from being homeless.

In general, the homeless state of an individual or family is a direct result of other needs of that household. A strong response to the homeless problem must address the wide range of needs of the people who are homeless. A case management approach to homelessness addresses the following needs, in addition to emergency shelter: food, health care, child care, transportation, and employment, and permanent housing.

Many low-income persons need supportive services to help them remain in their current housing -- i.e., emergency grants for rent/utility assistance. Affordable health care is also important -- one illness can cause financial disaster for an individual or a family. Illness can lead to job loss, and high medical bills -- a combination which can bankrupt an already low-income household.

How the Continuum of Care Facilitates Movement of Homeless Among Components

The Georgia Balance of State Continuum of Care in Gwinnett relies on the Coalition as the essential linkage among all the parts of the system. All first contacts, referrals and follow up come through the Coalition system of coordinated service delivery. The Coalition serves as the communication vehicle to ensure that appropriate services are delivered and that subsequent referrals to other necessary services occur. The Coalition links the agencies and organizations who deliver services to the homeless. The procedures for client intake, assessment, and evaluation are standardized and may begin with a contact to the HELPLINE by a homeless person, or a referral from a private or public entity. The IMPACT! Group is the key member of the Council, acting as the primary service delivery organization for the Emergency Shelter Grant program. The IMPACT! Group is the owner-operator of two hundred fifty (250) units of transitional housing and affordable rental housing apartment housing.

Gwinnett County's "Needs Minus Inventory Equals Gaps" Analysis

The Gwinnett County Health and Human Services Coalition identifies the limited quantity of Emergency Shelter facilities as being the highest need (gap) among homeless activities, followed by the need for additional transitional housing. This relationship has been confirmed each year of this Plan period through an informal survey of providers of homeless housing and services. The most recent survey was performed during January 2004, and is presented in **Table 16**. The Gaps Analysis survey revealed that service demands of homeless individuals and families exceeded available supply for child care, case management, job training, chronic substance abusers, and victims of domestic violence. These survey results, along with other input from the participants, were used to complete the "Needs-Inventory-

Gaps" analysis.

The data demonstrate the inadequate supply of all three types of housing which constitute the housing stock resources of the Georgia Balance of State Continuum of Care in Gwinnett County. Clearly, additional housing units [emergency shelter, transitional housing, permanent supportive housing, and permanent housing] and bed spaces must be made available in Gwinnett County to homeless persons and families

ANALYSIS/STRATEGIES

HOMELESS NEEDS

The nature and extent of homeless needs is described here. The different categories of homeless needs are assessed.

1. Needs of Sheltered and Unsheltered Homeless

Homelessness continues to increase in Gwinnett County, particularly among families with female-heads-of-households. The Gwinnett Children's Shelter provides shelter and assistance to abused/neglected children. The Battered Women's Shelter (Partnership Against Domestic Violence) serves children whose mothers take them out of violent family situations. However, the largest proportion of homeless persons who need housing in Gwinnett County are women and children who do not needed the services of either of these organizations.

The experience of social service agencies in Gwinnett County, and an analysis of the many identified problems, strongly indicates the need for a comprehensive approach when dealing with the homeless. Seldom is there a single problem which, when resolved, will solve the problem of homelessness for an individual or family. Gwinnett's experience indicates that in order to move a family out of its homeless condition into a more stable and permanent setting, a comprehensive array of services is usually required.

In most situations, a combination of circumstances has led to homelessness, or has left a family or individual poised on the brink of being homeless. Such people need coordinated help in the form of referrals for training and jobs, access to health care and personal counseling, as well as assistance with finding affordable housing.

2. Subpopulations

Gwinnett County has the same challenge as many communities in calculating accurate statistics on the actual numbers of subpopulations among the homeless. It is known that homeless women with children are the largest group of homeless in Gwinnett and that their numbers are increasing often due to job loss, housing displacement, family dissolution, or domestic violence.

Several groups within the homeless population have special needs:

1. Individuals (women/men);
2. Families with children;
3. Persons with physical disabilities;
4. Elderly persons;
5. Mentally/emotionally disabled and persons with substance abuse problems;
6. Veterans.

Because of the nature of the problem there are few statistics available to determine how large the need is for shelters. A study prepared for the Gwinnett County Coalition for Health and Human Services entitled, "Human Services Needs in Gwinnett County, Georgia: Assessment and Recommendations," estimated that 3.2% of the population in the average southern county in a given year will require emergency financial assistance, 60% of which will require help only one time in order to solve its financial crisis. This would indicate that approximately 22,000 people or 7,800 households in Gwinnett require some emergency assistance.

While there is no precise statistical information available, several agencies and nonprofits indicated that the fastest growing homeless population is families with children, including single parent families. In addition to the increasing demand from this group, their needs are exacerbated by the lack of shelter accommodations for families. Most shelter facilities are equipped to handle individual adults or children, and friends or relatives often cannot accommodate a large group for temporary shelter.

The ever-shifting population of the homeless makes precise statistical information hard to obtain. Transients move on, people become unemployed, buildings are uninhabitable, families are evicted and/or overcrowded -- thus, any statistics are only a rough estimate. Yet, it is clear that the numbers of homeless are increasing. Most urban areas report a similar inability to meet the need for emergency services.

The data on in Gwinnett County indicates a much greater number of homeless people in Gwinnett County who are unsheltered than sheltered. Unfortunately, the **Table 1** data is "point-in-time" information, and does not reflect the totality of the homeless problem over time. It is safe to project that the "gaps analysis" data is incomplete and understated for the year 2005. It is anticipated that the HMIS system may make collection and analysis of data more complete and accurate, thereby assisting in a more thorough picture of homelessness in Gwinnett.

3. Types of Housing Needed to Serve the Homeless

Under the Georgia Balance of State Continuum of Care in Gwinnett, three basic types of housing are needed to serve the homeless:

- A. Emergency Shelter - providing short-term shelter (usually several weeks) while a crisis situation is being resolved.
- B. Transitional Housing - providing a setting in which a family, or individual, can resolve problems that require more time, such as obtaining job training, ending drug abuse, or recovering from a large financial loss or health problem. This usually requires from 3-24 months, dependent on the ability of the homeless individual or family to progress and approach self-sufficiency.
- C. Permanent Housing - providing long-term, affordable housing, either ownership or rental.

A broad spectrum of affordable housing is needed -- one which provides small steps for people to take -- for those who are able to move from emergency shelters into housing which affords privacy and reflects the movement from dependency into self-sufficiency.

A large number of the homeless will need to move from a shelter or a transitional housing setting into assisted housing for a period of a few months to several years. Some may require assisted housing indefinitely. Group homes, which would be a solution for some of these individuals, are often ruled out by zoning regulations and often are opposed by nearby property owners or neighborhood groups. Single Room Occupancy [SRO] units, such as those found in older hotels and boarding houses, are no longer as common as in previous years. Although some recent successes have slowed the losses of such units, over 2,000 SRO units have been lost in the Atlanta area since 1970.

Resolving the problems of the homeless will require that each of these categories be addressed in a coordinated manner. A Massachusetts Association for Mental Health report, An Integrated Approach, states that "homelessness is a problem of such massive proportions and astonishing complexities that only a course of action which integrates all forces and resources at hand--public, private, government and provider--can begin to address the needs of people with no place to be."

4. Homeless Facilities

Homeless facilities provide a housing mechanism with facilities and services that meet the emergency shelter, transitional housing, permanent supportive housing, and permanent housing needs of homeless persons within the

jurisdiction.

A. Inventory of Facilities and Services for the Homeless and Persons Threatened with Homelessness

Gwinnett County has only one privately-operated emergency shelter and a few nonprofit organizations that provide shelter to a limited number of battered women, children and adults. Unfortunately, there are no other general emergency shelters for families or individuals who have lost their housing due to economic or physical disaster. To respond to this need, The IMPACT! Group operates an emergency shelter program in partnership with local hotels and motels, the other agencies serving the homeless population. The IMPACT! Group coordinates the delivery of shelter, services, and prevention activities using ESG grant funds provided by Gwinnett County and ESG and State Housing Trust Fund monies from Georgia DCA.

Rainbow Village owns/operates 14 units of shelter for homeless individuals and families using ESG funds from Gwinnett County and ESG and State Housing Trust Fund monies from Georgia DCA.

The Partnership Against Domestic Violence operates the shelter for abused women and their children in Gwinnett County, and receives ESG funds from Gwinnett County and ESG and State Housing Trust Fund monies from Georgia DCA.

The ESG Program has outstanding cooperation from the Health and Human Services Coalition, the Department of Family and Children's Services (DFCS), the Partnership for Community Action, the County's Cooperative Ministries, the Salvation Army, Travelers Aid, the Partnership Against Domestic Violence, Rainbow Village, and other public and private organizations and agencies.

Two other nonprofits serve targeted groups for emergency and transitional shelter -- the Partnership Against Domestic Violence (PADV) and the Gwinnett Children's Shelter. The PADV provides some emergency and transitional housing for women, and women with children, who are escaping domestic violence. The Children's Shelter provides some emergency and transitional housing for children and teens who are awaiting foster care or permanent placement.

Transitional housing in Gwinnett County (35 units) is provided by The IMPACT! Group, which has twelve (12) units, by Rainbow Village, with fourteen (14) units, one (1) unit owned/operated by Travelers Aid, and four units each leased by the Asian-American Resource Center and Distinguished Women With a Purpose. These organizations provide transitional shelter to families and/or to women with children.

B. Gaps in Homeless Facilities and Services

The County has identified the following major gaps in homeless facilities and services.

- (1) Emergency Shelter: Estimates of the homeless in Gwinnett range from 1,200 to 5,000 individuals per year. Using even the most conservative estimate, it is obvious that many more than the current 295 shelter beds are needed. There is, also, no place for the homeless to go during the day--particularly those who are ill, or those who are not able to work.
- (2) Transitional Housing: The number of transitional housing units is extremely limited. If the number of homeless in Gwinnett County is approximately 500 families who need Transitional Housing , approximately 345 units of transitional housing are required, with only 35 units currently available.
- (3) Affordable Housing: Permanent affordable and permanent supportive housing is in short supply in Gwinnett County, and no organization currently has a program to develop a sufficient supply of such housing for persons who are exiting transitional housing and moving into the permanent housing market.

INVESTMENT STRATEGIES

HOMELESS Emergency Shelter/Transitional Housing/Permanent Housing

1. Analysis

- (1) Persons most in need (e.g., those with the fewest resources) were identified as a top priority client group for
- (2) Gwinnett's housing/homeless/community development programs. The homeless population is growing
- (3) throughout the county and priorities have been established to increase emergency shelter, transitional housing,
- (4) and supportive services. Emergency shelter, transitional housing, and low-cost rental units are not able to meet
- (5) the demand. Housing costs continue to escalate at the same time the number of very low- and other low-income
- (6) households seeking affordable housing is increasing. Much of the homeless population in the suburban areas is
- (7) made up of women and families with children. Therefore, it is important to have a range of shelters and
- (8) supportive services.

2. Obstacles

There are several obstacles to meeting the needs of homeless persons: insufficient standard low-cost rental housing, insufficient transitional programs and housing, need for supportive services for the range of homeless constituents, need for higher wage jobs, limited government resources, reluctance of the community at large to recognize homelessness as an issue.

3. Strategy Development - Investment Plan (Activities and Programs)

Housing the homeless is one of the five major goals for Gwinnett County's Consolidated Plan, 2009-2013. Priority strategies to help deal with homelessness include rental assistance, supportive facilities and services. The county will work closely with nonprofits which provide shelter and related services. Special efforts will be made for the most vulnerable of the homeless population: children, families with children, and persons with special needs who require services to achieve and maintain independent living. The objective of the programs is to assist families and individuals in making the transition to permanent housing and independent living. Even with homelessness as a priority, funding is too limited to meet the demand for shelter and services. The County and/or the nonprofit service providers will also seek additional federal and state funding and strengthen case management services locally.

4. Strategy Implementation (Homeless)

Provide transitional housing, with comprehensive supporting services, to current and former homeless adults and families. Provide emergency shelter, with supportive services, to homeless adults and families.

A. Investment Plan (Activities and Programs for Each Priority) Programs and Resources:

Gwinnett County will use several resources to help meet the goals of the Plan, including Federal, state and local programs, and collaborations with private sector sources. Gwinnett County plans to use the following programs for transitional housing and permanent supportive housing and support services:

- HOME Program Funds for Transitional Housing
- Georgia Housing Trust Fund
- Georgia Department of Community Affairs (DCA) HOME Program Funds Health and Human Services
- Coalition Referral System
- HUD's SuperNOFA Grant Programs
- Rainbow Village Transitional Housing
- Travelers Aid of Metro Atlanta
- Private Foundations/Corporate Donations.

B. Plan for Leveraging Private and Non-Federal Funds:

Gwinnett County is committed to leveraging all resources to the greatest extent possible. For example, the County will work with the State of Georgia in the financing of shelters and transitional housing and for assistance with the implementation of the HMIS system.

The County will also seek funding or assist nonprofit organizations seeking funding from the State of Georgia in the financing of shelters, transitional housing or permanent housing for the homeless.

C. Matching Requirements:

The Gwinnett County ESG program requires a 1:1 match of funds. HOME Program funds from Gwinnett County used to acquire or rehabilitate transitional housing require a 1:4 match.

D. Categories of Residents to be Assisted

(1) Homeless adults, families, children, and Very low-income households of all household sizes, based on need and available services.

(2) Homeless Families (with 2 adults)

In general, the resources for homeless families with children are extremely limited. Shelters will be provided to house approximately 100 families over the Plan period.

(3) Homeless Female-Headed Families

Shelter and supportive services will be provided 500 mothers with children.

(4) Homeless Children

Approximately 2,000 homeless children will be served during the Plan period.

(5) Homeless Persons with Special Needs

Countywide, there are few resources for homeless persons with special needs. Persons with challenges such as substance abuse problems and persons diagnosed with AID/HIV and related diseases are directed to the respective state agencies for assistance. Special needs such as persons fleeing domestic violence and homeless youth are addressed through the PADV Shelter and the Children's Shelter. Both of these shelters, however, face demands which exceed their capacity to serve.

Any efforts to help homeless persons with special needs (require services to achieve and maintain independent living) to make the transition to permanent housing and independent living require services from other agencies such as the Georgia Department of Family and Children Services (DFCS) and the GRN Community Service Board [mental health/substance abuse services].

E. Homeless Service Goals:

For this Plan period, Gwinnett County will assist homeless persons and families, as follows:

- The Health and Human Services Coalition HELPLINE referral system expects to assist approximately:
 - 300 very low-income persons;
 - 600 homeless adults;
 - 450 homeless families; and
 - 600 female-headed families

Of these families, it is expected that 45 very low-income families and 30 other low-income families will receive transitional housing assistance.

Rainbow Village expects to provide transitional housing to 35 families.

The Partnership Against Domestic Violence Shelter expects to provide shelter to its 1000 clients (women with children) on an extended basis [more than 30 days] as needed. The Partnership Against Domestic Violence Shelter also expects to shelter 300 single women and 15 elderly women.

Norcross Cooperative Ministry will serve families with children (as the top priority) and will serve approximately 4,000 persons who are homeless.

THE IMPACT GROUP will provide transitional housing to 70 individuals who are members of approximately 25 families.

Rainbow Village will provide transitional housing to 30 individuals who are members of approximately 10 families.

The Salvation Army will transport 200 homeless single adults to its Atlanta shelter.

The Asian-American Resource Center will provide transitional housing assistance to 20 individuals.

Distinguished Women With a Purpose will provide transitional housing to 20 individuals.

F. Geographic Distribution of Services:

Emergency shelter and transitional housing services are provided in the areas in Gwinnett County with the largest numbers of identifiable homeless families and individuals [Interstate 85 Corridor - particularly Norcross; and in the Lawrenceville area]. The available emergency shelter, transitional housing, and shelters for abused persons serve persons from throughout Gwinnett County.

Homelessness continues to increase in Gwinnett County, particularly in the female-head of family group and the number of abused and/or homeless children in Gwinnett County is increasing at a rate approaching that of the growth in the population, as a whole. The existing shelters are planning expansions to help meet the growing need. Funding for these programs is a constant challenge.

G. Service Delivery and Management:

Each of the emergency shelter and transitional housing programs identified are managed by their sponsors. The Health and Human Services Coalition Referral Service provides referrals and placement assistance for homeless families and individuals who seek its services. During each year more than 1,500 persons request assistance through the HELPLINE, and a significant number of these calls are individuals or families who are homeless or who are in danger of becoming homeless.

HOMELESSNESS PREVENTION

1. Analysis

The number of households threatened with homelessness is increasing in the County. Emergency assistance and supportive services are essential to prevent homelessness. Those most often threatened with homelessness are the very low-income households, who typically do not have any savings or personal safety net to weather financial emergency such as job loss, illness, abandonment by primary wage-earner, and eviction. In addition, many at-risk households [the hidden homeless] live in overcrowded conditions, doubling up with relatives or acquaintances.

2. Obstacles

Because the social safety net is so limited, the very low-income persons and families with children are at greatest risk of becoming homeless. The chief obstacles to preventing homelessness include limited resources for skills training and job placement initiatives, affordable childcare, emergency assistance, and effective advocacy for this target group. In addition, more funding is required to improve the living conditions related to safety and code issues so families are not displaced or forced to live in overcrowded, unsanitary conditions. With the growing immigrant population in Gwinnett County it is likely that overcrowding will continue the presence of an increasing "hidden homeless" population.

3. Strategy Development - Investment Plan (Activities and Programs)

The County works with agencies to develop programs to keep people in their current housing. Such programs include emergency grants to cover rent/mortgage and/or utilities for very low-income households. Gwinnett County utilizes the maximum permitted (30%) of its ESG funds to provide homeless prevention.

The County will assist the homeless providers working to fulfill the homeless goals and priority objectives, by aiding these organizations when they seek federal funding from existing programs (e.g., HOME, CDBG, HOPWA, Section 202, Section 811, and HUD SuperNOFA Programs), and any yet-to-be-created programs. If the federal funding mechanism for McKinney Act funds is altered to provide additional homeless funding directly to Entitlement Urban Counties, the County will have additional resources to fund the gaps in its present Continuum of Care for the homeless. The County will assist its nonprofit service provider organizations in seeking state funding and work to facilitate more private investment in the very low-, other low- and moderate-income communities. The County will also support activities undertaken by local organizations working in the affordable housing arena, especially for applications for funding, providing technical assistance where necessary, and facilitating program development where requested.

Where market shifts occur which alter the level of need among any particular tenure type, the County will adjust its programs and funding levels accordingly to meet the change in demand for affordable housing services.

4. Strategy Implementation [Homeless Prevention]

A. Investment Plan (Activities and Programs)
Programs and Resources

The Gwinnett County Community Development Program uses several resources to help meet the goals of the Consolidated Plan, including Federal programs, state and local programs, and collaborations with private sector sources. Specifically for the programs listed above, Gwinnett County makes use, or assists other organizations to use, the following programs: CDBG, HOME, ESG, Section 8, Section 202, Section 811, Georgia Housing Trust Fund, HUD Supportive Housing Program, HUD Shelter Plus Care Program, and the Coalition for Health and Human Services Referral System. Norcross Cooperative Ministry, GRN Community Service Board, Asian-American Resource Center and other possible providers will provide homeless prevention assistance to 500 individuals during the Plan period. Outreach occurs through cooperation and referrals among service providers. Outreach also occurs through the "Helpline" operated by the Gwinnett County Health and Human Services Coalition where persons are referred to various public and private non-profit organizations appropriate to their needs.

B. Plan for Leveraging Private and Non-Federal Funds:

Gwinnett County is committed to leveraging all resources to the greatest extent possible. Churches and nonprofit organizations are urged to solicit donations [personal and corporate] to help defray the cost of providing housing and services to prevent homelessness.

C. Matching Requirements:

The Emergency Shelter Grant Program (Prevention) requires a 1:1 match of funds or more.

D. Categories of Residents to be Assisted:

Very low-income, Low-income, Moderate-income, Elderly, Near Homeless, households of all sizes, based on need.

Table 2
[HUD Table 1B]
Summary of Specific Homeless Objectives

Local Obj #	Specific Objectives	Performance Measure	Expected Units	Actual Units
	Homeless Objectives			
HML1	Support non-profit private and public entities that provide housing opportunities for at-risk populations	People	200	To Be Reported Each Year
HML2	Address the emergency shelter needs of homeless persons, including individuals, families, adults and youth.	People	4000	To Be Reported Each Year
HML3	Provide outreach to homeless persons for assessment of their individual needs	People	500	To Be Reported Each Year
HML4	Address the transitional housing needs of homeless persons, including individuals, families, adults and youth	People	75	To Be Reported Each Year
HML5	Help homeless persons make the transition to permanent housing and independent living	People	10	To Be Reported Each Year
HML6	Help prevent homelessness of low-income individuals and families	People	200	To Be Reported Each Year

The Gwinnett/Rockdale/Newton Community Service Board is the local provider of services to persons with mental health or substance abuse issues and problems. The GRN provides these services on a “out-patient” basis to persons who are leaving mental health facilities. Housing is provided by GRN for such clients via rental of affordable apartments.

For homeless persons leaving physical health facilities, the providers of emergency shelter and transitional housing in Gwinnett County offer housing opportunities through housing which they own or rent.

HOUSING GOALS AND PRIORITY OBJECTIVES

Gwinnett County has three Housing Goals with accompanying Priority Objectives in the Unified Plan, each of which are listed in this portion of the Plan.

HOUSING GOALS
Increase Access to Affordable Housing for Low and Moderate-income Persons [AH].
Eliminate Substandard Housing for Low and Moderate-income Individuals, Families, and Households [HR] Increase Housing and Supportive Services for Individuals and Families with Special Needs [SNH]

GOAL AH: <u>Increase Access to Affordable Housing for Low and Moderate-income Persons</u>
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Priority Objectives:

- AH1:** Principal Reduction [Downpayment Assistance] & Closing Cost Reduction for first-time homebuyers
- AH2:** Rehabilitation of existing housing for first-time home buyers
- AH3:** Home Buyer Education/Counseling
- AH4:** New construction of affordable housing for first-time home buyers
- AH5:** Reduction of acquisition and development costs for affordable single family housing
- AH6:** Reduction of acquisition and development costs for affordable multi-unit housing
- AH7:** Encourage private and non-profit developers by funding acquisition, development and rehabilitation activities

GOAL HR: <u>Eliminate Substandard Housing for Low and Moderate-income Individuals And Families and Households</u>
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Priority Objectives:

- HR1:** Rehabilitate owner-occupied homes
- HR2:** Energy Conservation and Weatherization for single- and multi-unit housing.
- HR3:** Home Owner Education
- HR4:** Replacement construction for non-feasible rehabilitation
- HR5:** Hazardous Materials Abatement/Removal [Lead/asbestos]
- HR6:** Rehabilitate multi-unit homes
- HR7:** Housing Code [Property Maintenance] Activities

GOAL SNH: Increase Housing and Supportive Services for Individuals and Families with Special Needs

Priority Objectives:

- SNH1** Support the efforts of public and private non-profits to create additional housing options for special needs clientele

- SNH2** Support the efforts of public private non-profits to acquire, construct, or rehabilitate housing for disabled persons, including persons with AIDS/HIV and persons who are diagnosed with substance abuse and/or physical or mental disabilities.

- SNH3** Support the efforts of public and private non-profits to acquire and/or construct transitional housing for special needs individuals

- SNH4** Financial Assistance with housing for special needs populations

HOUSING NEEDS

Categories of Persons Affected

Presented here are needs for assistance for by income categories: (1) less than 30% Median Family Income (MFI); and (3) 30%-50% MFI; 51-80% MFI, grouped by renter/homeowner status, family size, age status [elderly/non-elderly], disability status, and HIV/AIDS status. Needs are described in terms of following problems: any housing problems, cost burden [30% of income expended for housing], and severe cost burden [50% or more spend for housing]. Data is derived from Census 2000 tabular materials provided by HUD.

A HUD-required (Table 3A) follows which lists estimated Priority Housing Needs for Low- and Moderate-Income Renters, Homeowners, and Special Populations who are not homeless. The Unmet Need data was derived from the CHAS Table 1C information presented in Table 23A.

**Table 3A
(HUD Table 2A)
Priority Housing Needs Summary Table**

PRIORITY HOUSING NEEDS (Households)		Priority Need Level High, Medium, Low		Unmet Need [See Table 24 - CHAS Table 1C – All Households]	Multi Year Goals
Renter	Small Related	0-30%	H	1970	1
		31-50%	H	3065	2
		51-80%	H	3075	3
	Large Related	0-30%	M	830	2
		31-50%	M	1030	8
		51-80%	M	1235	15
	Elderly	0-30%	M	615	2
		31-50%	M	425	2
		51-80%	M	274	1
	All Other	0-30%	L	1480	0
		31-50%	L	2005	0
		51-80%	L	3510	0
Owner		0-30%	H	3540	25
		31-50%	H	5018	30
		51-80%	H	10662	120
Special Needs		0-80-%	L	500	8
Total 215 Goals					219
Total 215 Renter Goals					36
Total 215 Owner Goals					175

Table 3B
(HUD Table 2A)
PRIORITY HOUSING ACTIVITIES

PRIORITY HOUSING ACTIVITIES	Priority	Multi-Yr	Annual
		Goals	Goals
CDBG			
Acquisition of existing rental units	N	0	0
Production of new rental units	N	0	0
Rehabilitation of existing rental units	N	0	0
Rental assistance	N	0	0
Acquisition of existing owner units	N	0	0
Production of new owner units	N	0	0
Rehabilitation of existing owner units	H	50	10
Homeownership assistance	N	0	0
HOME			
Acquisition of existing rental units	N	0	0
Production of new rental units	N	0	0
Rehabilitation of existing rental units	N	0	0
Rental assistance	N	0	0
Acquisition of existing owner units	L	5	1
Production of new owner units	H	42	8
Rehabilitation of existing owner units	H	50	10
Homeownership assistance	H	50	10
HOPWA			
Rental assistance	N/A	N/A	N/A
Short term rent/mortgage utility payments	N/A	N/A	N/A
Facility based housing development	N/A	N/A	N/A
Facility based housing operations	N/A	N/A	N/A
Supportive services	N/A	N/A	N/A
Other			

The goals are derived largely from resources expected to be available from the CDBG, HOME and ADDI grant funds awarded to Gwinnett County and applied to the CHAS Table 1C households reporting “any housing problems.” Gwinnett County has no control over the award of additional funds by HUD or other agencies or the lending or granting of private resources for the acquisition, construction, or rehabilitation of housing units. Additional funds from these resources will help address the unmet needs listed in **Tables 3A and 3B**.

The goals are also depicted in another more specific format, in conformance with HUD’s Performance Measurements requirements in Table 3C (HUD Table 2C9).

**Table 3C
(HUD Table 2C)
Housing Activities
Summary of Specific Housing/Community Development Objectives
(Table 2A/2B Continuation Sheet)**

Specific Obj.	Outcome/Objective	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
DH-1 Availability/Accessibility of Decent Housing							
DH-1.1	New construction of affordable housing for first-time homebuyers – Five Year Goal: 42	HOME	Number of affordable homeowner units constructed	2009	10		
				2010	8		
				2011	8		
				2012	8		
				2013	8		
		MULTI-YEAR GOAL				42	
DH-2 Affordability of Decent Housing							
DH-2.1	Principal reduction (downpayment assistance) and closing cost reduction for first-time homebuyers – Five Year Goal: 50 Rehabilitate owner-occupied housing – Five Year Goal: 100 Acquire/Rehabilitate affordable rental housing - Five Year Goal – 36 Units	HOME/ADDI	Number of low-income households assisted Number of first-time homebuyers	2009	30		
				2010	66		
				2011			
		CDBG/HOME	Number of homeowner units brought to standard condition	2012	30		
				2013	30		
		HOME	Number of rental units brought to standard condition	2013	30		
MULTI-YEAR GOAL				186			
DH-3 Sustainability of Decent Housing							
DH-3.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
		MULTI-YEAR GOAL					

**Table 3C
(HUD Table 2C)
Housing Activities
Summary of Specific Housing/Community Development Objectives
(Table 2A/2B Continuation Sheet)**

Table 2C Summary of Specific Objectives

Specific Obj.	Outcome/Objective	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
SL-1 Availability/Accessibility of Suitable Living Environment							
SL-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
SL-2 Affordability of Suitable Living Environment							
SL-2.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
SL-3 Sustainability of Suitable Living Environment							
SL-3.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			

**Table 3C
(HUD Table 2C)
Housing Activities
Summary of Specific Housing/Community Development Objectives
(Table 2A/2B Continuation Sheet)**

Specific Obj.	Outcome/Objective	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
EO-1 Availability/Accessibility of Economic Opportunity							
EO-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
EO-2 Affordability of Economic Opportunity							
EO-2.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
EO-3 Sustainability of Economic Opportunity							
EO-3.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			

**Table 3C
(HUD Table 2C)
Housing Activities
Summary of Specific Housing/Community Development Objectives
(Table 2A/2B Continuation Sheet)**

Specific Objectives	Outcome/Objective	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
NR-1 Neighborhood Revitalization							
NR-1.1	N/ .			2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							
O-1							
O-1.1	N/ .			2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							
				2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							

TABLE 4: CHAS Table 1C - All Households

Name of Jurisdiction: Gwinnett County, Georgia Source of Data: CHAS Data Book						Data Current as of 2000			
Household by Type, Income, & Housing Problem	Renters					Owners			
	Elderly (1 & 2 Member) Households	Small Related Households (2 to 4 persons)	Large Related Households (5 or more)	All Other Households	Total Renters	Elderly (1 & 2 Member) Households	All Other Households	Total Owners	Total Households
	(A)	(B)	(C)	(D)	(E)	(F)	(I)	(J)	(L)
1. Extremely Low & Very Low Income	1,770	5,780	1,924	4,180	13,654	4,518	7,809	12,327	25,981
2. Extremely Low Income (0% to 30% AMI)	1,070	2,450	849	2,005	6,374	1,934	3,120	5,054	11,428
3. % with any housing problems	57.5	80.4	97.8	73.8	78.4	60.4	76.0	70.0	73.8
4. % Cost Bur den >30%	57.5	76.9	91.9	72.8	75.8	60.2	72.8	68.0	71.5
5. % Cost Burden >50%	47.7	70.8	77.7	69.1	62.4	44.0	65.6	57.4	62.9
6. Very Low Income (31% to 50% AMI)	700	3,330	1,075	2,175	7,280	2,584	4,689	7,273	14,553
7. % with any housing problems	60.7	92.0	95.8	92.2	82.2	40.0	85.0	69.0	79.3
8. % Cost Bur den >30%	60.7	88.6	79.1	92.2	78.1	39.6	82.4	67.2	76.4
9. % Cost Burden >50%	34.3	24.2	17.7	44.4	25.7	22.4	49.1	39.6	34.9
10. Low Income (51% to 80% AMI)	489	5,820	1,855	6,035	14,199	3,485	15,202	18,687	32,886
11. % with any housing problems	56.0	52.8	66.6	58.2	42.1	31.3	63.0	57.1	57.1
12. % Cost Bur den >30%	56.0	44.2	19.4	55.8	34.6	31.3	58.1	53.1	50.2
13. % Cost Burden >50%	8.0	1.0	1.7	2.4	2.1	7.7	13.7	12.6	7.9
14. Moderate to Upper Income (80% and greater AMI)	785	12,990	2,515	11,550	27,840	8,980	106,535	115,515	143,355
15. % with any housing problems	4.5	13.0	53.1	8.0	9.1	6.9	11.4	11.1	11.7
16. % Cost Bur den >30%	4.5	4.0	8.0	3.9	2.8	6.7	9.1	8.9	7.9
17. % Cost Burden >50%	1.3	0.1	0.0	0.1	0.3	6.0	0.8	8.0	6.0
18. Total Households	3,044	24,590	6,294	21,765	55,693	16,983	129,546	146,529	202,222
19. % with any housing problems	44.3	40.0	70.4	36.3	42.2	23.0	21.7	21.8	27.4

TABLE 5: CHAS Table 1C – White Non-Hispanic Households – Housing Problems

Name of Jurisdiction: Gwinnett County, Georgia		Source of Data: CHAS Data Book			Data Current as of: 2000				
Household by Type, Income, & Housing Problem	Renters				Owners				Total Households
	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Renters	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Owners	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
1. Extremely Low & Very Low Income	1,495	2,265	2,205	5,965	4,195	3,245	1,420	8,860	14,825
2. Extremely Low Income (0% to 30% AMI)	895	895	1,120	2,910	1,725	1,160	720	3,605	6,515
% with any housing problems	53.1	78.8	71	67.9	60.6	73.3	70.1	66.6	67.2
3. Very Low Income (31% to 50% AMI)	600	1,370	1,085	3,055	2,470	2,085	700	5,255	8,310
% with any housing problems	58.3	88.3	89.9	83	39.3	82.7	82.9	62.3	69.9
4. Low Income (51% to 80% AMI)	460	3,105	3,535	7,100	3,320	8,065	2,325	13,710	20,810
% with any housing problems	57.6	48	57.6	53.4	29.8	55.7	67.5	51.4	52.1
5. Moderate to Upper Income (80% and greater AMI)	665	7,535	7,185	15,385	8,595	74,305	12,060	94,960	110,345
% with any housing problems	4.5	8.7	5.5	7	6.6	7.8	15	8.6	8.4
6. Total Households	2,620	12,905	12,925	28,450	16,110	85,615	15,805	117,530	145,980
% with any housing problems	42.7	31.5	32.5	33	22.2	15	28.2	17.8	20.7

TABLE 6: CHAS Table 1C – Black Non-Hispanic Households – Housing Problems

Name of Jurisdiction: Gwinnett County, Georgia		Source of Data: CHAS Data Book			Data Current as of: 2000				
Household by Type, Income, & Housing Problem	Renters				Owners				Total Households
	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Renters	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Owners	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
1. Extremely Low & Very Low Income	125	2,125	1,200	3,450	190	640	165	995	4,445
2. Extremely Low Income (0% to 30% AMI)	70	870	480	1,420	120	260	70	450	1,870
% with any housing problems	78.6	86.2	89.6	87	58.3	82.7	71.4	74.4	84
3. Very Low Income (31% to 50% AMI)	55	1,255	720	2,030	70	380	95	545	2,575
% with any housing problems	72.7	94.4	95.8	94.3	50	90.8	68.4	81.7	91.7
4. Low Income (51% to 80% AMI)	14	1,935	1,715	3,664	55	1,330	405	1,790	5,454
% with any housing problems	71.4	54	56	55	54.5	66.9	84	70.4	60
5. Moderate to Upper Income (80% and greater AMI)	55	4,105	3,035	7,195	115	7,510	2,075	9,700	16,895
% with any housing problems	0	18.5	6.9	13.5	30.4	17.2	22.4	18.5	16.3
6. Total Households	194	8,165	5,950	14,309	360	9,480	2,645	12,485	26,794
% with any housing problems	54.1	45.8	38.5	42.9	47.2	28.9	34.8	30.7	37.2

TABLE 7: CHAS Table 1C – Hispanic Households

Name of Jurisdiction: Gwinnett County, Georgia		Source of Data: CHAS Data Book			Data Current as of: 2000				
Household by Type, Income, & Housing Problem	Renters				Owners				Total Households
	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Renters	Elderly 1 & 2 Member Households	Family Households	All Other Households	Total Owners	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	
1. Extremely Low & Very Low Income	55	2,250	420	2,725	49	1,095	70	1,214	3,939
2. Extremely Low Income (0% to 30% AMI)	55	1,025	195	1,275	20	365	60	445	1,720
% with any housing problems	72.7	89.3	82.1	87.5	50	87.7	58.3	82	86
3. Very Low Income (31% to 50% AMI)	0	1,225	225	1,450	29	730	10	769	2,219
% with any housing problems	N/A	96.7	95.6	96.6	86.2	93.2	100	93	95.3
4. Low Income (51% to 80% AMI)	4	1,805	375	2,184	14	1,285	100	1,399	3,583
% with any housing problems	100	67.6	61.3	66.6	28.6	76.3	80	76.1	70.3
5. Moderate to Upper Income (80% and greater AMI)	15	2,285	650	2,950	119	3,575	285	3,979	6,929
% with any housing problems	0	51.9	33.8	47.6	3.4	32	15.8	30	37.5
6. Total Households	74	6,340	1,445	7,859	182	5,955	455	6,592	14,451
% with any housing problems	59.5	71.1	57.1	68.4	23.6	52.5	37.4	50.6	60.3

**TABLE 8A
HUD Table 1C
Homeless Activities
Summary of Specific Objectives
(Table 1A/1B Continuation Sheet)**

Specific Obj.	Outcome/Objective # Specific Objectives	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
DH-1 Availability/Accessibility of Decent Housing							
DH-1.1				2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							
DH-2 Affordability of Decent Housing							
DH-2.1	Help prevent homelessness of low-income individuals and families	ESG	Number of adults and children served	2009	100		
				2010	100		
				2011	100		
				2012	100		
				2013	100		
MULTI-YEAR GOAL					500		
DH-3 Sustainability of Decent Housing							
DH-3.1				2009	800		
				2010	800		
				2011	800		
				2012	800		
				2013	800		
MULTI-YEAR GOAL					4000		

**Table 8B
HUD Table 1C
Homeless Activities
Summary of Specific Objectives
(Table 1A/1B Continuation Sheet)**

Specific Obj.	Outcome/Objective Specific Objectives	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
SL-1 Availability/Accessibility of Suitable Living Environment							
SL-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							
SL-2 Affordability of Suitable Living Environment							
SL-2.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
MULTI-YEAR GOAL							
SL-3 Sustainability of Suitable Living Environment							
SL-3.1	Address the emergency shelter needs of homeless persons, including individuals, families, adults, and youth. – Five Year Goal: 4,000	ESG	Number of adults served: 1500 Number of children served: 2500	2009	820		
				2010	820		
	Address the transitional Housing Needs of homeless persons, including individuals, families, adults, and youth. – Five Year Goal:	SHP		2011	820		
				2012	820		
				2013	820		
MULTI-YEAR GOAL				4100			

**Table 8B
HUD Table 1C
Homeless Activities
Summary of Specific Objectives
(Table 1A/1B Continuation Sheet)**

Specific Obj.	Outcome/Objective # Specific Objectives	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
EO-1 Availability/Accessibility of Economic Opportunity							
EO-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
EO-2 Affordability of Economic Opportunity							
EO-2.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
EO-3 Sustainability of Economic Opportunity							
EO-3.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
MULTI-YEAR GOAL							

**Table 8B
HUD Table 1C
Homeless Activities
Summary of Specific Objectives
(Table 1A/1B Continuation Sheet)**

Specific Obj.	Outcome/Objective # Specific Objectives	Sources of Funds	Performance Indicators	Year	Expected Number	Actual Number	Percent Completed
NR-1 Neighborhood Revitalization							
NR-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
O-1 Other							
O-1.1	N/A			2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			
 							
				2009			
				2010			
				2011			
				2012			
				2013			
				MULTI-YEAR GOAL			

OTHER HOUSING ISSUES

Environmental Quality - Lead-Based Paint Hazard

Lead-based paint is a growing health and environmental concern nationally, and to a lesser extent in Gwinnett County. Lead is the number one environmental health hazard to American children. An estimated 10-15% of all preschoolers in the United States are affected by lead poisoning. Most lead poisoning results from exposure to lead paint dust. The irreversible health effects of lead poisoning include IQ reductions; reading and learning disabilities; decreased attention span; and hyperactivity and aggressive behavior.

Lead was banned from residential paint in 1978. Older homes are more likely to have lead-based paint than newer homes. An estimated 90% of dwelling units built before 1940 have lead-based paint in the interior or on the exterior, while 62% of homes built between 1960 and 1979 have lead-based paint. The age of the unit is the only attribute for which the differences between categories are significant.

Housing units identified in **Table 9** reflect the estimated "incidence" (existence) of lead-based paint based on the year of construction of the housing. Only units that have been inspected as a part of Gwinnett federally assisted housing activities will have been tested for the presence of "lead-based paint hazards."

"Lead-Based Paint Hazard" means any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the appropriate Federal agency. The only way to determine hazards is to test for lead in dust, soil, deteriorated paint, chewable paint surfaces, friction paint surfaces, impact paint surfaces, and children.

Gwinnett County had the fewest units with the potential incidence of LBP (31,192 units) and the lowest percentage (23%) because housing development in the 1980's more than doubled the units previously available. Because two-thirds of the units were built after 1980, the incidence of lead-based paint is much lower in Gwinnett County. Approximately 5,130 units were occupied by very low-income households, and 14,586 units are occupied by other low-income households.

Tables 9 and Table 10 depict the estimated presence of lead in housing according to the age of housing in Gwinnett County.

Table 9
Estimated Number of Housing Units With Expected
Incidence of Lead-Based Paint [LBP]
Gwinnett County

Year Built	# Units	Estimated # with LBP
1980 and After	113,095	0
1960-1979	40,967	25,400
1940-1959	5,177	4,142
Before 1940	1,833	1,650
Totals	161,072	31,192

The year of construction of housing is the key variable for estimating the number of housing units with lead-based paint. Nationally, the percentage of units containing lead increases with the age of the structure. These figures include estimates of all housing with some lead-based paint, no matter how little. The estimates show incidence of lead-based paint, not demonstrated hazards. The following national percentages were applied to housing stock in the Consortium to arrive at the figures in the table above.

Table 10
Estimated Percentage of Housing Units
Expected to Possess Lead-Based Paint
Gwinnett County

Year Built	Percent with Lead-Based Paint
After 1980	0%
1960-1979	62%
1940 -1959	80%
Before 1940	90%

Testing of individual housing units requesting Housing Rehabilitation or Downpayment Assistance is necessary to determine the actual incidence of lead-based paint. Decisions on which units which to be tested to determine if they contain Lead Based Paint, is determined initially by the age of the structure and from a visual inspection of the structures.

Children with blood lead poisoning in Gwinnett County are almost non-existent, with only rare reports of incidents reported to the Gwinnett County Board of Health or the Gwinnett County Department of Family and Children Services. Neither organization has any current case load for lead poisoning.

Table 11 is an estimate of the number of housing units with lead-based paint by age of housing stock and income category of occupants:

Table 11
Estimate of Housing Units in Gwinnett County
With Lead-Based Paint
By Income Group and Age of Housing Stock

Income Group	Years of Construction of Housing Units		
	Before 1940	1940 – 1959	1960 - 1979
0-50% MFI [Very Low Income]	696	1,342	3,292
51% - 80% MFI [Low Income]	474	1,710	12,402
Other Households	480	1,090	9,706
Total Housing Units With Possible Lead-Based Paint Hazards	1,650	4,142	25,400

FAIR HOUSING

Gwinnett County completed the Analysis of Impediments to Fair Housing Choice [“A.I.”] in 1998, prepared by Metro Fair Housing Services, Inc. The “A.I.” contained seven impediments:

- 1) Fair Housing audits revealed significant levels of disparate and/or discriminatory treatment based on race among housing providers in the rental, sales and lending markets.
- 2) Disability tests conducted at new multifamily housing units (apartment complexes) showed significant levels of handicap accessibility violations.
- 3) Availability of affordable housing is insufficient in meeting the needs of low-to-moderate-income families in both apartment rental and single-family home purchases.

- 4) Lack of emphasis on affordable housing community awareness and homebuyer education programs.
- 5) Code sections in the current zoning ordinances are not in compliance with recent fair housing court decisions as they relate to the definition of personal care homes.
- 6) The County does not have an established fair housing enforcement program.
- 7) The County does not have a fair housing ordinance.

Recommendations from the "A.I." were utilized to develop a local "action plan" to address the impediments identified in the "A.I.". Gwinnett County utilized the recommendations from the "A.I." and contracted with Gwinnett Housing Resource Partnership [GHRP], a HUD-certified Fair Housing and Housing Counseling agency, to assist with the implementation of the local action plan to address the identified impediments to fair housing choice in Gwinnett County. The implementation actions were initiated during 2001, and continued through the time when this document was prepared. Progress on addressing the impediments is contained in the Consolidated Annual Performance and Evaluation Reports for all years of the Plan period and later years, if needed.

Gwinnett County will initiate the preparation of a new "A.I." during the first year of the Plan period. The number of minority residents in Gwinnett County has risen both as total numbers of individuals and as a percentage of the overall population. Therefore, Fair Housing activities will take on a greater importance during the Plan period.

Public and Assisted Housing.

Presented below is information pertaining to the number of public housing units and the physical condition of such units; restoration and revitalization needs; needs of tenants and applicants on waiting lists for available units (Section 504 needs assessment); and public housing agencies' strategy for improving management and operation and for improving the living environment. Authorities participating in a HUD Comprehensive Grant Program (modernization) are also presented.

a. Public Housing Inventory

Traditionally, assisted housing has consisted of public housing owned and operated by housing authorities for low-income households and for elderly or disabled persons. Three Public Housing Authorities (PHA) in Gwinnett County, operate 441 housing units (Buford Housing Authority: 186 units; Lawrenceville Housing Authority: 212 units; and Norcross Housing Authority: 44 units). Currently, the demand for low cost housing far outweighs the supply of public housing units. With occupancy rates running at 99%, there is an approximate waiting period of 3 to 48 months for a unit operated by these authorities. When waiting lists are open, federal preferences are used, no local preferences are used.

Units have been modernized in all of the authorities. In addition, Gwinnett County has weatherized units in Lawrenceville and Norcross to help reduce energy costs for the residents.

Location	0/1 BR	2 BR	3 + BR	Totals
Buford	32	77	77	186
Lawrenceville	73	77	62	212
Norcross	10	21	12	43
TOTALS	115	175	151	441

Gwinnett County is not aware of any potential loss of public housing units.

b. Section 8 Units

The Georgia Department of Community Affairs operates the Section 8 tenant-based program in Gwinnett County. All of the housing complexes with Section 8 units have waiting lists ranging from two to eight years, and all use federal preferences for placing persons/families with greatest immediate need. Most recipients of Section 8 assistance receive Section 8 Vouchers, rather than receiving project-based Section 8; however the following is a list of Project Based Section Units in Gwinnett:

Type of Housing	0/1 BR	2 BR	3 + BR	Totals
Christian Towers II	125	0	0	125
Ambers Apts.	4	16	0	20
Bradford Gwinnett Apts.	18	46	31	95
Wilocks Apts. (8 are handicapped accessible)	8	8	2	18
Westbury Sp. Apt.	8	22	0	30
Broadway Towers	75	0	0	75
TOTALS	238	92	33	363

c. Other Assisted Housing

A total of 140 other assisted units exist in Gwinnett County. One project, Applewood, has 100 zero (0) - one (1) bedroom units for elderly persons and uses Section 202 funds. Christian Terrace has forty units of zero (0) -one (1) bedroom units for mobility handicapped persons. Lilburn Terrace used Section 811 funds to develop the facility. Annandale has approximately one hundred (100) units of special housing for the handicapped of these twelve are HUD Section 202 assisted. United Cerebral Palsy has two group homes for persons with disabilities in Snellville, which house four residents, each.

The number and targeting [income level and type of housing served] of units currently assisted by local, state, or federally funded programs is presented here, where the needs of public housing are summarized in the following table. Following the table is information describing improvements which are being/have been made by the PHA's in Buford, Lawrenceville and Norcross during the Plan period.

**Table 12
(HUD Table 4)
Public Housing Needs
Local Jurisdiction – City of Buford Housing Authority**

Public Housing Need Category	PHA Priority Need Level High, Medium, Low, No Such Need	Estimated Dollars To Address
Restoration and Revitalization		
Capital Improvements	Information Not Available	Information Not Available
Modernization	Information Not Available	Information Not Available
Rehabilitation (Convert Old Office to	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
Expand Maintenance Facility	Information Not Available	Information Not Available
Improved Parking	Information Not Available	Information Not Available
Expand Offices	Information Not Available	Information Not Available
Management and Operations	Information Not Available	Information Not Available
Improved Living Environment	Information Not Available	Information Not Available
Neighborhood Revitalization (non-	Information Not Available	Information Not Available
Capital Improvements [Central A/C	Information Not Available	Information Not Available

Safety/Crime Prevention/Drug	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
Economic Opportunity	Information Not Available	Information Not Available
Resident Services/Family Self	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
Total	Information Not Available	Information Not Available

**Table 13
(HUD Table 4)
Public Housing Needs
Local Jurisdiction – City of Lawrenceville Housing Authority**

Public Housing Need Category	City PHA Priority Need Level High, Medium, Low, No Such Need	Estimated Dollars To Address
Restoration and Revitalization		
Capital Improvements	H	\$75,000
Modernization	H	\$869,410
Rehabilitation	N	\$0
Other (Specify)		
Dwelling Unit Equipment	H	\$100,000
Non-dwelling structures	H	\$100,000
Management and Operations	H	\$3,420,460
Improved Living Environment		
Neighborhood Revitalization (non-capital)	N	
Capital Improvements	N	
Safety/Crime Prevention/Drug Elimination	H	\$135,000
Other (Specify)		
Economic Opportunity		
Resident Services/Family Self Sufficiency	N	
Other (Specify)		
After-school centers (2)	H	\$250,000
Transportation	H	\$100,000
Computer Lab for Adult Education	H	\$280,000
Total		\$5,329,170

**Table 14
(HUD Table 4)
Public Housing Needs
Local Jurisdiction – City of Norcross Housing Authority**

Public Housing Need Category	PHA Priority Need Level High, Medium, Low, No Such Need	Estimated Dollars To Address
Restoration and Revitalization		
Capital Improvements	Information Not Available	Information Not Available
Modernization	Information Not Available	Information Not Available
Rehabilitation	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
	Information Not Available	Information Not Available
	Information Not Available	Information Not Available
	Information Not Available	Information Not Available
Management and Operations	Information Not Available	Information Not Available
Improved Living Environment	Information Not Available	Information Not Available
Neighborhood Revitalization (non-	Information Not Available	Information Not Available
Capital Improvements	Information Not Available	Information Not Available
Safety/Crime Prevention/Drug	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
Economic Opportunity	Information Not Available	Information Not Available
Resident Services/Family Self	Information Not Available	Information Not Available
Other (Specify)	Information Not Available	Information Not Available
Total	Information Not Available	Information Not Available

a. PUBLIC HOUSING IMPROVEMENTS

Each of the local public housing authorities has taken steps to improve the management and operations of the housing authorities and will continue their efforts this year. Such activities to encourage public housing residents to become more involved in management are described in **Tables 12-14**.

BUFORD HOUSING AUTHORITY (BHA)

Management and Operations: The BHA provides 186 units of low-rent housing for very low- and low-income households. The demand for units is high, and BHA is working to reduce the turn-over time in order to house new families in need of affordable housing. In terms of housing improvements and maintenance issues, BHA is improving the response time for work requests.

Living Conditions: The BHA is actively working to improve the living conditions of the existing housing units through several measures including interior modernization with CIAP funds and installation of storm windows for increased energy efficiency. A lead-based paint abatement program is also underway. Security is increasing with the installation of security entrance doors to public housing developments. Accessibility to the homes is also improving with Section 504 to provide accessibility to persons with Disabilities to 112 units with \$80,000.

LAWRENCEVILLE HOUSING AUTHORITY (LHA)

Management and Operations: LHA provides 212 units of rental housing for very low- and low-income households. The LHA provides a forum for tenant participation through periodic tenant meetings.

Living Conditions: A program to increase resident safety and eliminate illegal drugs from the public housing communities will continue. LHA is also working in partnership with the Lawrenceville Police Department, the Gwinnett Sheriff's Office, the University of Georgia, and several other agencies to establish programs on-site for both children and adults. Such programs will include: GED Training, Tutoring and Counseling, Arts and Crafts, Karate and Dance Classes, Girl Scouts and Boy Scouts, and Senior Citizen Days. The LHA provides computer labs for adult education and after-school programs for its residents.

NORCROSS HOUSING AUTHORITY (NHA)

Management and Operations: The NHA provides 44 units of affordable public rental housing for very-low- and low-income households. Management and operations have improved in part because of a Lease Update.

Living Conditions: The units provided by NHA will be improved with several energy saving and aesthetic improvements. For instance, new storm doors have been installed at outdoor exits and interior doors have been replaced with wooden doors. Energy saving windows have also been installed to improve energy efficiency. In individual units, florescent lighting has been installed in the kitchens. Using CDBG Program assistance from Gwinnett County, the NHA replaced heating and air-conditioning systems in all of its 44 units of Public Housing.

BARRIERS TO AFFORDABLE HOUSING

Described here is the relationship of local public policies (tax policies, land use controls, zoning ordinances, building codes, fees and charges, growth limits, policies on return of residential investment) to the cost of housing or incentives to develop, maintain, or improve affordable housing.

Public Policies

The Consolidated Plan seeks to identify public policies and practices which may hinder the process of developing and preserving affordable housing. The Plan will be used to communicate information to County officials which might be used to affect changes in policies.

The major policy issues identified as barriers to developing affordable housing and suggested responses are discussed in this section.

Issue 1. Local Building Requirements

Current codes and zoning classifications offer developers in Gwinnett County limited flexibility to produce adequate housing that is affordable to many moderate- and low-income families. Code items which are seen as having the most impact on housing costs include: minimum square footage and minimum lot size requirements; and certain infrastructure requirements. Gwinnett County's "Conservation Subdivisions" may help with the affordability problem, over time.

Responses: Possible Modification of Local Building Requirements

Other communities around the state and nation have demonstrated that it is possible to modify development standards to permit development of more affordable housing while maintaining building and neighborhood quality. The County could evaluate the establishment of an affordable housing zoning classification which will allow developers and builders to construct more affordable housing. For example, a new classification should allow smaller units, greater density, reduced setbacks through easements, and other techniques for reducing the cost of development.

A part of the evaluation might be to propose for consideration to the Department of Planning and Development, that it could identify and revise development standards which could be changed to facilitate affordable housing creation. Possible modifications include: reducing right-of-way requirements on certain local streets; reducing interior setbacks; and waiving sidewalk requirements under certain conditions, by allowing some flexibility of site design, such as house placement, easements, and street widths. County and City governments can facilitate the development of affordable housing with thoughtful impact analysis of existing policies on affordable housing.

The construction or conversion of structures for housing in designated "mixed-use" areas of Gwinnett County may also offer opportunities to develop more affordable housing. Similarly, Gwinnett County's increasing focus on revitalization and redevelopment since 2000 may provide opportunities to redevelop older areas of the County to include more affordable housing.

Issue 2. Burdensome Federal and State Regulations

Federal and state programs and regulations often place requirements on local jurisdictions which drive up the cost of development. They frequently do not allow the flexibility needed for local communities to devise cost efficient solutions to their particular affordable housing problems.

Responses: Reduce Federal and State Regulations

Gwinnett County will work with and encourage the Congressional delegation and state representatives to pass legislation which allows local jurisdictions flexibility in funding allocations. Such legislation could

possibly focus on increasing local Block Grant capacity rather than programs that are very limited in scope. Efforts should also be made to establish procedures for reconciling conflicting requirements between the Federal, state and local levels, including elimination of redundant regulations. The CDP will continue to identify other negative policy barriers, so that they may be addressed and dealt with accordingly.

Issue 3. Historically Weak Policies to Preserve Existing Housing Stock

Gwinnett 2020, A Comprehensive Plan for Gwinnett County, Georgia addresses preservation of existing housing stock for affordable housing. Many inhabited units suffer from deferred maintenance and continue their decline until rehabilitation is not feasible. Some vacant and abandoned units go unattended.

Responses: Preserve Existing Affordable Housing Stock

Preservation of existing housing stock is a more cost effective method of creating and maintaining affordable housing compared to new construction. Renovation costs in Gwinnett County are typically less than \$40,000 per unit, while most new construction costs more than \$180,000 per unit. The County provides rehabilitation assistance to homeowners and renters. The CDP continue to provide comprehensive rehabilitation funds and emergency repairs, where conditions on housing units present an immediate threat to the health and safety of the residents.

In 2005, Gwinnett County implemented a concentrated code enforcement program in certain targeted areas and has subsequently expanded the program countywide. This new Quality of Life Program of the Gwinnett County Police Department is providing concrete action by the County to help preserve the housing and building stock in the County.

Issue 4. Lack of Public/Private Partnerships with Financial Institutions

More lender involvement in affordable housing efforts is needed.

Responses: Build Partnerships with Financial Institutions

Gwinnett County has built strong relationships with local financial institutions to help with the development of the County. The County and its non-profit partner, such as The IMPACT! Group, work with lenders to help them meet their Community Reinvestment Act (CRA) obligations. The CRA activities by lenders help build stronger neighborhoods by: identifying credit needs and market opportunities in low- and moderate-income areas; developing sound products to meet those needs; and promoting services to target markets. Further, such partnership collaborations may include development of products which leverage public resources, reduce bank risk, and meet critical community needs. Programs may include affordable home mortgages, home improvement loans, and home buyer education.

Issue 5. Need for More Affordable Housing Community Awareness and Homebuyer Education

Many residents of Gwinnett County hold misperceptions of affordable housing and are not aware of the critical needs in the county. Homebuyer Education programs are growing, but need to be strengthened and expanded.

Responses: Increase Education and Awareness about Affordable Housing Issues

Gwinnett County will assist agencies and organizations which educate citizens and stakeholders in the affordable housing process. The homeowner education programs being carried out by The IMPACT! Group are being carried out, in part, with grant funds from HUD, and additional HUD grant funds awarded by Gwinnett County.

The County will work with The IMPACT! Group to provide a clearer understanding of affordable housing issues in Gwinnett County for lenders, realtors, builders and developers, homeowners associations, the general public, local officials, building inspectors, and civic organizations.

Other outreach will focus on issues such as informing the public about the need for affordable housing, reducing fears and resistance often put forth by neighborhood organizations which fear a reduction in their property values if affordable housing is constructed.

As development costs continue to rise, new approaches to affordable housing will be necessary. Techniques such as mixed-use development may help make such development more acceptable for all.

HOUSING PRIORITY ANALYSIS AND STRATEGY DEVELOPMENT

AFFORDABLE HOUSING

GOAL AH: Increase access to affordable housing for low and moderate-income persons.

I. Analysis

Affordability is a critical issue for low and very low-income households living in Gwinnett County.

A. Affordable Rental Housing

Affordable rental properties are critical to the stability of the community. At least one-third of the households cannot reasonably afford to purchase a home, and almost one-fourth cannot afford to rent decent housing.

More than three-fourths (76.9%) of all renters earning 0-30% of the median family income experience a cost burden for housing; that is, they pay more than 30% of their income for housing expenses. Two-thirds of them [67%] have a severe cost burden, paying more than 50% of their income for housing costs.

Very low-income renter households earning 31-50% of median family income face cost burdens also. Eighty-five percent (85%) of them experience a cost burden and 30% experience a severe cost burden.

Other low-income renters [earning 51-80% of the median family income] also experience housing affordability problems. Almost half of them (46.2%) report a cost burden, and 1.7% report a severe cost burden for housing costs.

There simply are not enough affordable rental units available in the Count. Large affordable rentals with three (3)-four (4) bedrooms, in particular, are too expensive for low-income families. At the same time, many apartment complexes are struggling to manage high vacancy rates. This mismatch in the market place results in overcrowding in some cases, deteriorating housing stock in others, and an increase in evictions and homelessness.

A higher percentage of elderly and large households have cost burdens in every income category.

B. Affordable Housing for Homeowners and First-Time Homebuyers

Most of the recent housing development in Gwinnett County has been for higher-priced homes. Escalating land and construction costs have priced the low- and moderate-income family out of the marketplace. The inventory of affordable homes for sale at less than \$150,000 is very small and is shrinking as housing costs rise.

Potential low- and moderate-income homebuyers often face the challenge of having enough cash at closing for the downpayment and closing costs. Credit is also an issue for many who live paycheck to paycheck and lack budgeting skills.

C. Obstacles

The County faces obstacles ranging from general NIMBY ["Not In My Back Yard"] attitudes to technical issues such as limited numbers existing nonprofit housing developers or private developers willing to construct affordable housing for low-income homebuyers. Financial resources are extremely limited to help nonprofits developers develop their internal capacity building and housing initiatives.

II. Strategy Development - Investment Plan [Activities and Programs]

Generally, Gwinnett County is using its resources to help those most in need. Affordable housing needs include homeownership opportunities and assistance, affordable rental units, and rental assistance. Downpayment assistance programs for first-time home buyers are a tool to help make housing more affordable. The primary activity employed to address affordable rental housing will be housing rehabilitation and neighborhood revitalization. The County will work with agencies to help them obtain rental rehabilitation assistance and to obtain rental assistance to reduce the cost burden for very low- and other low-income households. The County also provides technical assistance to nonprofits and for-profit developers working to build or rehabilitate affordable housing.

A. Strategy Implementation

1. Investment Plan [Activities and Programs for Each Priority]

(a) Programs and Resources:

Gwinnett County CDP Program uses several resources to help meet the goals of the Consolidated Plan, including Federal programs, state and local programs, and collaborations with private sector sources. Specifically for homebuyer programs, Gwinnett County makes use of or encourages the use of the following programs:

- HUD's CDBG program;
- HUD's HOME Program;
- HUD's American Dream Downpayment Initiative [ADDI]
- Gwinnett County Habitat for Humanity;
- Local Financial Institutions;
- The IMPACT! Group;
- Private real estate developers;
- Federal Home Loan Bank [for member banks]; and Georgia DCA Homeowner Programs.

(b) Plan for Leveraging Private and Non-Federal Funds:

Gwinnett County is committed to leveraging all resources to the greatest extent possible. For example, the County is working with financial institutions to provide mortgages for this target market. The HOME Program-financed Downpayment Assistance Program [HomeStretch] is administered by the County and provides a second mortgage loan. The County provides CDBG Housing Counseling funds to help fund the homebuyer/homeowner education associated with the HomeStretch Program.

Gwinnett County, through its local CHDO (The IMPACT! Group) and other HUD-Certified Housing Counseling Agencies, is working with credit counseling services to promote credit counseling and homebuyer education to help residents prepare for Home ownership. The County plans to increase partnership efforts with local lenders to provide home mortgage credit to more low- and moderate-income potential homebuyers.

Through the education program and the creative financial techniques, the county will aid homebuyers who otherwise would continue to rent because of traditional underwriting criteria. The move of these households to Home ownership will free up affordable rental units to other needy households.

(c) Matching Requirements:

There are no matching requirements for any of the homebuyer programs, except the HOME Program (25% match). The value of the property financed is such that the matching funds are readily available. Gwinnett County is working with financial institutions to develop collaborative programs which will positively leverage the investment of public resources.

(d) Categories of Residents to be Assisted: Very low-income, Low-income, and Moderate-income households of all sizes, based on need.

(e) Plan Period Goals:

For the period 2009-2013, Gwinnett County and private organizations plan to assist residents in the following target groups. All target income groups include elderly and persons with disabilities.

(i) Very Low-Income

Habitat for Humanity of Gwinnett plans to build one new neighborhood in which it will construct between 4 and 12 homes for very low-income families. The development plan will be adjusted according to the buildability/permittability of the site. Other scattered site construction of new homes will include 13 new homes. Habitat will provide HOME Program downpayment assistance to 25 families, including serving the following estimated households: 10 Black/African-American; 10 White/Non-Hispanic; and, 5 White/Hispanic.

(ii) Low-Income

The Downpayment/Closing Cost Assistance Program will serve 10 low-income households, including serving the following estimated households: 7 Black/African-American; 2 White/Non-Hispanic; and, 1 White/Hispanic.

(iii) Moderate-Income

The HomeStretch Downpayment/Closing Cost Assistance Program will serve 50 moderate-income households, including serving the following estimated households: 30 Black/African-American; 15 White/Non-Hispanic; and, 5 White/Hispanic.

(f) Geographic Distribution of Services:

Gwinnett County Habitat for Humanity and The IMPACT! Group programs work countywide. Residents in low-and moderate-income areas, however, are targeted through marketing and outreach efforts.

Through the education program and creative financial techniques, Gwinnett County will aid homebuyers who otherwise would continue to rent because of traditional underwriting criteria. The move of these households to Home ownership will free up affordable rental units to other needy households.

(g) Service Delivery and Management:

Gwinnett County works closely with participating financial institutions and realtors in the Downpayment Assistance Program to ensure the target groups are being served. Primary mortgage loans are made by the private lenders.

The County also works with the Gwinnett County Habitat for Humanity to enable Habitat to construct homes for very low- and low-income households.

(h) Resources

The expected resources to be available to address the needs identified in the Consolidated Plan are

described below. A. Federal Programs

Gwinnett County and its development community (both nonprofit and for-profit) aggressively pursue federal and state resources, as depicted in the following chart, to assist in the production and maintenance of affordable housing.

FEDERAL RESOURCES

PROGRAMS	ACQUIRE	REHAB	NEW CONSTRUCTION	HOME-BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
HOME	X	X	X	X			
ADDI				X			
CDBG		X				X	
SECTION 8					X		
SECTION 8 MOD. REHAB		X					
SECTION 811			X				
SECTION 202			X				
ESG PROGRAM						X	X
FEMA							
SUPPORTIVE HOUSING						X	
HOPWA						X	X
LOW-INCOME HOUSING TAX CREDIT		X	X				

B. Non-Federal Resources

Resources from private and non-federal public sources which are reasonably expected to be made available to address the needs identified in the Plan are included in this matrix. The manner in which federal funds will leverage those additional resources is also presented, including a description of how matching requirements of the HUD Program will be satisfied.

NON FEDERAL RESOURCES

	ACQUIRE	REHAB	NEW CONST.	HOME-BUYER ASSIST.	RENTAL ASSIST.	HOME-LESS ASSIST.	HOME-LESS PREVENT.
LIHTC (LOW INCOME HOUSING TAX CREDIT)	X	X	X				
1ST TIME HOME BUYER PROGRAMS				X			
SECONDARY MARKET	X	X	X				

PRIVATE RESOURCES

FOR-PROFIT

	ACQUIRE	REHAB	NEW CONSTRUCTION	HOME BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
BANKS	X	X	X	X			
FEDERAL HOME LOAN BANK AFFORDABLE HOUSING PROGRAM	X	X	X				

Federal Home Loan Bank Affordable Housing Program

The Affordable Housing Program awards low-cost financing on a competitive basis for affordable housing projects through its Community Investment Program. The CIP provides low-cost funds to member lending institutions for terms of one month to 20 years. These funds can be used for affordable housing projects and serve as an important source of private financing.

Activities are not yet into the development stages in Gwinnett County at this time, but the feasibility of such ventures will be evaluated and perhaps implemented during each of the years during the 2009-2013 Plan period.

NON-PROFIT

	ACQUIRE	REHAB	NEW CONST.	HOME-BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENTION	CAPACITY BUILDING
FOUNDATIONS	X	X	X	X	X	X	X	X
LOCAL CDC/CHDO	X	X	X	X		X	X	
MACF						X		X
FOUNDATION FOR NORTHEAST GEORGIA						X	X	X
UNITED WAY								X

Metropolitan Atlanta Community Foundation (MACF)

MACF, in its original trust form, was developed in 1951 by the City of Atlanta's four major banks to serve a variety of donors and has grown to become the 15th largest community foundation in the country with assets of over \$100 million. MACF was established as a non-profit vehicle for philanthropy, and pools funds to provide grants to support various causes including housing initiatives and capacity building of non-profit organizations in the 19-county metropolitan Atlanta area. Many of the MACF recipients also receive Federal, State, and other local grants which are leveraged with these private funds to support their initiatives.

Foundation for Northeast Georgia

This organization was formerly known as the Gwinnett Foundation. It makes small awards to non-profit organizations, largely for operating costs.

SUBSTANDARD HOUSING

GOAL HR: Eliminate substandard housing for low- and moderate-income individuals, families, and households.

I. Analysis

Gwinnett County has aging owner-occupied and rental properties. Many of the older units are in need of repair; but they also tend to be occupied by those least able to pay for such repairs. Because the County is a growth area, most middle- and upper-income people live in newer units.

Older units, which were built under less stringent building and energy codes, are generally more expensive to maintain than newer homes. They generally require more repair, and therefore, present a cost burden to low-income residents.

A. Owner-occupied Housing Needs Rehabilitation

Very low-income households who own their own homes overwhelmingly report housing problems. Almost (70%) reported housing problems of some kind [in need of repairs, overcrowding, cost burden, severe cost burden]. Some 68% of all very low-income homeowners reported a cost burden to maintain their homes (they pay more than 30% of their income for housing costs). Among those in the lowest income category (0-30% of median family income) 58% of them have a severe cost burden to remain in their homes. Almost 40% of those earning 31-50% of the median family income reported a severe cost burden.

Other low-income homeowners (those earning 51-80% of median family income) experienced housing problems, too. More than one half (57%) reported housing problems, with 53% experiencing a cost burden and 12.5% experiencing a severe cost burden.

B. Obstacles: Insufficient Funding

The chief obstacle to eliminating substandard housing is funding. Because the County is responsible for a large land area, programs operate on a countywide basis, the demand for federal funds (i.e., HOME and CDBG) is spread throughout the community and the results of housing improvements is scattered. Support for enhanced capacity of local community housing development organizations (CHDO's) and other nonprofits can result in greater impact in targeted areas.

C. Code Enforcement

Historically, Gwinnett County has focused more on new housing construction. However, beginning in 2005, the County has moved aggressively to begin code enforcement on existing housing units. This effort will be continued and expanded during the Plan period.

II. Strategy Development - Investment Plan (Activities and Programs)

Gwinnett County operates several programs to address substandard housing. Housing rehabilitation programs are the primary activities planned. Programs include emergency home repairs and rehabilitation of housing. The HUD grant [CDBG and HOME Program] funded programs are described in this section of the Plan and in the respective annual Action Plans for each of the years of the Plan period.

A. Strategy Implementation

1. Investment Plan (Activities and Programs for Each Priority)

Provide opportunities for bringing Gwinnett's existing substandard housing stock up to minimum property standards -- owner-occupied and rental housing.

(a) Programs and Resources:

Gwinnett County uses several resources to help meet the goals of the Consolidated Plan, including Federal programs, state and local programs, and collaborations with private sector sources. Specifically for the programs addressing substandard housing, Gwinnett County makes use of the following programs:

- (1) HUD's CDBG Program
- (2) HUD's HOME Program

Homeowner Housing Rehabilitation

The County use deferred loans and grants in its homeowner housing rehabilitation program. Families are qualified by income, equity, and other qualification factors to determine whether loans or grants are used for their respective rehabilitation.

Under the homeowner housing rehabilitation program, approximately 150 homes will be rehabilitated during the Plan period.

Rental Housing Rehabilitation

The IMPACT! Group is currently the only non-profit housing CDC/CHDO in Gwinnett County which owns affordable rental housing [approximately 250 garden apartments and townhouses]. During the Plan period, The IMPACT! Group will operate these units as affordable housing in accordance with the funding requirements of programs which provided monies to acquire and/or rehabilitate these rental units.

(b) Matching Requirements:

The only matching requirement is for the HOME Program, which requires a 25% match for rehabilitation activities. Gwinnett County is able to utilize the matching value from other HOME-funded activities to generate matching funds for the rehabilitation program.

Categories of Residents to be Assisted: Very low-income, Low-income, Moderate-income, Elderly, and Handicapped households of all household sizes, based on need.

Plan Period Service Goals by Income Group:

For the Plan period, Gwinnett County plans to assist residents in the following target groups:

Very Low-Income (HUD requires 50% or less MFI):

The Homeowner Rehabilitation Program estimates that it will serve 30 households. Approximately 10 of these households will be elderly and 5 disabled, , including serving the following estimated households: 15 Black/African-American; 10 White/Non-Hispanic; and, 5 White/Hispanic.

Low-Income [HUD requires 51% - 80% MFI]:

The Homeowner Rehabilitation Program estimates that it will serve 120 low-income households, 30 of which will be elderly and 5 disabled, , including serving the following estimated households: 80 Black/African-American; 35 White/Non-Hispanic; and, 5 White/Hispanic.

2. Geographic Distribution of Services:

The Housing Rehabilitation Program operates countywide, but efforts are also made to targeted to needy areas in Gwinnett County where substandard housing is prevalent and to the Gwinnett County designated Revitalization Areas. While the County responds to individual requests for assistance, attention is paid to neighborhoods or developments where several units are in need of rehabilitation or repair. The community impact is greatly enhanced when broad improvements are evident in the community.

Specific targeted efforts in Housing Rehabilitation will be carried out during the Plan period in the Liberty Heights Community and in the older cities of the County [Buford, Lawrenceville, and Norcross].

The IMPACT! Group will continue its efforts to complete the rehabilitation of its multi-family properties in the Norcross area.

3. Service Delivery and Management:

All of the programs identified in this description will be managed by the Gwinnett County Community Development Program, administered by W. Frank Newton, Inc., under the direction of the Gwinnett County Department of Financial Services. Rehabilitation work is contracted by homeowners with county-approved rehabilitation contractors. The Gwinnett County Community Development Program provides technical assistance to homeowners to assist them with the Rehabilitation process.

The County and its development community (both nonprofit and for-profit) aggressively pursue federal and state resources, as depicted in the following chart, to assist in the production and maintenance of affordable housing.

4. Resources

A. Federal Resources

FEDERAL RESOURCES

	ACQUIRE	REHAB	NEW CONSTRUCTION	HOME-BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
HOME	X	X	X	X			
CDBG	X	X		X		X	
LIHTC		X	X				

Resources from private and non-federal public sources which are reasonably expected to be made available to address the needs identified in the plan are included in this matrix. The manner in which federal funds will leverage those additional resources is also presented, including a description of how matching requirements of the HUD Program will be satisfied.

B. Non-Federal Resources

Non-federal resources are those unscheduled loan repayments from previous housing rehabilitation loans [CDBG/HOME/ADDI] made to low and moderate-income homeowners by Gwinnett County. These loan repayments are Program Income and are used for eligible activities under each program, as applicable.

PRIVATE RESOURCES

FOR-PROFIT

	ACQUIRE	REHAB	NEW CONST.	HOME - BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
BANKS		X					
FEDERAL HOME LOAN BANK AFFORDABLE HOUSING PROGRAM		X					

Federal Home Loan Bank Affordable Housing program

Affordable Housing Program: The Affordable Housing Program awards low-cost financing on a competitive basis for affordable housing projects. The AHP Community Investment Program: The CIP provides low-cost funds to member institution for terms of one month to twenty (20) years. These funds can be used for affordable housing projects and serve as an important source of private financing.

Activities are not yet into the development stages in Gwinnett County at this time, but the feasibility of such ventures will be evaluated and perhaps implemented during the Plan period.

NON-PROFIT

	ACQUIRE	REHAB	NEW CONST.	HOME-BUYER ASSIST.	RENTAL ASSIST	HOMELESS ASSIST.	HOMELESS PREVENT.	CAPACITY BUILDING
GHRP	X	X	X					

Special Needs Housing

GOAL SNH: Increase Housing and Supportive Services for Individuals and Families with Special Needs.

I. Analysis

Persons with special needs include the elderly, persons with AIDS, persons with severe mental illness, persons with alcohol and/or other drug addiction, single parents and others. Unfortunately, affordable housing and supportive housing for persons with special needs is extremely limited in the county.

Housing with support services [e.g., day care for single parents, nearby health care for elderly] and residential treatment centers have not emerged to meet the growing demand for their services. Long term and permanent facilities are needed for elderly, frail elderly, persons with mental illness, persons with developmental and physical disabilities, and those with alcohol or other drug addiction.

Such facilities should include transitional housing, single room occupancy units, intermediate care, residential treatment/care facilities, and affordable single- and multi-family structures. Health and social services support should be made available with all supportive housing facilities and referrals to ensure wellness, full recovery and/or curtail recidivism.

A. Obstacles

The chief obstacle to providing services can be partially attributed to the lack of federal and state support for programs which address housing needs of persons with special needs. Private sector involvement in this area will be increased only with subsidies or incentives from the government.

II. Strategy Development - Investment Plan (Activities and Programs)

Gwinnett County will work with nonprofits or others seeking to build or expand facilities to serve special needs populations. This will include strengthening nonprofit organizations in their operational and developmental skills. It will also include seeking additional resources which can be passed to nonprofit organizations for development of special needs housing.

A. Strategy Implementation Investment Plan (Activities and Programs for Each Priority):

1.

a. Programs and Resources:

Gwinnett County CDP Program uses several resources to help meet non-homeless special housing needs including Federal programs, state and local programs, and collaborations with private sector sources. Specifically for the programs listed above, Gwinnett County makes use of the following programs:

- (1) HUD's Section 8 Program, which is administered by the State of Georgia, Department of Community Affairs (DCA);
- (2) HUD HOP WA Program;
- (3) HUD Section 811 Program;
- (4) HUD Section 202 Program

b. Plan for Leveraging Private and Non-Federal Funds:

Gwinnett County is committed to leveraging all resources to the greatest extent possible. For example, the County works with HUD and, when possible, the State of Georgia to provide direct assistance to these target groups.

c. Matching Requirements:

There are no matching requirements with these programs.

d. Categories of Residents to be Assisted

Very Low-Income, Homeless, Elderly, Persons with Disabilities.

e. Plan Period Service Goals:

For the 2009-2013 period, HUD will provide PHA funds to Local PHA's in Gwinnett County plans to assist residents in the following target groups:

(i) Very Low-Income Public housing units in

Norcross, Lawrenceville, and Buford:

Buford Housing Authority - 186 units for very low- and low-income residents
Norcross Housing Authority - 44 units for low and moderate-income persons.
Lawrenceville - 212 units - for low and moderate-income residents.

(ii) Elderly

The Buford Housing Authority will serve 87 elderly residents.
The Norcross Housing Authority will provide at least two (2) units for elderly residents.

The Christian Towers II is a private development under construction which recently received Section 202 funds to provide 125 units for elderly residents.

The Center for Pan Asian Community Services will operate its 50 units of Section 202 housing for elderly in South Gwinnett County.

(iii) Persons With Disabilities

The Lilburn Terrace Apartments will provide forty (40) one (1) bedroom units to the mobility impaired adults.

The Wiloaks apartments has eight (8) handicapped units.

Annandale at Suwanee, Inc will serve 87 people with the primary diagnosis of development disability, mental retardation, head injury, and borderline or decreased mental ability.

United Cerebral Palsy of Atlanta constructed 8 units of Section 811-assisted housing in Snellville in 1997. No loss of Section 202 or Section 811 units is expected during the plan period.

HOPWA assistance, if awarded, is estimated to provide housing for 50 very low-income and 50 low-income individuals who have HI V/AIDS.

No loss of public housing units is expected during the plan period.

2. Geographic Distribution of Services:

The Rental Assistance efforts under this priority will be targeted to areas with the greatest identified very low-income populations in Gwinnett County including the areas around Norcross, Buford, and Lawrenceville.

Gwinnett County lacks sufficient decent affordable rental housing stock for very low- and low-income households. Until more affordable housing is created, rental assistance is critical for a growing number of Gwinnett County residents.

3. Service Delivery and Management:

The Local Public Housing Authorities manage their respective public housing units.

Services to the elderly and handicapped will be provided through HUD's Section 202 and Section 811 programs, if funding becomes available. Gwinnett County invites HOME Program applications from organizations which propose to construct housing which will serve Special Needs populations during any year of the Plan period.

4. Resources

The expected federal resources to be available to address the needs identified in the Consolidated Plan are described below.

A. Federal Programs

Gwinnett County and its development community (both nonprofit and for-profit) aggressively pursue federal and state resources, as depicted in the following chart, to assist in the production and maintenance of special needs housing.

FEDERAL RESOURCES

	ACQUIRE	REHAB	NEW CONSTRUC -TION	HOME- BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
HOME	X	X	X				
CDBG	X	X					
SECTION 8					X		
SECTION 811			X		X		
SECTION 202			X		X		

Resources from private and non-federal public sources which are reasonably expected to be made available to address the needs identified in the plan are included in this matrix. The manner in which federal funds will leverage those additional resources is also presented, including a description of how matching requirements of the HUD Program will be satisfied.

B. Non-Federal Resources

NON FEDERAL RESOURCES

No other non-federal resources are identified at this time to fund Special-Needs Housing.

PRIVATE RESOURCES

FOR-PROFIT

	ACQUIRE	REHAB	NEW CONSTRUC -TION	HOME BUYER ASSIST.	RENTAL ASSIST.	HOMELESS ASSIST.	HOMELESS PREVENT.
Banks	X	X	X				

COORDINATION OF HOUSING ACTIVITIES

Gwinnett County will coordinate services between agencies providing housing resources, assisted housing providers and health, mental health and service agencies by enhancing existing coordination mechanisms and developing new relationships. This process will include the following efforts:

1. Gwinnett County will assist the Gwinnett Health and Human Services Coalition in its role of coordinating existing social services and new program development between organizations. Gwinnett will help the Coalition inform additional private non-profit organizations and government agencies on the role which the Coalition carries out in Gwinnett County. The CD Program Office works with all local municipalities and Gwinnett County departments, and can serve to link these entities with the Coalition;
2. Gwinnett County will encourage public-private partnerships between private developers, non-profit housing organizations, and local human services organizations. These partnerships will be aimed at developing affordable housing which best meets the needs of low-income Gwinnett residents, and which helps link supportive services with affordable housing as it is developed. Such efforts will focus on identifying prospective tenants or home buyers and ensuring that they receive the services needed for successful participation in appropriate housing;

3. Gwinnett County will work with the local Public Housing Authorities (PHA) to develop housing options for PHA residents, such as first time homebuyer programs;
4. Gwinnett County will assist The IMPACT! Group, Initiative for Affordable Housing, and any additional organizations designed as Community Housing Development Organizations in their roles as CHDO's and as developers/owners of affordable housing for low and moderate-income persons. This will include helping them: serve as a housing counseling agencies and fair housing agencies, and to strengthen and support for homebuyer assistance, affordable rental housing, special needs housing, and the homeless assistance programs they carry out.
5. Gwinnett County will work with state agencies, such as Georgia Department of Community Affairs (DCA), to link state resources with local organizations such as The IMPACT! Group and Gwinnett County Habitat for Humanity to develop more affordable housing.
6. Gwinnett County will continue its Fair Housing activities by updating its Analysis of Impediments to Fair Housing Choice following the completion of the Consolidated Plan 2009-2013. In subsequent years of the Plan period, Gwinnett County will use HUD grant funds to fund activities which implement the Action Plan recommended in the new A.I.

COMMUNITY DEVELOPMENT
[NON-HOUSING COMMUNITY DEVELOPMENT PLAN]

The Community Development section of the Gwinnett County Consolidated Plan 1998-2005 serves as the Non-Housing Community Development Plan, as required in the Consolidated Plan regulations at 24 CFR 91.215(e).

This component of the Consolidated Plan includes the following items:

1. Community Development Goal;
2. Long and Short Term Priority Objectives;
3. Community Development needs; and
4. Proposed strategies and accomplishments

GOAL: CD Increase the capacity of public facilities and public services to improve the social, economic, and physical environment for low- and moderate-income individuals and families by acquiring, constructing, or rehabilitating public facilities, revitalizing older areas of the County, providing equipment purchased through public services activities, and providing overall program administration and management.

Long Term Priority Objectives:

CDPFLT PUBLIC FACILITIES: To provide for the acquisition, construction, reconstruction, rehabilitation, or installation of public facilities and improvements to: (1) meet health and safety regulations, and (2) upgrade and maintain the viability of neighborhoods where low- and moderate-income families reside; and, (3) revitalize older areas of the County.

CDPSLT PUBLIC SERVICES: To provide the resources necessary to improve the community's public services, including, but not limited to, employment, crime prevention, childcare, physical and mental health, drug abuse, education, energy conservation, transportation, care for the elderly, welfare and recreational needs.

CDADLT ADMINISTRATION/PLANNING/MANAGEMENT: To provide the administrative structure to conduct community development, housing, and homeless activities by planning, implementing, monitoring and evaluating, community development, housing and homeless programs.

Short Term Priority Objectives:

CDST1 To improve existing deteriorated public facilities and infrastructure in low- and moderate-income areas to meet health and safety standards, including but not limited to areas of the County where the physical condition of the public infrastructure and facilities need revitalization.

CDST2 To construct new public facilities and infrastructure in low- and moderate-income areas now lacking such facilities, including but not limited to areas of the County where the physical condition of the public infrastructure and facilities need revitalization.

CDST3 To construct, acquire, and/or renovate public facilities to meet the needs of special population groups such as the elderly, persons with disabilities, homeless persons, and persons suffering from various types of abuse.

CDST 4 To provide funding, support, or technical assistance to assist in the implementation of programs for special population groups such as the elderly, persons with disabilities, homeless persons, and persons suffering from various types of abuse.

CDST5 To provide funding, support, or technical assistance to private non-profit and public agencies meeting

the public service needs of the County's low and moderate-income population.

CDST 6 To encourage the development of and maximize the opportunities for minority and female-owned businesses.

CDST 7 To provide the administrative structure for the planning, implementation, and management of the Community Development Block Grant Program, the Emergency Shelter Grants Program, the HOME Program, the American Dream Downpayment Initiative, and other housing, community development and homeless programs.

Priority non-housing Community Development Needs are described presented in **Table 15** and are also summarized, with proposed performance measures in **Table 16**.

Table 15
(HUD Table 2B)
PRIORITY COMMUNITY DEVELOPMENT NEEDS

PRIORITY COMMUNITY DEVELOPMENT NEEDS	Priority Need Level High, Medium, Low No Such Need	Unmet Priority Need	Estimated Dollars To Address Unmet Priority Need	Multi-Year Goals	Annual Goals
PUBLIC FACILITY NEEDS (Projects)					
Senior Centers [03A]	H	2	\$5,000,000	1	1
Centers for Persons With Disabilities [03B]	H	2	\$500,000	1	1
Homeless Facilities [03 C]	H	1	\$6,000,000	1	1
Youth Centers [03D]	H	2	\$5,000,000	1	1
Child Care Centers [03M]	H	4	\$500,000	1	1
Health Facilities[03P]	H	2	\$12,000,000	2	1
Neighborhood Facilities [03E]	H	2	\$5,000,000	2	1
Parks and/or Recreation Facilities [03F]	M	3	\$300,000	1	1
Parking Facilities [03G]	M	2	\$100,000	2	1
Non-Residential Historic Preservation [16B]	N	0	\$0	0	0
Other Public Facility Needs [03]	N	0	\$0	0	0
Public Facilities Subtotal		20	\$34,400,000.00	12	9
INFRASTRUCTURE (Projects)					
Water/Sewer Improvements [03J]	H	5	\$5,000,000	2	1
Street Improvements [03K]	H	5	\$5,000,000	4	2
Sidewalks [03L]	H	5	\$3,000,000	4	1
Solid Waste Disposal Improvements [03H]	N	0	\$0	0	0
Flood/Drainage Improvements [03I]	H	3	\$5,000,000	2	1
Other Infrastructure Needs [03]	N	0	\$0	0	0
Infrastructure Subtotal		18	\$18,000,000.00	12	5
PUBLIC SERVICE NEEDS (People)					
Senior Services [05A]	M	4	\$1,500,000	500	100
Services for Persons With Disabilities [05B]	M	2	\$1,000,000	2,000	200
Youth Services [05D]	M	4	\$500,000	300	100
Childcare Services [05L]	M	4	\$500,000	200	75
Transportation Services [05E]	H	5	\$500,000	500	100
Substance Abuse Services [05F]	M	1	\$500,000	1,100	0
Employment Training [05H]	M	2	\$1,000,000	100	25
Health Services [05M]	H	2	\$500,000	20,000	20,000
Lead Hazard Screening [05P]	N	0	\$0	0	0
Crime Awareness [05I]	L	1	\$500,000	0	0
Other Public Service Needs [05]	H	0	\$375,000	1,500	300
Public Services Subtotal		26	\$6,600,000.00	28,100	20,900
ECONOMIC DEVELOPMENT					
ED Assist. to For-Profits (Businesses) [18A]	L	1	\$1,000,000	0	0
ED Technical Assistance (Businesses) [18B]	L	1	\$1,000,000	0	0
Micro-Enterprise Assist. (Businesses) [18C]	L	1	\$1,000,000	0	0
Rehab; Publicly- or Private-Owned Commercial/ Industrial (Projects) [14E]	N	1	\$1,000,000	0	0
Economic Development Subtotal		4	\$4,000,000.00	0	
PLANNING					
Planning [20]	H	1	\$100,000.00	1	1
Planning Subtotal		1	\$100,000.00	1	1
TOTAL ESTIMATED DOLLARS NEEDED			\$63,100,000		

TABLE 16
HUD Table 2C
Summary of Specific Housing/Community Development Objectives
(Table 2A/2B Continuation Sheet)

HUD Obj Code #	Specific Activities/Objectives & HUD Matrix Code	Sources of Funds	Performance Indicators	Expected Number	Actual Number
	Rental Housing Objectives				
DH-2	Acquire/Rehabilitate Rental Units [14G]	HOME	# Rental Housing Units Brought to Standard Condition	36	
	Owner Housing Objectives				
DB-2	Rehabilitate Owner-Occupied Housing [14A]	CDBG/ HOME	# Homeowner Housing Units Brought to Standard Condition	75	
DH-2	Construct Affordable Owner-Occupied Housing [12]	HOME	# Affordable Homeowner Units Constructed	15	
DH-2	Downpayment Assistance to Homebuyers [13]	ADDI	# First-Time Homebuyers Receiving Downpayment Assist.	40	
	Community Development Objectives				
	<i>[See Infrastructure, Public Facilities, Public Services Objectives]</i>				
	Infrastructure Objectives				
SL-1	Water/Sewer Improvements [03J]	CDBG	# Persons With Improved Accessibility	2,000	
SL-1	Street Improvements [03K]	CDBG	# Persons With Improved Accessibility	6,000	
SL-1	Sidewalks [03L]	CDBG	# Persons With Improved Accessibility	6,000	
SL-1	Flood/Drainage Improvements [03I]		# Persons With Improved Accessibility	0	
	Public Facilities Objectives				
SL-1	Senior Centers [03A]	CDBG	# Persons With Improved Accessibility	500	
SL-1	Centers for Disabled Persons [03B]	CDBG	# Persons With Improved Accessibility	2,000	
SL-1	Homeless Centers [03C]	CDBG	# Persons With New Accessibility	3,000	
SL-1	Youth Centers [03D]		# Persons With New Accessibility	0	
SL-1	Child Care Centers [03M]	CDBG	# Persons With Improved Accessibility	200	
SL-1	Health Facilities [03P]	CDBG	# Persons With Improved Accessibility	500	
SL-1	Neighborhood Facilities [03E]		# Persons With Improved Accessibility	0	
SL-1	Parks and/or Rec. Facilities [03F]		# Persons With Improved Accessibility	100	
SL-1	Parking Facilities [03E]		# Persons With Improved Accessibility	200	
	Public Services Objectives				
DH-2	Public Services General [Housing Counseling] [05]	CDBG	# Persons With Improved Access	1,500	
SL-3	Senior Services [05A]	CDBG	# of Persons With Improved Access	400	
SL-3	Services for Persons With Disabilities [05B]		# of Persons With Improved Access	100	
SL-3	Youth Services [05D]		# of Persons With New Access	200	
SL-3	Childcare Services [05L]		# of Persons With Improved Access	200	
SL-3	Transportation Services [05E]		# of Persons With Improved Access	500	
SL-3	Substance Abuse Services [05F]		# of Persons With New Access	0	
SL-3	Employment Training [05H]		# # of Persons With New Access	0	
SL-3	Health Services [05M]	CDBG	# People With Improved Access	20,000	
SL-3	Lead Hazard Screening [05P]		# of People With Improved Access	0	
	Economic Development Objectives				
	None				
	Neighborhood Revitalization/Other Objectives				
	None				

	Outcome/Objective Codes		
	Availability/Accessibility	Affordability	Sustainability
<i>Decent Housing</i>	DH-1	DH-2	DH-3
Suitable Living Environment	SL-1	SL-2	SL-3
Economic Opportunity	EO-1	EO-2	EO-3

BARRIERS TO AFFORDABLE HOUSING

Barriers affecting non-housing community development often result from public policies which may not take into account their affect on low and moderate-income citizens. The strategy to remove these barriers is presented in the Housing Market Analysis. A continuous analysis must be performed throughout the period of this Plan to detect such barriers. Recommendations developed from the analysis will be utilized for each Action Plan to identify any changes in public policies necessary for the reduction or minimizing of these barriers.

LEAD-BASED PAINT HAZARDS

Actions are proposed to evaluate and reduce lead-based paint hazards. These actions are being integrated into Gwinnett County's housing and community development operating procedures.

Gwinnett County carries out two primary steps during the Consolidated Plan period to reduce lead based paint hazards: (1) Evaluation/assessment of the incidence of lead based paint hazards in Gwinnett; and (2) removal of such hazards once identified.

1. Currently, there is very little detailed information on the incidence of lead based paint in Gwinnett County, nor on the extent to which such incidence poses significant hazards. The incidence of lead based paint in Gwinnett is based on the age of the housing stock (see Strategic Plan - Other Housing Issues). However, this procedure is imprecise, and provides a limited base from which to carry out a lead removal program. Gwinnett County addresses lead-based paint on any housing which receives rehabilitation or downpayment assistance. Inspections of these homes are performed by certified Lead Risk Assessors, to ensure compliance with lead based paint regulations of the United States Department of Housing and Urban Development.

Gwinnett County is using HUD Grant funds [CDBG and/or HOME] to perform lead removal in dwelling units [homeowner or rental] being rehabilitated with its CDBG or HOME Program funds. Lead removal on rental rehabilitation projects is carried out with HOME Program and non-Federal funds.

2. During the development of Consolidated Plan 2009-2013, the Gwinnett County Health Department and the Gwinnett County Department of Family and Children Services [Georgia's "welfare" agency] were contacted about lead-based paint issues and case. Neither agency responded with a listing of clients who were suffering from elevated levels of lead in their blood.

ANTI-POVERTY STRATEGY

Described below are the goals, programs, and policies for reducing the number of poverty level households. Note that these overlap the goals program for producing and preserving Affordable Housing.

One approach to reducing the number of families and individuals who fall under the poverty level is to increase income. The primary method available for increasing income is employment placement, or upgrading employment for Seniors Citizens and for persons incarcerated in County correctional facilities. Such programs are currently underway in Gwinnett County.

A second approach to reducing poverty can be through reducing the cost of living for individuals and families under the poverty level. While not technically moving people over the official poverty line, this approach may have a similar effect. Activities such as reducing housing and utility costs can accomplish this effect. Gwinnett County will pursue such efforts as funding becomes available.

These two approaches to reducing poverty (increasing employment, and reducing living costs) are more fully described as follows:

A. Increasing Employment

Gwinnett County will work with private sector employers, and public and private human service organizations, to stimulate increased employment, both in terms of an increase in the absolute number of jobs available and the relative wage paid. This will be accomplished through the following efforts:

- Work with the Chamber of Commerce to attract new businesses and industries to Gwinnett County;
- Examine the job market in Gwinnett County to identify those job classifications which have the best potential for increasing earnings, particularly for entry level and moderate skill jobs which are reasonably accessible to low-income persons with job training;
- Work with local human service organizations and job development agencies to increase the variety and quality of job training programs; and
- Work with the Georgia Department of Labor Area Office to increase the flow of information to local service organizations so that individuals may be referred to available jobs, particularly jobs that offer under-employed persons the opportunity to move up the employment scale. Also, provide information useful in planning job training programs.

B. Reduce Living Costs

Gwinnett County will work with local human service organizations in efforts to reduce the costs of daily living, in effect assisting low-income families to reduce their level of poverty. This will be accomplished through the following activities:

- Strengthening the ability of local human service organizations to refer low-income clients among agencies for assistance and services. This will be accomplished by increasing the availability of information about resources and by improving communication among organizations;
- Assisting local organizations in accessing federal, state and private resources which can provide vitally needed services -- such as food, shelter and transportation;
- Increasing the availability of affordable housing for low-income families through a range of projects, such as renovation of deteriorating rental units, development of additional new housing units, and increasing the availability of housing for first time home buyers;

- Reducing acquisition and development costs for affordable housing units; and
- Encouraging housing development programs, especially programs implemented with public assistance (such as Housing Programs using CDBG and HOME Program funding), to incorporate job training opportunities as a part of their operations.

Gwinnett County will coordinate the above efforts with community programs and services by:

- Working closely with the Gwinnett Health and Human Services Coalition, which represents more than thirty human service organizations;
- Working with the Gwinnett Chamber of Commerce;
- Working with the Workforce Investment Act Program and its service providers in Gwinnett County, as well as the Georgia Department of Labor; and
- Initiating such interagency meetings as may be needed to focus efforts on special needs.

INSTITUTIONAL STRUCTURE

The Gwinnett County institutional structure, including private industry, non-profit organizations, and public institutions through which the County will carry out its Consolidated Plan is addressed here. The strengths and gaps in the delivery system are also assessed.

The Gwinnett County CDP, under the direction of the Department of Financial Services, serves as the lead in planning, monitoring, and coordinating the implementation of the county's Consolidated Plan and annual updates. Other public agencies focus on specific housing needs (e.g., the local public housing authorities).

The County is working toward improving the coordination of Gwinnett's approach to affordable housing issues. This section describes the activities and focus of each agency or organization type involved in affordable housing efforts in Gwinnett County.

Gwinnett County Community Development Program (CDP) - (Administered by W. Frank Newton, Inc.)

The use of the CDP as the County's lead for affordable housing, and the willingness of all major public and private housing agencies in the county to work through a coordinated system has improved the planning and implementation of affordable housing programs. The CDP plans the housing strategy, as approved by Gwinnett County, coordinates with nonprofits, and manages the CDBG program, the Emergency Shelter Grants program, the HOME program, and the American Dream Downpayment Initiative for the County. The CDP coordinates HOPWA program activities with the City of Atlanta.

CDP Staff Resources

Although the CDP has been and continues to be active in maintaining existing affordable housing to Gwinnett County residents, a need exists for increased resources in the form of specialized professional staff for the development of fair and affordable housing. In particular, additional staff is needed to study and plan for a more coordinated housing system and to seek resources to help other non-profit and for-profit organizations to help acquire, construct or rehabilitate housing for its occupancy by low and moderate-income persons.

Local Housing Authorities

The local Public Housing Authorities (PHA) operate public housing for Buford, Norcross, Lawrenceville and surrounding communities in Gwinnett County.

The most significant issues confronting the PHA's are four-fold:

1. The need for sufficient HUD or other funds to modernize all existing public housing units.

2. The need for more public housing units in the county, especially for senior citizens and the disabled.
3. The need for more Section 8 certificates and vouchers.

The resources to meet these needs are beyond the county's control, and are available only from HUD. Too few Section 8 certificates are now available to meet demand. Georgia DCA maintains a long waiting list of Section 8 applicants.

STATE AGENCIES

Supportive services in Gwinnett County are provided by the Department of Family and Children's Services, the Health Department, the Department of Labor, the FEMA Emergency Food and Shelter Program, and the Partnership for Community Action. The funding for these agencies is inadequate for the needs they are expected to meet in Gwinnett County.

NONPROFIT ORGANIZATIONS

A few nonprofits provide immediate assistance to the homeless, very-low, and low-income individuals and families in terms of emergency shelter, transitional housing, and human service referrals. They serve a critical function in the delivery of housing to the needy in the County, but they lack the resources and capacity to adequately meet the growing numbers of people requiring their assistance.

Gwinnett Coalition for Health and Human Services

The mission of the Gwinnett Health and Human Services Coalition is to maximize the effectiveness of social service resources in Gwinnett by:

1. Facilitating linkage, coordination, and collaboration of social service providers;
2. Facilitates ongoing planning involving public and private sectors;
3. Provision of a centralized information and referral system; and
4. Maintenance of a need and service database to assist continued comprehensive planning efforts

The Coalition has a Helpline referral system for people needing a variety of services including housing, health care, jobs, job training, and childcare. The Coalition works with the County to provide timely data which will be helpful in identifying people needing immediate shelter and affordable housing.

Community-Based Development Organizations

A critical gap in the delivery system of affordable housing in the county is insufficient development capacity. Gwinnett has one Community Housing Development Organization (CHDO) located in the County. which utilizes HOME and other funds for new construction, acquisition, and rehabilitation of housing for affordable uses and to house the homeless. This CHDO is The IMPACT! Group [formerly the Gwinnett Housing Resource Partnership, Inc. (see below)]. A second CHDO, Initiative for Affordable Housing, Inc. was designated June 1, 2004, but has not yet proposed a specific project to Gwinnett County.

The IMPACT! Group [Formerly Gwinnett Housing Resource Partnership, Inc.]

This non-profit agency serves as the County's CHDO and leading non-profit facilitator of affordable housing. The agency was created from the reorganization of the Community Housing Resource Board and the Homelessness Committee of the Coalition to provide greater emphasis on affordable housing needs and fair housing issues in the county. The IMPACT! Group is seeking to serve a broad spectrum of affordable housing needs including emergency shelter, transitional housing, affordable rentals and cooperatives, and Home ownership. The agency acquired a HUD-owned 196 unit multi-family rental property, and provides services under the Emergency Shelters Grant program, and is a lead agency in the Gwinnett Coalition for Health and Human Services.

Gwinnett County Habitat for Humanity

The only local nonprofit new housing developer at this time is Gwinnett County Habitat for Humanity. Gwinnett County Habitat currently builds new housing for low income homebuyers who are to participate in the construction of their home and/or in the construction of the homes of other Habitat homebuyers. Habitat uses private donations and some funds from the Gwinnett County HOME Program.

GOVERNMENTAL COORDINATION

Gwinnett County is the local government in the County taking the most active role in affordable and fair housing. Although three cities (Buford, Lawrenceville, and Norcross) have public housing authorities, these organizations are almost solely focused on the operation and maintenance of their rental housing.

The primary promoters and developers of affordable housing in Gwinnett County are:

Gwinnett County [Financial Services Department/Community Development Program]; Gwinnett Housing Resource Partnership; Habitat for Humanity; and Gwinnett Coalition for Health and Human Services

Gwinnett County provides HUD grant funds (CDBG, HOME, and ESG) to GHRP and Habitat to promote the acquisition, construction and rehabilitation of fair and affordable housing for low and moderate-income persons.

Gaps in the Housing Delivery System for Low and Moderate-income Persons

Opportunities for Improving Institutional Cooperation

Overall, the institutional structure for delivery of affordable housing in Gwinnett County can be improved with the following:

- Stronger planning, coordination, and implementation systems among agencies.
- Capacity enhancement of the CDP to expand programs/services.
- Increased funding for Public Housing Improvements.
- Increased rental assistance through the Section 8 Program.
- Increased financial resources for agencies and nonprofit organizations currently delivering critical housing and supportive services.
- Support for the Gwinnett County CHDO's to construct, acquire, and/or rehabilitate existing, and develop (also promote education) new, affordable housing stock -- both owner-occupied and rental units.
- Support for creation of additional nonprofit housing organizations to serve as sponsors for the acquisition, construction or rehabilitation of affordable housing.
- Aggressive code enforcement to help preserve the affordable housing stock.
- Additional funding and attention to revitalizing older areas of the County.

PUBLIC HOUSING RESIDENT INITIATIVES/PUBLIC HOUSING NEEDS

Activities to encourage public housing residents to become more involved in management and participate in home ownership are described here.

Lawrenceville Housing Authority

The LHA has active Resident Associations in its housing communities. Their input is sought on issues relating to management, housing maintenance, and programs for residents.

Buford Housing Authority

The BHA encourages the residents of its housing to become more involved in the management of its properties and programs for residents. Resident Associations are active in the BHA housing developments. BHA provides support and financial assistance to the Associations to develop their capabilities and co-sponsor resident activities. The residents' input is sought on ways to improve the conditions and environment of the public housing. Resident representatives are encouraged to attend all BHA Board meetings. BHA participates in Workforce Investment Act to provide training and skills to residents.

Norcross Housing Authority

The NHA has a small number of units, with the majority of residents being families with children. Resident input is solicited through meetings with residents.

Gwinnett County consults with these three public housing authority during the development of Consolidated Plans, Action Plans or amendments to ensure that the needs of these PHA's and their residents are reflected in the Consolidated Plan or Action Plans. Each of the PHA's was contacted to obtain this information. Only the Housing Authority of the City of Lawrenceville responded to Gwinnett County's request for information. [See Tables 32-34.]

PERFORMANCE MEASUREMENT

Gwinnett County is implementing the **Performance Measurement System for Community Planning and Development Formula Grant Programs**, published in the Federal Register on March 7, 2006, by revising this document to include the newly required performance measures and data tables.

The Performance Measures system will now include the reporting of "output" measures, such as the number of persons served, numbers of houses rehabilitated, etc., but will also contain "outcome" measures which help establish the long-term benefits gained through the investment of HUD CPD Formula Grant funds by Gwinnett County and other Entitlement grantees throughout the nation.

Gwinnett County includes this new HUD-adopted performance evaluation system in this Consolidated Plan and in each respective Action Plan, as the measures apply to all activities being carried out with HUD Entitlement grant funds awarded to Gwinnett County by HUD.

APPENDICES

APPENDIX 1
HUD CERTIFICATIONS

CERTIFICATIONS

In accordance with the applicable statutes and the regulations governing the consolidated plan regulations, the jurisdiction certifies that:

Affirmatively Further Fair Housing - The jurisdiction will affirmatively further fair housing, which means it will conduct an analysis of impediments to fair housing choice within the jurisdiction, take appropriate actions to overcome the effects of any impediments identified through that analysis, and maintain records reflecting that analysis and actions in this regard.

Anti-displacement and Relocation Plan - It will comply with the acquisition and relocation requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and implementing regulations at 49 CFR 24; and it has in effect and is following a residential antidisplacement and relocation assistance plan required under section 104(d) of the Housing and Community Development Act of 1974, as amended, in connection with any activity assisted with funding under the CDBG or HOME programs.

Drug Free Workplace - It will or will continue to provide drug-free workplace by:

1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
2. Establishing and ongoing drug-free awareness program to inform employees about -
 - (a) The dangers of drug abuse in the workplaces;
 - (b) The grantee's policy of maintaining a drug-free workplace;
 - (c) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (d) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
3. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph 1;
4. Notifying the employee in the statement required by paragraph 1 that, as a condition of employment under the grant, the employee will -
 - (a) Abide by the terms of the statement; and
 - (b) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
5. Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph 4(b) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer or other designee on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
6. Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph 4(b), with respect to any employee who is so convicted -
 - (a) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (b) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
7. Make a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs 1,2,3,4,5 and 6. Anti-Lobbying - To the best of the jurisdiction's knowledge and belief:
 1. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing

or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions; and
3. It will require that the language of paragraph 1 and 2 of this anti-lobbying certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Authority of Jurisdiction -- The consolidated plan is authorized under State and local law (as applicable) and the jurisdiction possesses the legal authority to carry out the programs for which it is seeking funding, in accordance with applicable HUD regulations.

Consistency with plan -- The housing activities to be undertaken with CDBG, HOME, ESG, and HOPWA funds are consistent with the strategic plan.

Section 3 -- It will comply with section 3 of the Housing and Urban Development Act of 1968, and implementing regulations at 24 CFR Part 135.

Signature/Authorized Official

[Maria Woods]

Date

Acting Director, Gwinnett County Department of Financial Services

Title

Specific CDBG Certifications

The Entitlement Community certifies that:

Citizen Participation -- It is in full compliance and following a detailed citizen participation plan that satisfies the requirements of 24 CFR 9 1.105.

Community Development Plan -- Its consolidated housing and community development plan identifies community development and housing needs and specifies both short-term and long-term community development objectives that provide decent housing, expand economic opportunities primarily for persons of low and moderate-income. [See 24 CFR 570.2 and 24 CFR part 570].

Following a Plan -- It is following a current consolidated plan (or Comprehensive Housing Affordability Strategy) that has been approved by HUD. **Use of Funds --** It has complied with the following criteria:

1. Maximum Feasible Priority. With respect to activities expected to be assisted with CDBG funds, it certifies that it has developed its Action Plan so as to give maximum feasible priority to activities which benefit low and moderate-income families or aid in the prevention or elimination of slums or blight. The Action Plan may also include activities which the grantee certifies are designed to meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community, and other financial resources are not available).
- 2 Overall Benefit. The aggregate use of CDBG funds including section 108 guaranteed loans during program year(s) 2006-2008 (a period specified by the grantee consisting of one, two, or three specific consecutive program years), shall principally benefit persons of low and moderate-income in a manner that ensures that at least 70 percent of the amount is expended for activities that benefit such persons during the designated period.
3. Special Assessments. It will not attempt to recover any capital costs of public improvements assisted with CDBG funds including Section 108 loan guaranteed funds by assessing any amount against properties owned and occupied by persons of low and moderate-income, including any fee charged or assessment made as a condition of obtaining access to such public improvements.

However, if CDBG funds are used to pay the proportion of a fee or assessment that relates to the capital costs of public improvements (assisted in part with CDBG funds) financed from other revenue sources, an assessment or charge may be made against the property with respect to the public improvements financed by a source other than CDBG funds.

The jurisdiction will not attempt to recover any capital costs of public improvements assisted with CDBG funds, including Section 108, unless CDBG funds are used to pay the proportion of fee or assessment attributable to the capital costs of public improvements financed from other revenue sources. In this case, an assessment or charge may be made against the property with respect to the public improvements financed by a source other than CDBG funds. Also, in the case of properties owned and occupied by moderate-income [not low-income] families, an assessment or charge may be made against the property for public improvements financed by a source other than CDBG funds if the jurisdiction certifies that it lacks CDBG funds to cover the assessment.

Excessive Force -- It has adopted and is enforcing:

1. A policy prohibiting the use of excessive force by law enforcement agencies within its jurisdiction against any individuals engaged in non-violent civil rights demonstration; and
2. A policy of enforcing applicable State and local laws against physically barring entrance to or exit from a facility or location which is the subject of such non-violent civil rights demonstrations within its jurisdiction;

Compliance With Anti-discrimination laws -- The grant will be conducted and administered in conformity with the title VI of the Civil Rights Act of 1964 (42 USC 2000d), the Fair Housing Act (42 USC 3601-3619), and implementing regulations.

Lead-Based Paint-- Its notification, inspection, testing, and abatement procedures concerning lead-based paint will comply with the requirements of 24 CFR 570.608;

Compliance with Laws -- It will comply with applicable laws.

Signature/Authorized Official

[Maria Woods]

Date

Acting Director, Gwinnett County Department of Financial Services

Title

HOME Certifications

The HOME participating jurisdiction certifies that:

Tenant Based Rental Assistance -- If the participating jurisdiction intends to provide tenant-based rental assistance:

The use of HOME funds for tenant-based rental assistance is an essential element of the participating jurisdiction's consolidated plan for expanding the supply, affordability, and availability of decent, safe, sanitary, and affordable housing.

Eligible Activities and Costs -- it is using and will use HOME funds for eligible activities and costs, as described in 24 CFR § 92.205 through 92.209 and that it is not using and will not use HOME funds for prohibited activities, as described in § 92.2 14.

Appropriate Financial Assistance -- before committing any funds to a project, it will evaluate the project in accordance with the guidelines that it adopts for this purpose and will not invest any more HOME funds in combination with other Federal assistance than is necessary to provide affordable housing.

Signature/Authorized Official

[Maria Woods]

Date

Acting Director, Gwinnett County Department of Financial Services

Title

Certifications

The Emergency Shelter Grantee certifies that:

Major rehabilitation/conversion -- It will maintain any building for which assistance is used under the ESG program as a shelter for homeless individuals and families for at least 10 years. If the jurisdiction plans to use funds for purposes less than tenant-based rental assistance, the applicant will maintain any building for which assistance is used under the ESG program as a shelter for homeless individuals and families for at least 3 years.

Essential Services -- It will provide services or shelter to homeless individuals and families for the period during which the ESG assistance is provided, without regard to a particular site or structure as long as the same general population is served.

Renovation -- Any renovation carried out with ESG assistance shall be sufficient to ensure that the building involved is safe and sanitary.

Supportive Services -- It will assist homeless individuals in obtaining appropriate supportive services, including permanent housing, medical and mental health treatment, counseling, supervision, and other services essential for achieving independent living, and other Federal, State, local, and private assistance.

Matching Funds -- It will obtain matching amounts required under section 576.71 of this title.

Confidentiality -- It will develop and implement procedures to ensure the confidentiality of records pertaining to any individual provided family violence prevention or treatment services under any project assisted under the ESG program, including protection against the release of the address or location of any family violence shelter project except with the written authorization of the person responsible for the operation of the shelter.

Homeless Persons Involvement -- To the maximum extent practicable, it will involve, through employment, volunteer services, or otherwise, homeless individuals and families in constructing, renovating, maintaining, operating facilities, and providing services assisted through this program.

Consolidated Plan -- It is following a current HUD-approved Consolidated Plan or CHAS.

Discharge Policy Certification -- It has developed a policy for the discharge of persons from publicly funded institutions or systems of care (such as health care facilities, foster care or other youth facilities, or correction programs and institutions) in order to prevent such discharge from immediately resulting in homelessness for such persons.

HMIS -- It will comply with HUD's standards for participation in a local Homeless Management Information system and the collection and reporting of client-level information.

Signature/Authorized Official [Maria Woods] Date

Acting Director, Gwinnett County Department of Financial Services

Title

APPENDIX TO CERTIFICATIONS

INSTRUCTIONS CONCERNING LOBBYING AND DRUG-FREE WORKPLACE REQUIREMENTS:

A. Lobbying Certification

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

B. Drug-Free Workplace Certification

1. By signing and/or submitting this application or grant agreement, the grantee is providing the certification.
2. The certification is a material representation of fact upon which reliance is placed when the agency awards the grant. If it is later determined that the grantee knowingly rendered a false certification, or otherwise violates the requirements of the Drug-Free Workplace Act, HUD, in addition to any other remedies available to the Federal Government, may take action authorized under the Drug-Free Workplace Act.
3. For grantees other than individuals, Alternate I applies. (This is the information to which jurisdictions certify.)
4. For grantees who are individuals, Alternate II applies. (Not applicable to jurisdictions.)
5. Workplaces under grants, for grantees other than individuals, need not be identified on the certification. If known, they may be identified in the grant application. If the grantee does not identify the workplaces at the time of application, or upon award, if there is no application, the grantee must keep the identity of the workplace(s) on file in its office and make the information available for Federal inspection. Failure to identify all known workplaces constitutes a violation of the grantee's drug-free workplace requirements.
6. Workplace identifications must include the actual address of buildings (or parts of buildings) or other sites where work under the grant takes place. Categorical descriptions may be used (e.g., all vehicles of a mass transit authority or State highway department while in operation, State employees in each local unemployment office, performers in concert halls or radio stations).
2. If the workplace identified to the agency changes during the performance of the grant, the grantee shall inform the agency of the change(s), if it previously identified the workplaces in question (see paragraph five).
8. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Gwinnett County Community Development Program (Administered by W. Frank Newton, Inc.)
575 Old Norcross Road, Suite A
Lawrenceville, GA 0045-4367 [Gwinnett County, GA]

Gwinnett County Department of Financial Services
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, GA 3 0045-6900 [Gwinnett County, GA]

Check if there are workplace on file that are not identified here; The certification with regard to the drug-free workplace required by 24 CFR part 24, subpart F.

9. Definitions of terms in the Nonprocurement Suspension and Debarment common rule and Drug-Free Workplace common rule apply to this certification. Grantees' attention is called, in particular, to the following definitions from these rules:

"Controlled substance" means a controlled substance in Schedules I through V of the Controlled Substances Act

(21 U.S.C. 812) and as further defined by regulation (21 CFR 1308.11 through 1308.15);

"Conviction" means a finding of guilt (including a plea of *nolo contendere*) imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes;

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, use, or possession of any controlled substance;

"Employee" means the employee of a grantee directly engaged in the performance of work under a grant, including: (i) All "direct charge" employees; (ii) all "indirect charge" employees unless their impact or involvement is insignificant to the performance of the grant; and (iii) temporary personnel and consultants who are directly engaged in the performance of work under the grant and who are on the grantee's payroll. This definition does not include workers not on the payroll of the grantee (.g., volunteers, even if used to meet a matching requirement; consultants or independent contractors not on the grantee's payroll; or employees of subrecipients or subcontractors in covered workplaces)

EXECUTIVE ORDER 12372 REVIEW DOCUMENTATION

Executive Order 12372 requires that any projects proposing an expenditure of Federal funds for water and sewer construction be reviewed by State [Georgia] and regional [Atlanta Regional Commission] authorities for consistency with State and regional plans and policies.

Gwinnett County complies with the E.O. 12372 review requirements for all water/sewer activities which are funded from any Action Plan submitted during the Plan Period.

APPENDIX 2
MONITORING PROCESS

MONITORING PROCESS

The Gwinnett County has established monitoring standards consistent with the federal guidelines for each HUD program it administers directly [CDBG, HOME/ADDI, and ESG Programs]. Monitoring procedures are described in the separate Operating Procedures for each of these respective programs.

Gwinnett County also reviews applications for other programs which require consistency with the Consolidated Plan. These federal programs include: HOME Program, CDBG, Shelter Plus Care Program, Supportive Housing for the Elderly (Section 202), Supportive Housing for Persons with Disabilities (Section 811), Emergency Shelter Grants Program, Supportive Housing Program, Shelter Plus Care Program, Moderate Rehabilitation Single Room Occupancy Program, and Housing Opportunities for Persons with AIDS (HOPWA) Program.

Monitoring Procedures

The monitoring procedures are detailed in the three Operating Procedures Manuals [CDBG, HOME/ADDI, ESG]. The monitoring is carried out using a risk-assessment process to determine whether monitoring will be: on-site or desk-reviews. Monitoring involves a five-step process to ensure that all statutory and regulatory requirements are being met. Individual programs (CDBG, HOME, and ESG) have Operating Procedures which provide additional details, procedures, forms used to carry out monitoring of organizations/activities receiving these grant funds.

Gwinnett County is responsible for:

1. Monitoring organizations and programs which use federal funds awarded by Gwinnett County. Reports are made on a regular basis, as required by the appropriate federal program regulations. The County checks the records of organizations receiving federal funds from Gwinnett County to ensure the information is reported accurately and completely.
2. Collecting data and reviews data to ensure consistency with the Consolidated Plan. The County reviews the number and types of households served with federal funds and analyze leveraging and matching sources.
3. Making visits to each subrecipient organization to check records and visits to projects, as appropriate.
4. Using a system of checklists and documentation for HUD-funded projects. Site visits to projects and reviews of project documentation are geared to ensure compliance with regulations and agreements.
5. Utilizing a system of notification to agencies or organizations when an instance(s) of non-compliance with federal regulations or County policies has been determined. The County notifies the agency or organization responsible and proceeds according to the established policies and procedures set forth by federal regulations and County policy.

Gwinnett County has created its Monitoring Instruments to be consistent with those by HUD in its monitoring of Gwinnett County's Entitlement Grant programs [CDBG, HOME, ADDI and ESG]. HUD's documents are contained in the CPD Monitoring Handbook.

APPENDIX 3

**COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
NATIONAL OBJECTIVES**

NATIONAL OBJECTIVES

The proposed objectives, strategies, and all funding contained in this plan will be undertaken in accordance with Title I of the Housing and Community Development Act of 1974, as amended, and must principally benefit low and moderate income persons. No activities will be undertaken under this Plan which do not benefit predominantly low and moderate income persons.

The United States Department of Housing and Urban Development publishes maximum household income tables annually, which determine eligibility for the CBDG, HOME, and American Dream Downpayment Initiative grant programs. Maximum household income from all persons over 18 years of age living in the home may not exceed 80 percent of Median Family Income for the Atlanta, Georgia Metropolitan Area for a household to meet the HUD definition of low- and moderate-income.

APPENDIX 4

DISPLACEMENT STATEMENT

DISPLACEMENT STATEMENT

No displacement should occur as a result of the activities to be undertaken by Gwinnett County under this Plan. However, federal regulations require that each recipient provide a plan of action to assist persons in the unlikely event of displacement. If displacement should occur, Gwinnett County would implement the provisions as required by 24 CFR Part 42, 92, and 570, and as outlined in the County's residential anti-displacement and relocation assistance plan contained in this document

APPENDIX 5

HUD CONSOLIDATED PLAN REVIEW CHECKLIST

Consolidated Plan Review Guidance

This guidance is provided as a template for the reviews of complete plans. The submission of sections dealing with Needs Assessments, Housing Market Analysis, and Strategic Plans are not required on an annual basis. Each field office should include additional questions or clarifications that address the complexity of their local situation.

Grantee: Gwinnet County, GA

1. If a Consortia, list participating communities and asterisk the lead agency: N/A

2. Consolidated Plan covers the following programs:

CDBG HOME ESG HOPWA

3. Period covered by Consolidated Plan is: 3 4 5 years.

Also, specify the period with month beginning and year ending JAN 2009 – DEC 2013

4. Date plan due: 12/15/08

5. Date plan received:

6. Automatic approval date (45 days of date received above):

7. Are maps included (optional)? **Yes X** No

8. Has an Executive Summary been attached (required)? **Yes X** No

9. Did the grantee include the following tables:

Local Jurisdiction:

Table 1A: **Yes X** No

Table 1B: **Yes X** No

Table 1C: **Yes X** No

Table 2A: **Yes X** No

Table 2B: **Yes X** No

Table 2C: **Yes X** No

Table 3A: **Yes X** No

Table 3B: **Yes X** No

Table 3C: **Yes X** No

10. Did the grantee use the CPMP Tool? Yes **No X**.

11. Did the grantee include one or more proposed outcomes in the Plan?

Yes X No Verification found on page 64, 68-72, 108

12. Does the plan include a Neighborhood Revitalization Strategy Area or Target Area where activities are carried out in a concentrated manner?

Yes **No X** Verification found on page

If yes, identify census tracts for each NRSA and forward to Headquarters.

CONSULTATION PROCESS (91.100)

1. Has the grantee consulted with other public/private entities that provide assisted housing, health services, and social services in developing this plan?

Yes X No Verification found on page 9

Use the following checklist as a guide to determine extent of consultation process:

Consultation			
24CFR	Requirement	Yes	No
91.100(a)(1)	Housing Services	X	<input type="checkbox"/>
	Social Services	X	<input type="checkbox"/>
	Fair Housing Services	X	<input type="checkbox"/>
	Health Services	X	<input type="checkbox"/>
	Homeless Services	X	<input type="checkbox"/>
91.100(a)(2)*	Chronically Homeless	X	<input type="checkbox"/>
91.100(a)(3)**	Lead-based Paint	X	<input type="checkbox"/>
91.100(a)(4)***	Adjacent Government	X	<input type="checkbox"/>
	State (Non-housing)	<input type="checkbox"/>	<input type="checkbox"/>
	County (Metro. City)	<input type="checkbox"/>	<input type="checkbox"/>
91.100(a)(5)	Metro. Planning Agencies	<input type="checkbox"/>	<input type="checkbox"/>
91.100(b)	HOPWA	X	<input type="checkbox"/>
91.100(c)	PHA Plan	X	<input type="checkbox"/>

*Were assisted housing, health, and social service agencies consulted to determine resources available to address needs of chronically homeless persons?

**Were State/Local health and child welfare agencies consulted regarding lead paint issues?

***Was copy of the plan submitted to the State, and County if applicable; if an urban county, to the entitlement cities in the county.

1. Did the grantee indicate that it consulted with other organizations that provide housing and supportive services to special needs populations (including elderly persons, persons with disabilities, persons with HIV/AIDS, homeless persons)?

Yes X No Verification found on page 9

2. Did the grantee consult with Public Housing Agencies during Consolidated Plan development?

Yes X No N/A Verification found on page 9

CITIZEN PARTICIPATION (91.105, AND 91.200)

1. Is there a description of the development of the plan and efforts to broaden public participation, including the names of organizations involved in the development of the plan?

Yes X No Verification found on page 9-11

Note: The Jurisdiction shall encourage the participation of local and regional institutions and other organization (including businesses, developers, community, and faith-based organizations) in the process of developing and implementing the plan.

2. Is there a summary of the citizen participation process, and were the public hearing and comment period requirements satisfactory?

Yes X No Verification found on page 8-33

3. Are citizen comments included in the plan, and are the comments specifically and adequately addressed by the grantee?

Yes X No Verification found on page 8-33

4. Is there a description of the lead agency or entity responsible for overseeing the

development of the Consolidated Plan?

Yes No Verification found on page 32

HOUSING AND HOMELESS NEEDS ASSESSMENT (91.205)

HOUSING

1. Has the grantee identified the estimated number and types of families with housing needs for a **5 year** period?

Yes No Verification found on pages 68-76

Note: See Table 2A (required) – page 67

Family types (extremely low-, low-, moderate, and middle income) that should be identified are:

- Renter/owner
- Elderly
- Single persons
- Large families
- Persons with disabilities
- Victims of domestic violence
- Persons with HIV/AIDs

2. Has the grantee identified the types of housing needs in the community for a 5 year period?

Yes No Verification found on page 66-81

Types of housing needs should be determined with an analysis of:

- Severe cost and cost burden
- Overcrowding (especially for large families)
- Substandard (renter/owner, extremely low-, low-, moderate, and middle income)

3. Has the grantee included a discussion of any racial or ethnic groups that have a disproportionately greater need in comparison to the needs of a particular income category?

Yes No Verification found on page Not Applicable

Note: Disproportionately greater need exists when the percentage of persons in a category of need who are members of a particular racial/ethnic group is at least 10% points higher than the percentage of persons in the category as a whole. **See Section 91.205 (b) (2)**

HOMELESS

1. Has the grantee satisfactorily identified the nature and extent of homelessness, and is there a continuum of care concept? **See Table 1A (required)**. Page 53

Yes No Verification found on page 48-64

- Information should be on both homeless singles and families (and subpopulations) that are either sheltered/unsheltered or threatened with homelessness.

2. Has the grantee identified homeless facilities and services needs for homeless individuals and homeless families with children, both sheltered and unsheltered and homeless subpopulations?

Yes No Verification found on page 48-64

3. Has the grantee identified the extent of homelessness by racial/ethnic group, if the information is available?
Yes **No X** Verification found on page Not Available

4. Did the grantee describe the jurisdiction's strategy for developing a system to address homelessness and the priority needs of homeless persons and families (including the subpopulations identified in the needs section)? The jurisdiction's strategy must consider the housing and supportive services needed in each stage of the process, i.e. preventing homelessness, outreach/assessment, emergency shelters and services, transitional housing, and helping homeless persons (especially any persons that are chronically homeless) make the transition to permanent housing and independent living.
Yes X No Pages 48-64

5. Did the grantee describe its strategy for helping extremely low- and low-income individuals and families who are at imminent risk of becoming homeless?
Yes X No Pages 62-64

SPECIAL NEEDS - NOT HOMELESS

1. Has the grantee included a discussion on the estimated number of non-homeless persons in need of supportive housing, and their supportive housing needs? **See Table 1B (optional)**.
Yes X No Verification found on page 100-103
Note: Estimated number of non-homeless persons should include the elderly, frail elderly, persons with disabilities, persons with alcohol or other drug addiction, persons with HIV/AIDs and their families, and public housing residents.

LEAD-BASED PAINT HAZARDS

1. Has the grantee estimated the number of housing units with lead-based paint hazards?
Yes X No Verification found on page 81-82
Note: The estimated number of units should be those that are occupied by low/moderate income families.

HOUSING AND MARKET ANALYSIS (91.210)

GENERAL CHARACTERISTICS

1. Has the grantee described the significant characteristics of the housing market, and the housing stock available to persons with disabilities, and persons with HIV/AIDs?
(Review any maps if provided/See Table 1A and 1B)
Yes X No Verification found in Unified Plan, Chapter C.5 & Appendix A

Note: There should be a discussion of housing supply and demand, as well as the condition and cost of the housing. Data on the housing market should include, to extent information is available, an estimate of the number of abandoned buildings and whether they are suitable for rehabilitation. The grantee should also identify and describe the locations and degree of racial/ethnic minority concentrations, as well as low/moderate income families.

2. Did the grantee identify and describe any area of low-income concentration and any area of minority concentration either in a narrative or one or more maps, stating how it defines the terms "area of low-income concentration" and "area of minority concentration"?
Yes X No see Unified Plan, Chapter C.5 & Appendix A

PUBLIC AND ASSISTED HOUSING

1. Has the grantee described the number and condition of the public housing units, results from the Section 504 needs assessments, and the strategies for improving operation and living conditions for public housing residents?
Yes X No N/A Verification found on page 83-87
2. Has the grantee identified the number of public housing units expected to be lost from the inventory?
Yes X No N/A Verification found on page 83

Check if this jurisdiction has any HOPE VI projects awarded or in development that may result in a net loss of units.

3. With regard to federal, state and locally-assisted units other than public housing, has the grantee identified the number and targeting of units by income level and household type, and the number of units expected to be lost from the assisted housing inventory for any reason, i.e. expiration of Section 8 contracts?
Yes X No Verification found on page 100-102

HOMELESS FACILITIES AND SERVICES

1. Have the facilities and services that compose the grantee's continuum of care been identified?
Yes X No Verification found on page 48-56
Appropriate facilities would be:
- Emergency shelters,
 - Transitional shelters, and
 - Permanent/supportive housing (including persons that are chronically homeless).
1. Does the inventory include, to the extent information is available, an estimate of percentage or number of beds and supportive services programs serving people that are chronically homeless?
Yes No Verification found on page 48-56

SPECIAL NEEDS FACILITIES AND SERVICES

1. Has the grantee described the facilities/services to assist non-homeless persons in need of supportive housing? **See Table 1B**
Yes X No Verification found on page 100
- Discussion should also include a description of appropriate supportive housing for persons leaving mental/physical health facilities.

BARRIERS TO AFFORDABLE HOUSING

1. Has the grantee described public policies that affect affordable housing?

Yes **X** No Verification found on page 88

Factors which affect affordable housing may include:

- Building and zoning codes;
- Environmental problems;
- Impact fees;
- Cost of land; and
- Incentive programs such as tax abatement or down-payment assistance.

Note: For Urban Counties, does the discussion include factors in both incorporated and unincorporated areas?

STRATEGIC PLAN (91.215)

When reviewing this section of the Consolidated Plan, keep in mind that the priorities/objectives should relate to the needs identified in the Housing and Homeless Needs and Housing and Market Analysis sections.

GENERAL

1. Does the grantee describe the basis for assigning the priority given to each category in Table 2A?

Yes **X** No Page 67

2. Has the grantee identified any obstacles to meeting underserved needs?

Yes **X** No Pages 88-90

3. Has the grantee summarized the priorities and specific objectives, describing how funds that are reasonably expected to be made available will be used to address identified needs? **See Tables 1A, 1B, 1C, 2A, 2B, and 2C**

Yes **X** No Pages 53, 64, 73, 67, 107, 69 respectively

4. For each specific objective, has the grantee identified proposed accomplishments and outcomes the jurisdiction hopes to achieve in quantitative terms over a specific time period, or in other measurable terms as identified and defined by the jurisdiction? **See Tables 1A, 1B, 1C, 2A, 2B and 2C**

Yes **X** No Pages 53, 64, 73, 67, 107, 69 respectively

AFFORDABLE HOUSING

1. Did the grantee state how the analysis of the housing market and the severity of housing problems and needs of extremely low-income, low-income, and moderate-income renters and owners identified in accordance with 91.205 provided the basis for assigning the relative priority given to each priority needs category in the priority housing needs table prescribed by HUD?

Yes **X** No Verification found on page 66 and Unified Plan, Appendix A

2. Does the affordable housing section identify how the characteristics of the housing market will influence the use of funds made available for rental assistance, production of new units, rehabilitation of old units, or acquisition of existing units?

Yes **X** No Verification found on page 91

Note: If the jurisdiction intends to use HOME funds for tenant-based rental assistance or plans to use HOME funds to assist persons with special needs, the plan must specify local market conditions that led to the choice of that option.

3. Does the grantee described proposed accomplishments to specify the number of extremely low, low, moderate, and middle income families to whom the grantee will provide affordable housing as defined in 24 CFR 92.252 for rental housing and 24 CFR 92.254 for homeownership over a specific time period?
Yes X No Verification found on page 67 – HUD Table 2A

HOMELESSNESS

1. Does the grantee describe the strategy for helping low-income families avoid becoming homeless?
Yes X No Verification found on page 62
2. Does the grantee describe the jurisdiction's strategy for reaching out to homeless persons and assessing their individual needs?
Yes X No Verification found on page 62
3. Does the grantee describe the jurisdiction's strategy for addressing the emergency shelter and transitional housing needs of homeless persons?
Yes X No Verification found on page 60-64
4. Does the grantee describe the jurisdiction's strategy for helping homeless persons (especially persons that are chronically homeless) make the transition to permanent housing and independent living?
Yes X No Verification found on page 60-64

OTHER SPECIAL NEEDS

1. With respect to supportive needs of the non-homeless, does the plan describe the priority housing and supportive service needs of persons who are not homeless but may or may not require supportive housing?
Yes X No Verification found on page 100

NON-HOUSING COMMUNITY DEVELOPMENT PLAN

1. Did the grantee describe the priority non-housing community development needs, reflecting the needs for the type of activity? **Table 2B (required)**
Yes X No Verification found on page 107
Note: The Community Development component of the plan must state the grantee's specific long-term and short-term community development objectives (including economic development activities that create jobs) that must be developed in accordance with the statutory goals described in 24 CFR 91.1 and the primary objectives of the CDBG program.
2. Is the grantee requesting approval of a Neighborhood Revitalization Strategy Area?
Yes No **NO X**
If YES, does it meet the requirements of CPD Notice 96-1 and include outcomes?
Yes No **NO X [Not Applicable]**
Note: Separate documentation should be maintained to verify compliance with CPD Notice 96-1.

BARRIERS TO AFFORDABLE HOUSING

1. Does the grantee describe the jurisdiction's strategy to remove or ameliorate negative effects of public policies, that serve as barriers to affordable housing as identified in the needs assessment section?
Yes X **No** Verification found on page 88

LEAD-BASED PAINT HAZARDS

1. Does the plan outline the actions proposed or being taken to evaluate and reduce lead-based paint hazards, describe how the plan for reduction of lead-based paint hazards is related to the extent of lead poisoning and hazards, and how the plan for reduction will be integrated into housing policies and programs?
Yes X **No** Verification found on page 81

ANTI-POVERTY STRATEGY

1. Does the grantee describe the jurisdiction's goals, programs, and policies for reducing the number of poverty level families?
Yes X **No** Verification found on page 110
Has the grantee programs such as:
- Family Self-sufficiency
 - Head Start
 - State and Local Programs
 - Section 3
 - Welfare to Work
 - Workforce Development Initiative

INSTITUTIONAL STRUCTURE

1. Does the grantee explain the institutional structure, including private industry, nonprofit organizations, community and faith-based organizations, and public institutions, through which the jurisdiction will carry out its housing, homeless, and community development plan, assessing the strengths and gaps in the delivery system?
Yes X **No** Verification found on page 113

COORDINATION

1. Does the plan identify the jurisdiction's activities to enhance coordination between public and assisted housing providers and private and governmental health, mental health, and service agencies?
Yes X **No** Verification found on page 113
2. With respect to the public entities involved, does the plan describe the means of cooperation among the state and local units of government in the metropolitan area in the implementation of the plan?
Yes X **No** Verification found on page 113

3. With respect the homeless strategy, does the plan describe efforts to enhance coordination among agencies to address the needs of persons that are chronically homeless?
Yes X **No** Verification found on page 113

4. With respect to economic development, does the plan describe efforts to enhance coordination with private industry, businesses, developers, and social service agencies.
Yes X **No** Verification found on page 113

PUBLIC HOUSING

1. Does the grantee describe the jurisdiction's activities to encourage public housing residents to become more involved in management and participate in homeownership?
Yes X **No** Verification found on page 114

2. Has the grantee describe the manner in which the plan of the jurisdiction will help address the needs of public housing?
Yes X **No** Verification found on page 114
Note: Amended to Title 1 October 21, 1998 Section 105(b)(11)

3. Is the grantee served by a troubled PHA as designated by HUD?
Yes **No** **NO X**
If YES, Has the grantee in which any troubled public housing agency is located, described the manner in which the State or unit of local government will provide financial or other assistance to such troubled agency in improving its operations to remove such designation?
Yes **No** Verification found on page
Note: Amended to Title 1 October 21, 1998 Section 105(g)

ACTION PLAN (91.220)

1. Has the Standard 424 Form for the applicable programs been included with the correct dollar allocations and signed by the appropriate official?
Yes X **No**
2. Is the DUNS number listed?
Yes X **No**
3. Did the grantee describe the geographic areas of the jurisdiction (including areas of low income and/or racial/minority concentration) in which assistance will be directed during the next year.
Yes X **No**
4. Did the grantee describe the basis for allocating investments geographically within the jurisdiction (or within the EMSA for HOPWA) (91.215(a)(1)) during the next year and the rationale for assigning the priorities.
Yes X **No**

RESOURCES

1. Has the grantee described the Federal Resources, and private and non-Federal public resources expected to be available to address priority needs and specific objectives identified in the plan?
Yes X **No** Verification found on page 93

2. Did the grantee describe how HOME and/or ESG matching requirements will be satisfied?
Yes No N/A Verification found on page Project Forms 93/107

ACTIVITIES 91.220(D)

- 1.
- a) Has the grantee described the CDBG funded activities for the program year in a complete manner? **See Table 3C** see pages 94-109
Yes No
 - b) Has the grantee described the HOME funded activities for the program year in a complete manner? **See Table 3C** see pages 94-109
Yes No
 - c) Has the grantee described the ESG funded activities for the program year in a complete manner? **See Table 3C** see pages 94-109
Yes No
 - d) Has the grantee described the HOPWA funded activities for the program year in a complete manner? **See Table 3C**
Yes **No X – Gwinnett County does not receive HOPWA funds from HUD**
2. Does the action plan contain a summary of priorities and specific annual objectives that will be addressed during the program year?
Yes No Verification found on pages 76, 82
Note: The Jurisdiction should use summary of annual objectives as identified in Table 3A of the Consolidated Plan.
3. Do the proposed activities correspond to the priority needs identified/local specific objectives listed in the Consolidated Plan?
Yes No Verification found on page 76
Note: The Jurisdiction should use priority needs as identified in Table 2A and 2B of the Consolidated Plan.
4. Are the proposed activities identified in sufficient detail, including the number and type of families that will benefit from the proposed activities and locations, so that citizens know the degree to which they may be affected?
Yes No Verification found on pages 94-109

Outcomes 91.220(e)

1. Does the action plan contain outcome measures for activities in accordance with the Federal Register Notice dated March 7, 2006?
Yes No Verification found on pages 94-109

Expenditure Limits

1. Has the grantee exceeded the 20% administrative cap for CDBG?
Yes **No X**
2. Has the grantee exceeded the 15% public service cap for CDBG?
Yes **No X**
3. Has the grantee exceeded the 10% administrative cap for HOME?
Yes **No X**
4. Has the grantee met the 15% CHDO set-aside for HOME?
Yes No

5. Has the grantee exceeded the 3% administrative cap for HOPWA or the 7% administrative cap by project sponsors under HOPWA?
Yes **No X** - Gwinnett County does not receive HOPWA funds from HUD

GEOGRAPHIC DISTRIBUTION 91.220(f)

1. Did the grantee include a narrative, maps, or tables that identify the geographic areas in which it will direct assistance?
Yes X No Verification found on pages 110-115
2. Does the grantee provide a description of the areas, including areas of minority concentration, in which it will direct funds?
Yes X No Verification found on pages 110-115
3. Does the grantee provide the rationale for the priorities for allocating investment geographically for each program, including within the metropolitan area (or a State's service area) for the HOPWA program?
Yes X No Verification found on pages 130-131
If no, explain the basis for the no response: Gwinnett County does not receive HOPWA Funds
4. Did the grantee estimate the percentage of funds it plans to dedicate to target areas?
Yes X No Verification found on page 131

AFFORDABLE HOUSING GOALS 91.220(g)

1. Does the action plan specify one-year goals for the number of homeless, non-homeless, and special needs households to be provided affordable housing units using funds made available to the jurisdiction?
Yes X No Verification found on page 132
Note: The Jurisdiction should use housing summary of goals as identified in Table 3B of the Consolidated Plan.
2. Does the action plan specify one-year goals for the number of households to be provided affordable housing units through activities that provide rental assistance, production of new units, rehabilitation of existing units, or acquisition of exiting units using funds made available to the jurisdiction?
Yes X No Verification found on page 132
Note: The Jurisdiction should use housing summary of goals as identified in Table 3B of the Consolidated Plan.

PUBLIC HOUSING 91.220(h)

1. Does the action plan include actions that address the following, *if applicable*:
- needs of public housing, **Yes X** No see page 122
 - public housing improvements and resident initiatives, **Yes X** No see pages 121-128
 - assist troubled public housing agencies. Yes **No X** **no troubled housing authorities in Gwinnett County.**

HOMELESS AND OTHER SPECIAL NEEDS ACTIVITIES 91.220(i)

1. Have homeless prevention activities been proposed?
Yes **No X** Verification found on page

2. Have emergency shelter, transitional housing, programs to assist in the transition to permanent housing and independent living been proposed?
Yes X No Verification found on pages 76, 107

3. Are supportive housing activities being undertaken to address the priority housing needs of persons who are not homeless (elderly, frail elderly, persons with disabilities, person with HIV/AIDS, persons with alcohol or other substance abuse problems)?
Yes X No Verification found on pages 76, 105

4. Have specific action steps to end chronic homelessness been identified?
Yes X No Verification found on pages 76, 127

OTHER ACTIONS 91.220(k)

1. Does the Action Plan include other proposed actions which will address the following, **if applicable**:
 - foster and maintain affordable housing, **Yes X** No , see page 122
 - public housing improvements and resident initiatives, **Yes X** No , see pages 121-128
 - evaluation and reduction of lead-based hazards, **Yes X** No , see page 123
 - reducing the number of persons below the poverty line, **Yes X** No , see page 124
 - developing institutional structures/enhancing coordination between housing and services agencies, **Yes X** No , see page 133.

PROGRAM SPECIFIC REQUIREMENTS 91.220(l)

1. CDBG
 - a) Does the total amount of funds allocated equal the amount of the grant plus program income and carryover funds? **Yes X** No , see page 76

 - b) Does the action plan identify the amount of CDBG funds that will be used for activities that benefit persons of low- and moderate-income? **Yes X** No , see page 133.

1. HOME
 - a) Did grantee (PJ) describe other forms of investment? **See Section 92.205**
Yes X No N/A , see page 118
If grantee (PJ) plans to use HOME funds for homebuyers, did they state the guidelines of resale or recapture, as required in 92.254?
Yes X No N/A , see page 117

- b) If grantee (PJ) plans to use HOME funds to refinance existing debt secured by multifamily housing that is being rehabilitated with HOME funds, did they state its refinancing guidelines required under 24 CFR 92.206(b)?
Yes X No N/A , see page 119
- c) Resale Provisions -- For homeownership activities, did the participating jurisdiction must describe its resale or recapture guidelines that ensure the affordability of units acquired with HOME funds? See 24 CFR 92.254(a)(4).
Yes X No , see page 117
- d) HOME Tenant-Based Rental Assistance -- Did the participating jurisdiction must describe the local market conditions that led to the use of a HOME funds for tenant based rental assistance program?
Yes **No X** N/A
 - a. If the tenant based rental assistance program is targeted to or provides a preference for a special needs group, that group must be identified in the Consolidated Plan as having an unmet need and show the preference is needed to narrow the gap in benefits and services received by this population.
- e) If a participating jurisdiction intends to use forms of investment other than those described in 24 CFR 92.205(b), did the jurisdiction describe these forms of investment?
Yes X No, , see page 118
- f) Did the jurisdiction describe the policy and procedures it will follow to affirmatively market housing containing five or more HOME-assisted units?
Yes X No , see page 118
- g) Did the jurisdiction describe actions taken to establish and oversee a minority outreach program within its jurisdiction to ensure inclusion, to the maximum extent possible, of minority and women, and entities owned by minorities and women, including without limitation, real estate firms, construction firms, appraisal firms, management firms, financial institutions, investment banking firms, underwriters, accountants, and providers of legal services, in all contracts, entered into by the participating jurisdiction with such persons or entities, public and private, in order to facilitate the activities of the participating jurisdiction to provide affordable housing under the HOME program or any other Federal housing law applicable to such jurisdiction?
Yes X No , see page 118
- h) If a jurisdiction intends to use HOME funds to refinance existing debt secured by multifamily housing that is rehabilitated with HOME funds, did it state its financing guidelines required under 24 CFR 92.206(b)?
Yes X No , see page 119

1. American Dream Downpayment Initiative

- a. If the jurisdiction planned to use American Dream Downpayment Initiative (ADDI) funds to increase access to homeownership, did it provide the following information:
 - i. description of the planned use of the ADDI funds?
Yes X No , see page 120
 - ii. plan for conducting targeted outreach to residents and tenants of public and manufactured housing and to other families assisted by public housing agencies, for the purposes of ensuring that the ADDI funds are used to provide downpayment assistance for such residents, tenants, and families? **Yes X** No , see page 1209
 - iii. a description of the actions to be taken to ensure the suitability of families receiving ADDI funds to undertake and maintain homeownership, such as provision of housing counseling to homebuyers?
Yes X No , see page 120

4. HOPWA

- a) Does the action plan specify on-year goals for the number of low-income households to be provided affordable housing using HOPWA funds for short-term rent, mortgage, and utility payments to prevent homelessness; tenant-based rental assistance, units provided in housing facilities operated with HOPWA funds? Yes No **X**

Verification found on page **Gwinnett County receives no HOPWA funds from HUD.**

- b) Does the action plan identify the method for selecting project sponsors (including providing full access to grassroots faith-based and other community organizations)?

- c) Yes No **X** Verification found on page

Gwinnett County receives no HOPWA funds from HUD.

MONITORING (91.230)

1. Does the grantee describe the standards and procedures that it will use to monitor activities carried out in furtherance of the plan?

Yes **X** No Verification found on page 126

2. Does the Plan describe actions to be taken by the grantee to monitor its performance in meeting its goals and objectives set forth in it's Consolidated Plan?

Yes **X** No Verification found on page 126

3. Does the Plan describe steps/actions being taken to insure compliance with program requirements, including requirements involving the timeliness of expenditures?

Yes **X** No Verification found on page 126

Note: If timeliness of expenditures is an issue, please make sure the grant award letter includes language regarding appropriate actions the grantee should take to remedy this problem.

4. Does the Plan describe steps/actions it will use to ensure long-term compliance with housing codes, including any actions or on-site inspections it plans to undertake during the program year?

Yes **X** No Verification found on page 126

Note: For example, a HOME program grantee should identify steps it will take to review affordable housing projects it has funded to insure compliance with all HOME program requirements.

5. Does the Plan describe actions to be taken by the grantee to monitor its subrecipients, (including sponsors or administering agents)?

Yes **X** No Verification found on page 126

HUD APPROVAL ACTION

The regulations at Section 91.500(b) state that HUD will approve or disapprove a plan or a portion of a plan for the three following reasons:

- 1) if it is inconsistent with the purposes of NAHA;
- 2) if it is substantially incomplete; and/or
- 3) if certifications are not satisfactory to the Secretary
- 4) if does not include description of manner in which unit of local government or state will provide financial or other assistance to troubled public housing agencies.

Please use the following to determine approval or disapproval:

CONSISTENCY WITH NAHA

1. Is the Plan inconsistent with the purposes of NAHA?

Yes No

If the Plan is inconsistent with NAHA, set forth the basis of that determination by using the following as a guide:

- Does the Plan provide assistance to help families, not owning a home, to save for a down-payment for the purchase of a home.
- Does the Plan provide assistance to retain, where feasible, as housing affordable to low income families, those dwelling units provided for such purpose with federal assistance.
- Does the Plan provide assistance to extend and strengthen partnerships among all levels of government and the private sector, including for-profit and non-profit organizations, in the production and operation of housing affordable to low- and moderate-income families.
- Does the Plan provide assistance to expand and improve federal rental assistance for very low-income families.
- Does the Plan provide assistance to increase the supply of supportive housing, which combines structural features and services needed to enable persons with special needs to live with dignity and independence.

SUBSTANTIALLY INCOMPLETE

1. Is the Plan (including any corrective actions taken at HUD's request during HUD's review of the plan) substantially incomplete?

Yes No

If the Plan is substantially incomplete, set forth the basis of that determination by using the following as a guide:

- The Plan was developed without the required citizen participation or the required consultation.
- The Plan fails to satisfy all the required elements in the regulations.

AFFIRMATIVELY FURTHERING FAIR HOUSING

1. Is the Certification to Affirmatively Further Fair Housing satisfactory to the Secretary?
 Yes No

If the Certification is not satisfactory, set forth the basis of that determination by using the following as a guide:

- Disregard of regulatory requirements to conduct an analysis of impediments to fair housing choice, take appropriate actions to address identified impediments, and maintain adequate records on the steps taken to affirmatively further fair housing in the jurisdiction.
- Lack of action taken on outstanding findings regarding performance under affirmatively furthering fair housing certification requirements of the Consolidated Plan or the Community Development Block Grant Program.

CERTIFICATIONS (91.225)

1. Are the general and specific certifications for each program funded complete and accurate, where applicable:

Note: Consortia, please refer to 91.425
 State, please refer to 91.325

General:

- | | | |
|--|------------------------------|-----------------------------|
| (1) Affirmatively furthering fair housing: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (2) Anti-displacement and relocation Plan: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (3) Drug-free workplace: | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (4) Anti-lobbying | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (5) Authority of Jurisdiction | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (6) Consistency with Plan | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (7) Acquisition and relocation | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (8) Section 3 | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

CDBG: **

- | | | |
|---|------------------------------|-----------------------------|
| (1) Citizen Participation | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (2) Community Development Plan | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (3) Following Plan | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (4) Use of funds | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (5) Excessive Force | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (6) Compliance with anti-discrimination law | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (7) Compliance with lead-based paint procedures | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (8) Compliance with laws | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

ESG:

- | | | |
|---|------------------------------|-----------------------------|
| (1) Not less than 10-years | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (2) Not less than 3-years | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (3) Service Provision | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (4) Safe and Sanitary | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (5) Supportive Services | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (6) Match Requirements | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (7) Confidentiality | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (8) Employing or involving the homeless | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| (9) Consolidated Plan compliance | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

(10) Discharge policy Yes No

HOME

(1) TBRA is consistent w/Plan Yes No

(2) Use for eligible activities Yes No

(3) Monitor for subsidy layering Yes No

HOPWA:

(1) Meet urgent needs Yes No

(2) 10- or 3-year operation Yes No

***The certification period for the CDBG program's overall benefit requirements must be consistent with the period certified in the prior certification.*

Based on my review of the Plan against the regulations, I have determined the Plan is:

Approved

Disapproved

Date plan disapproved (in part or in its entirety):

Note: Written notification of disapproval must be communicated to the applicant in accordance with 24 CFR 91.500(c). **If disapproved**, provide documentation including dates and times on incompleteness determination, and discussions with grantee and Headquarters:

Reviewed by

DATE:

Program Manager

DATE:

CPD Director

APPENDIX 6
ANNUAL ACTION PLANS AND AMENDMENTS 2009-2013



2030 unified plan

Comprehensive Plan

Consolidated Plan

Comprehensive Transportation Plan

Technical Appendices

Overview of the Appendices

The 2008 Gwinnett Unified Plan, at around 200 pages, is the tip of an iceberg. These appendices, nearly 950 pages long are its base. A very substantial research effort underpins the policies and maps of the Plan. The Appendices are its record. They will provide a deeper understanding than the Plan itself of the trends, driving forces, scenario development and analysis conducted for Gwinnett and the region.

Volume 1 of the Appendices contains two plans executed concurrent and parallel with the Comprehensive plan. These are the:

- **Consolidated Transportation Plan (CTP).** This is a Plan whose format and content is specified by ARC. Significantly contributed to by *Moreland –Altobelli Inc.*, it is one of the three plans that make up and cross-pollinate the Unified Plan. It uses the Middle of the Pack scenario to generate a list of needed transportation projects and adds additional projects that are desirable, resources allowing. The modeling done for the CTP was used in the Unified Plan, which also modeled the International Gateway scenario.
- **Consolidated Plan (CP).** This HUD-specified Plan, developed by *Bay Area Economics*, is the third leg of the Unified Plan, and the result of a pilot program by HUD to better integrate such plans into the ongoing agenda of community plans. This pilot, thus, seeks to raise the profile of Gwinnett’s housing affordability gap and the social services needs that lower income residents have. While the data required by the plan, and its detailed reporting requirements, are contained in this appendix the findings and implications of the CP have influenced the policies in the Unified Plan. A “crosswalk” between these two documents, that makes these influences clear, prefaces the appendix.

Volume 2 of the appendices is organized in a sequence of: Public Outreach Process (A); basic analysis (B through E); modeling and evaluation (F through H). They reflect the substantive contributions of the team of experts assembled to help prepare the Unified Plan. Some highlights of each appendix in Volume 3 follow.

A – Public Outreach Process. Summarized in Part 2, Section B.2 of the Plan, this appendix describes in full the outreach process used to develop the Plan. It list interviewees, dates, agendas of the Plan Advisory Committee and so forth. It also contains summaries of the six focus group meetings, organized and conducted by *Ventana Marketing Inc.* These meetings were an effort to solicit the input of minority/ethnic groups, usually under-represented, into the planning work.

B – Community Assessment. This is the summary document produced at the end of the first phase of the Plan, a DCA requirement. It analyzes recent trends, discusses important features and issues for the county and sets up the meat of the Plan. Some of this material is incorporated in Part 1 of the Plan but the Assessment is obviously fuller and contains, in particular, more City-specific information.

C – Population and Employment Forecasts. Gwinnett has a 30–year history of outstripping its growth forecasts. It was deemed particularly important, therefore, to make sure that the forecasts for this Unified Plan were robust and defensible. *Dr. Thomas Hammer* undertook a comprehensive analysis of growth trends from a state, regional and county perspective, deploying a massive data base of counties nation-wide in which to ground his projections. Several meetings with ARC, which uses a different methodology, were held to review the Plan’s assumptions. In the event, both approaches yielded very similar results, the projections generally showing a slowing of growth for Gwinnett.

D – Economic Development Overview. The *Robert Charles Lesser Company*, locally based, mined its hands-on familiarity with the region and Gwinnett to write this overview of economic development prospects for the County. Covering much ground and peppered with data nuggets and insights, much of this material found its way into different sections of the Plan and strongly influenced its direction. RCLCo’s judgments also determined many of the parameters of the Land Use Allocation model.

E – Homeownership and Socio-Economic Trends. The sweeping changes in the racial and ethnic makeup of Gwinnett over the decade since the last plan necessitated a closer look. These reports, by *Dr Dan Immergluck of Georgia Tech*, constitute important original research on this phenomenon and its implications. They portray some encouraging signs and patterns of relative integration rather than wholesale racial/ethnic segregation. These 2006/2007 reports were also a very early warning of the sub prime mortgage fiasco in which Gwinnett is now so heavily embroiled. This analysis also informed the Consolidated Housing Plan.

F – Land Use Allocation. One look at the zoning targets in the Plan (Table 53, Figure 80) will make it clear that there is an unusually detailed level of land use analysis supporting the Plan. This appendix explains the way in which land uses were allocated in the various scenarios and their relationship to other forecasting and modeling efforts for the Plan. This guidance on future land use actions, conducted by *Facet Decision Systems*, also provides a tool for future use by the County as conditions change.

G – Transit Testing. As part of the transportation modeling effort different transit routes and services were tested. This appendix provides information on the additional transit services tested in the International Gateway Scenario and provides a detailed table of mode splits for the eight County subareas.

H – Fiscal Analysis. No analysis in this Plan is more sobering than that conducted by *Dr. Robert Eger* (Georgia State University) of the County’s fiscal future. By significantly expanding the reach of existing fiscal models used by the County this analysis reveals the coming fiscal crunch. It compares the various scenarios against each other and recommends significant changes in the way the county raises and spends monies to secure a positive fiscal future. Its recommendations have deeply shaped the Plan’s policies and maps. The fiscal model, part of the land use allocation modeling described above, also furnishes the County with a useful, ongoing tool.

Appendix C – Population and Employment Forecasts

Appendix C: Population and Employment Forecasts

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Socio-Economic and Employment Forecast Summary

Background

Gwinnett County has chosen to produce a separate set of socioeconomic forecasts for the Unified Plan effort instead of using ARC's numbers. One primary reason for this was schedule. The Unified Plan was underway in Spring 2006, and these forecasts were foremost on the project's critical path. ARC's numbers were not ready by this time, and in fact were not received by the County until August of that year. Gwinnett County was also interested in a methodology that could generate alternative scenarios. This could be accomplished efficiently with a transparent, fully documented allocation process. This forecast development process is described in detail below.

Forecasts for the Nation, Atlanta Region, and 29 Individual Counties

The forecasting component of the Gwinnett County comprehensive planning process is structured in two phases. The first phase is charged with generating initial forecasts to serve as a benchmark for plan development. The second phase will then use largely the same methods to prepare forecasts that describe alternative future scenarios. Changes relative to the initial forecasts will almost surely be a consequence – perhaps an objective – of the plan elements incorporated in the second phase. [The Comprehensive Transportation Plan Needs Assessment made use of the initial forecasts generated for a trends based scenario, also called the Middle-of-the-Pack Scenario.]

As an integral part of the Atlanta urban complex, Gwinnett County cannot be forecasted in isolation. Hence the forecasting task addresses a “region” consisting of the 28-county Atlanta metropolitan area plus Hall County (which officially comprises metropolitan Gainesville but is clearly part of the larger complex). The chosen approach involves the successive preparation of forecasts for the region as a whole, for individual counties within the region, and finally for eight sub-county areas (SCAs) within Gwinnett County.

The following discussion will offer abbreviated descriptions of the regional and county-level methodologies for readers lacking time or need for technical detail. The resulting county forecasts are not included here but are available elsewhere. These results include all major economic and demographic variables for 30 observation units (the abovementioned counties with Fulton divided into two parts), so that the Gwinnett forecasts can be evaluated in a region-wide context.

A leading characteristic of the overall forecasting approach is strict and exclusive reliance upon empirical relationships – i.e., on forecasting equations that have been fitted statistically to observed data. This feature has increased the forecasting workload and significantly constrained the nature of the forecasting relationships, as discussed at the end of this text. Its benefits can be summarized as objectivity and realism. Objectivity is an important concern since forecasting programs can easily slip into a prescriptive mode rather than focusing strictly upon prediction. Realism is a challenge since the dynamics of urban development are extremely complex. Molding predictive relationships to observed reality is the only way to assure that they effectively subsume, if not explicitly express, the myriad influences on urban growth. Consequently the forecasts yielded by an empirically based approach make an ideal platform

from which to entertain revisions based on detailed circumstances and prospective public actions.

The core variables addressed by the forecasting sequence are: employment by industry (using a 19-category NAICS-based classification system); population by age and sex; and households by relative income. The baseline year, or jumping-off point, for forecast preparation is 2005. All variables are being forecasted through 2035, even though the relevant time frame for plan preparation only extends through 2030.

Regional Forecasting

The regional forecasting approach rests upon an assumption that all long-term trends at the regional level are economically driven. This assumption would not apply well to retirement areas or many foreign countries, but job availability rules metropolitan growth in most of America, and greater Atlanta is the most American of places.

To assist evaluation of the findings, the regional forecasting process is kept as mechanical and transparent as possible. Its key element consists of linking regional industries to national industries and assuming that past relationships will hold in the future. Regional forecasts are thus obtained by: 1) preparing a forecast of national employment; 2) linking regional industries to their national counterparts; 3) projecting the regional/national linkages forward to derive a regional economic forecast; and 4) forecasting regional demographics on the basis of employment.

The best existing forecast of national employment is a detailed projection by the Bureau of Labor Statistics (BLS) that currently extends through 2014. Conditions further in the future have been addressed by assuming that over the long term U.S. employment will be demographically limited. While this assumption may look dubious from today's perspective, the supporting arguments are that: 1) political forces will always push the economy toward full employment in the long run, even at a cost of drastic measures like bringing back inflation or cheapening the currency; and 2) the challenge of maintaining full employment should progressively abate as aging of the population reduces growth in the labor force. The assumed demographic linkage has made it possible to project total U.S. employment beyond 2014 by applying labor force participation rates to the Census Bureau's population forecasts, then allowing for unemployment. The aggregate figures were then allocated across industries by projecting forward the industry shares specified by the BLS employment projections through 2014.

The input data for regional forecasting consisted of employment by industry for an historical period starting in 1969. For each industry, the regional employment level in each year was expressed as a ratio to employment in the corresponding national industry. A straight-line trend was fitted to the ratio values, sometimes using the whole 37 years of record and sometimes using just the last 20 years. Each industry trend line was then extrapolated into the future, with no adjustment other than an upward or downward shift to make the extrapolated line depart exactly from the point for 2005. Future ratio values were determined from the trend line and applied to the forecasted levels of national employment in the given years. The figures were then assembled to yield overall descriptions of the future regional economy.

The actual process was more complicated than just implied because an input-output table (or rather, a time-variant series of input-output tables) was used to split out the “final demand” component of employment in each industry. These components – considered the regional economic drivers – were the basis for forming regional-national ratios, fitting historical trend lines, and estimating future employment by applying values from the extrapolated trend lines to forecasted national employment. Input-output was then applied in reverse to obtain future descriptions of the overall regional economy.

Regional population by age, sex and race was forecasted using familiar cohort-survival methods, which “age” each population group across each time interval on the basis of birth, death and net migration rates. Population was linked to employment by way of net migration and labor force participation rates. Given the latter rates along with assumptions about unemployment and net commuting, it was possible to compute the level of jobholding supportable by any given population profile. Hence the forecasting process for each future year involved systematically adjusting the net migration rates in the cohort-survival tableau so that they yielded a population profile consistent with the regional employment total already established. The adjustment was a straightforward expression of economic determinism: the more jobs, the more persons would migrate into the region for economic reasons.

County-Level Forecasting

The task of county-level forecasting is to allocate predetermined regional quantities across the region’s component counties. The relationships used to accomplish this objective are collectively referenced as an allocation model. In the present approach the quantities subject to allocation have been increments rather than absolute amounts, because the model was designed to predict changes across a succession of future time intervals. The intervals spanned ten years and hence were all bracketed by years ending in 5. As a last step, the forecasted variables have been interpolated (by fitting curvilinear relationships to data for three intervals) to years ending in 0.

Obtaining reliable predictive relationships through statistical calibration requires hundreds of observation units, so the calibration database must extend far beyond the study region of ultimate concern. The practice of drawing upon experience outside the study area is justified by the facts that: 1) growth patterns in U.S. metropolitan areas exhibit a high degree of commonality; and 2) the last stage of model calibration consists of “pegging” the equations as necessary to replicate local conditions. The Gwinnett study has utilized data for all metro areas in the eastern half of the country with populations above one million, excluding several areas at the northeastern and southern extremes of this territory. The resulting sample consisted of 355 counties and independent cities in 34 metro areas, with a combined population of slightly over 90 million.

The calibration process consisted of using multivariate statistical analysis to “explain” changes observed in the 355-county sample across the 1993-2003 interval. The calibration period ended in 2003 because this was the latest year covered by a key data source when the inputs were assembled. The target variables consisted of employment in nineteen industries and households in five income groups (which were quintiles based on the regional income distribution), with all other variables set aside for estimation on a derivative basis. Model calibration thus involved fitting twenty-four equations.

The predictors in the equations were limited almost entirely to past, initial, and current values of the same quantities being analyzed – i.e., employment and households – when embedded in complex functions to replicate real-world linkages. This feature followed from the requirements of model application, namely the fact that any quantity used as a predictor in a forecasting routine must itself be predicted. A related feature was a sequencing of equations accompanied by a limitation of the current-change predictors in each equation to variables addressed earlier in the sequence, which assured that all required inputs would be available when needed in the forecasting process.

To simulate urban growth dynamics realistically, an allocation model must at minimum have the capacity to: 1) express possible interactions among all combinations of economic sectors and household groups; 2) capture the influence on each area (county) of events in nearby areas; and 3) register the growth-retarding effects of progressive reductions in available land. The Gwinnett approach met the first criterion by treating employment and households on a fully integral basis, with all sectors tested for influence on all other sectors. The second criterion, relating primarily to spillover of growth from one urbanizing area to the next, was met by structuring most predictors as “proximity” measures that covered past, initial or current conditions in all areas of a region rather than just the area to which a measure pertained. These quantities were computed as sums of changes or initial conditions inversely weighted by distance from the subject area, using parameters that were varied to yield multiple versions of each variable. The third criterion was met by forming an index of land availability (estimated as a function of employment and dwelling units in the 824-zone analysis described momentarily). This was included as a weighting factor in all proximity variables, bearing an exponent that became sector-specific in the calibration process. The multiplicative form allowed each predictor to balance the advantages of centrality – i.e., nearness to existing development and growth – against the advantage of greater land abundance at less central locations.

After the twenty-four equations were fitted to 1993-2003 data (and explanatory variables referencing 1983-93) for the calibration sample, they were applied to “predict” 1995-2005 changes in all variables for counties in the Atlanta region. On this basis the model was pegged to local conditions by including reduced versions of the 1995-2005 residuals (prediction shortfalls) as additive adjustment factors in the equations. The forecasting process then consisted of applying the adjusted equations recursively to the 2005-15, 2015-25 and 2025-35 intervals. At each step the outputs obtained for one interval became the inputs – i.e., the basis for updating all predictors and the land availability index – for the next interval.

This description has omitted various complications, one of which was that there were actually two allocation models. The functional forms used in such models are constrained by the need to achieve exact allocations of fixed regional totals. Past studies had employed two different types of functional forms. Only one was initially used in the Gwinnett study, but the results were considered unsatisfactory in terms of predictive accuracy across the 355-observation sample, so another model was calibrated using the other form. The forecasting process then applied these models in parallel, using whatever equation or combination of equations provided the best explanation of 1995-2005 Atlanta trends for each sector.

Returning to the subject of overall strengths and weaknesses, the commitment of any forecasting approach to empirical calibration limits the quantities usable as predictors to variables that can feasibly be obtained for hundreds of observation units. These do not include most of the factors, over and above land area and existing activity levels, which shape the availability and suitability of land for future development. Highways, other infrastructure, environmental constraints, and policy-related factors such as zoning are omitted as independent influences on growth. The result is a “demand-side” model that tells what outcomes the market is likely to produce given a continuation of all supply-related conditions that prevailed in the recent past. Accepting forecasts produced on these terms basically requires an assumption that over the long run the key supply factors will be shaped by demand rather than vice versa. But notwithstanding the plausibility of this assumption, demand-side modeling is well suited to the present task of developing objective initial forecasts to serve as a platform for policy-related refinements.

Sub-County Area Forecasts to Traffic Analysis Zone Forecast Data

The direct outputs of the above process were “initial” sub-county area (SCA) level forecasts of the following quantities: employment in 19 industries; occupied dwelling units in five structure-type categories; and households in 20 categories involving five income quintiles and four racial/ethnic groups. The initial forecasts – obtained at five-year intervals through 2030 – became the basis for the Middle-of-the-Pack scenario (or the Trends based scenario), one of three scenarios addressed by the planning process, and the scenario used for CTP future needs assessment.

These basic variables have been translated into other demographic descriptors; the allocation outputs have subsequently been projected into a full set of descriptors for each TAZ. These notes do not cover the process of constructing a 2005 baseline or the special steps involved in creating scenarios other than Middle-of-the-Pack.

Three of the necessary steps involved conversions of SCA-level tabulations from one set of categories to another. The conversions were simple in concept, but involved fairly elaborate procedures incorporating various kinds of external data. They consisted of:

- 1) Converting the household income breakdowns from quintiles to four other categories of relative income;
- 2) Converting employment data from the 19-category NAICS-based classification system used in economic modeling to an 8-category SIC-based system; and
- 3) Converting the breakdowns of occupied dwelling units by structure type to tabulations by land-use category (with the addition of vacant dwellings estimated from SCA-specific and structure-type-specific vacancy rates).

The four-category income classification and the eight-category employment classification were dictated by the needs of transportation modeling, while the land use categories were those chosen for TAZ allocation.

The converted employment data and dwelling numbers by land-use category for SCAs were allocated across TAZs using methods described below. Meanwhile other steps were needed to obtain variables that would serve as SCA control totals when expanding the outputs of the

allocation process. The ultimate focus was a demographic table that would drive the transportation model (along with descriptors of economic activity) when made available at the TAZ level. This table – referenced hereafter simply as the “transportation table” – was a 24-item tabulation covering all combinations of four income categories and six household-size categories. The latter categories consisted of one person per household, two persons per household, and so forth up to six or more persons per household.

Travel Demand Model Input Data

The first step in developing SCA-level versions of the transportation table for use as control totals consisted of developing future household-size distributions. This was done by working forward from distributions obtained from the decennial census (since more recent information of this nature was not available for small areas). Starting from a distribution based on the previous year’s results, an algorithm shifted households up or down among size categories as needed to obtain a distribution consistent with the current SCA population total.

No tabulated versions of the transportation table were available at the SCA level for any year. However, a table for the region as a whole was obtained and mathematically analyzed to establish characteristic relationships among cells (which ultimately involved a typology of 34 cases based on relative magnitudes). These relationships were applied to 2005 Gwinnett households by income and size to develop baseline transportation tables for all TAZs. The tables were then aggregated to the SCA level and projected into the future to provide the necessary control totals for processing of allocation results. The projection process was analogous to that employed for household size per se, except that iterative methods were required to enforce consistency with the income and size totals (i.e., with the predetermined row and column totals of the transportation table for each SCA when expressed as a matrix).

The receipt of TAZ-allocated dwelling units by land-use category then triggered the most complicated estimation tasks. These included:

- Translation of the 2030 dwelling units by land-use category back into the structure-type categories used in the demographic analysis (with elimination of vacancies to equate the figures with households).
- Development of structure-type tabulations for TAZs in all forecast years between 2005 and 2030 (i.e., all years ending in 0 or 5), using the SCA-level tabulations from the original modeling process as control totals.
- Development of four-category income distributions for all TAZs in all years using continuity with prior distributions, regression-based linkages to structure types, and iterative methods to enforce consistency with SCA control totals.
- Development of household size distributions for TAZs, again working from one year to the next, using an upshift/downshift algorithm and iterative methods for SCA-level reconciliation. This process yielded household population figures that when added to independent estimates of persons in group-quarters gave total TAZ population.
- Estimation of all cells in the transportation table for each TAZ in each successive year. Based on the distributions of values across cells in the prior year, two provisional versions of the transportation table were prepared for each TAZ, one preserving the correct income profile and one preserving the correct size profile. These were then averaged and became the basis for two new versions, with the correct income and size

profiles enforced as before. This process was continued until convergence was achieved at values consistent with the 24-element SCA control totals. (Since all 492 TAZs were addressed simultaneously, the iterative process for each year spanned 60 MB of Excel files.)

The TAZ-level transportation tables and employment breakdowns were then delivered to the transportation modelers, while the other TAZ and SCA descriptors were made available for other planning tasks.

Employment Allocation Methodology

The algorithmic assignment of "Employment" land is a proportional allocation at the TAZ level. This avoids the need to identify specific parcels that will be developed, and gives us more reproducible results than any "Monte Carlo" allocation methodology. It also has the advantage of being very easy to explain.

In summary, our overall approach is:

- 1) Determine all of the "classes" of employment land
- 2) Determine how much land is in each category in each TAZ, and how much land is available in total for each category
- 3) Determine the ratios of employment that will be attributed to each "class"¹
- 4) Determine how much land would be used for this employment use²
- 5) Determine how much land will be consumed in each category, and assign that percentage of use to the land contained in each TAZ³

This gives us a development pattern with enough "knobs" to allow us to adjust the variables until we come up with a development pattern that looks realistic.

¹ For our simple example (assuming that all classes of employment are of roughly equal area) we will simply allocate half as much to each less desirable class, so the overall ratio of employment land will be 16:8:4:2:1, which will result in roughly half of the "employment land" being allocated to the "first tier" developments, 25% to the "second Tier" developments, 12.5% to the "Third Tier" and so on, which is simple to explain. Another common allocation methodology would be the 1/n series, so the ratios would be 1, 1/2, 1/3, 1/4 etc. It is relatively straightforward for us to change these ratios and generate new allocation profiles on this basis. Since this is strongly dependent on the distribution of areas available to each "class", we need to do a bit more work before we can propose these ratios.

² Since this is an approximation, we will simply use the FAR values and average square feet per employee based on existing Gwinnett data (InfoUSA, ELU parcel and tax data) to determine how much land is used, and how many employees this represents. These values may be modified by Robert Charles Lesser Co. to more accurately reflect future trends. Since these values will be at a TAZ level, this could represent a number of new buildings which all have "average" FAR's and employees per square foot, or a mix of uses and densities (such as a shipping yard with very low FAR's and employee densities coupled with a business park having very high FAR's and employee densities: at a TAZ level these are equivalent).

³ As an example, if a TAZ had 100 acres of "First Tier" 200 acres of "Second Tier" employment land, if 20% of "First Tier" and 5% of "Second Tier" land was used then this TAZ would have consumed 20 Acres of "First Tier" and 10 acres of "Second Tier" land. Note that the number of employees added has already been calculated in the previous step.

Population and Employment Forecasts

Introduction

Socioeconomic forecasting in support of the Gwinnett Unified Plan involved two major activities: preparation of an “initial” forecast series that assumed a continuation of recent trends and policies; and development of alternative future scenarios based on other assumptions. The following were the steps involved in obtaining the initial forecast (which in modified form became the “Middle-of-the-Road” scenario):

- 1) Preparation of national and regional forecasts
- 2) Allocation of regional forecast totals to counties
- 3) Allocation of Gwinnett County forecast totals to sub-county areas (SCAs)
- 4) Expert review and revision of SCA forecasts
- 5) Preparation of supplementary variables required for transportation modeling
- 6) Allocation of forecast variables to TAZs (involving conversion to land-use variables and allocation to individual land parcels)

The present discussion will cover the first five of these steps, with notes on their linkages to TAZ-level and parcel-level forecasting and commentary on the preparation of alternative SCA forecasts. Another appendix describes the SCA-to-parcel allocation process and other tasks involving fine-grained description of land uses.

Initial forecasts were obtained in steps 1 through 3 via a top-down forecasting sequence with two key features: an exclusive reliance upon empirically calibrated forecasting relationships; and a linkage of Gwinnett County forecasts to anticipated developments in the Atlanta region as a whole. The limitation to predictive relationships based on empirical data profoundly shaped the region-to-county and county-to-SCA allocation tasks, which constituted the bulk of the initial forecasting effort.

The Atlanta region covered by the forecasting process was the 28-county Atlanta metropolitan area plus Hall County (which officially constituted metropolitan Gainesville but was clearly part of the Atlanta urban complex). Fulton County was split into two parts, namely the portions located above and below the northern loop of I-285, so the region-to-county allocation step addressed 30 separate geographic units.

Forecasts were prepared using a 2005 baseline year. In concept this “jumping-off point” was the last year covered by actual values of variables, although many of the sub-county descriptors for 2005 were in fact estimates due to limits on data availability. All forecasts for the region, Gwinnett County and its component SCAs were carried to 2035, because the allocation procedures dealt with ten-year increments starting in 2005. The forecasted values of variables for years ending in five were subsequently interpolated to years ending in zero, and the 2035 values were never used thereafter.

Economic conditions at all geographic levels were described in terms of employment by industry, utilizing a Bureau of Labor Statistics (BLS) definition of employment that included part-time jobs but excluded self-employed persons. (This

definition was chosen because the BLS was the only federal agency that offered NAICS-classified historical data, and because various statistics supplied by the Atlanta Regional Commission were BLS-consistent.) All forecasts down to the SCA level addressed 19 industry groups based on the North American Industrial Classification System (NAICS). At that point the baseline and forecasted magnitudes were converted to an 8-category grouping based on the older Standard Industrial Classification (SIC) system, because these SIC industries were required as transportation modeling inputs.

Demographic characteristics were described using a variety of variables, which differed among geographic levels due to requirements of the forecasting methodology. These variables are summarized in the following list. Some of the entries indicate the reasons for differences in emphasis (for example, the fact that the national forecasting process worked from demographics to total employment, whereas the regional forecast was employment-driven), but for the most part the explanations are postponed to the discussion of individual tasks. Some of the listed variables played only instrumental roles. For example, breakdowns of households by dwelling-unit structure type were needed for interaction with parcel allocation tasks but were not required by statistical end-users, and breakdowns of population and households by race were needed to estimate labor force participation, household size and income trends but were not carried beyond the third forecasting step.

National Forecast

- Population by age, sex and race (used to peg total end-year employment)
- Employment in 19 NAICS industries (breakdown based on BLS forecast)

Regional Forecast

- Employment in 19 NAICS industries (linked to national employment)
- Population by age, sex and race (linked to regional employment)
- Households by income quintile (estimated on the basis of population)

County Forecasts

- Employment in 19 NAICS industries (joint output of core allocation model)
- Households by income quintile (joint output of core allocation model)
- Households by structure type (from model housing loop)
- Households by race/ethnicity (from model racial loop)
- Population by age, sex, race and household status (from supplementary rel.s)

Forecasts for Gwinnett SCAs

- Same as above, plus households by number of persons in household

Gwinnett SAC Forecasts after Review/Revision and Conversion

- Employment in 8 SIC industries
- Households in four income categories specified by transportation model
- Households by structure type and number of persons in household
- Cross-tab: households by income and number of persons in household
- Population by age, sex and household status

Gwinnett TAZ Forecasts

- Employment in 8 SIC industries
- Population by household status
- Cross-tab: households by income and number of persons in household

National and Regional Forecasting

Historical Context

The enormous growth of metro Atlanta over the second half of the last century is widely familiar. Table 1 below summarizes the relevant population trends since 1940. This table covers the entire 29-county region of present concern and offers separate figures for a nine-county core area. In no decade since 1960 has the Atlanta region failed to gain population at a compound rate of less than 2.35% per year, or failed to grow at least twice as fast as the U.S. as a whole. These generalities also held during the 1940-60 interval for the nine-county core area that constituted the metropolis at that time.

Table 1. HISTORICAL POPULATION TRENDS IN THE ATLANTA REGION

	Fulton & Eight Con- tiguous Counties*		Other 20 Counties in Present Metropolis		Total 29-County Region		
	Persons	% Ch./Yr.	Persons	% Ch./Yr.	Persons	% Ch. Per Yr.	Ratio to U.S. %
1940	608,513		334,849		943,362		
1950	778,895	2.50%	340,542	0.17%	1,119,437	1.73%	1.266
1960	1,077,299	3.30%	359,825	0.55%	1,437,124	2.53%	1.478
1970	1,479,108	3.22%	424,630	1.67%	1,903,737	2.85%	2.258
1980	1,851,693	2.27%	550,451	2.63%	2,402,144	2.35%	2.162
1990	2,445,317	2.82%	719,536	2.71%	3,164,853	2.80%	2.981
2000	3,338,334	3.16%	1,048,924	3.84%	4,387,258	3.32%	2.670
1950-2000		2.95%		2.28%		2.77%	2.218

* All counties touching Fulton except Carroll and Coweta.

A similar situation prevailed for employment, the driver of population growth. Between 1969 and 2000, the 29-county region gained employment at a compound annual rate of 3.67%, as compared with a U.S. rate of 2.02% per year. This 31-year period included only two individual years in which the region lost employment and four years in which it failed to exceed the national rate of job growth. There was no five-year interval in which the region's employment gain failed to exceed 100,000 jobs and 8.65% of the initial-year level (which today would translate into 200,000-plus jobs).

But at the start of the present decade the region's explosive job growth came to a halt. Its employment base expanded by only half a percentage point between 2000 and 2001, then declined for two consecutive years. The ensuing gains during 2003-05 just succeeded in bringing the 2005 annual average to a level 48,500 jobs or 2.1% above the 2000 figure. This unprecedented period of stagnation was linked to national economic conditions, but in contrast to prior experience, the Atlanta region did not fare appreciably better than U.S. Its losses during 2001-03 were in fact worse than the accompanying national declines.

Remarkably, the near-standstill in regional employment during 2000-05 had only modest impact on population growth. This is shown by Table 2 on the next page, which describes population and net migration for five-year intervals starting in 1990. Both sets

of figures include breakdowns by racial/ethnic status (with all Hispanic persons isolated from the three race-based groups). The figures outside the first and third columns have been estimated from Census Bureau data and the cohort-survival analysis to be described.

Table 2. POPULATION AND NET MIGRATION IN THE ATLANTA REGION

	Population				Estimated Net Migration		
	1990	1995	2000	2005	1990-95	1995-00	2000-05
White	2,271,623	2,464,579	2,701,199	2,845,548	93,575	137,941	62,192
Black	778,212	984,446	1,237,349	1,490,731	141,611	172,660	167,505
Asian	51,660	96,309	151,061	209,681	38,558	44,135	45,555
Hispanic	63,358	168,596	297,649	459,867	90,003	96,813	114,354
Total	3,164,853	3,713,930	4,387,258	5,005,827	363,747	451,549	389,606
Annual % Ch.		3.25%	3.39%	2.67%			

The region grew rapidly during the early 1990s and a bit more rapidly in the late 1990s, with net migration supplying about two-thirds of the population gain in each case. A slowdown then occurred, but from 1995-2000 to 2000-05 the region's annual growth rate dropped by less than three-quarters of a percentage point and its net migration stayed high in absolute terms. As a result, the region's population increased by 14.1% over the first half of the present decade while its employment was rising by only 2.1%.

Table 2 shows the huge population increases that occurred during the 1990s for the region's three major minority groups. Starting with only 28% of the region's 1990 population, these groups supplied more than two-thirds of its population gain for the decade. The minority population then kept increasing at a comparable pace after 2000 (lower in percentage terms but higher in absolute terms), with rises in net migration occurring for two of the three groups. Meanwhile the adverse employment situation caused white net migration to fall by more than half from 1995-2000 to 2000-05.

The region's economic and demographic history raised a series of questions for the Gwinnett forecasting effort. Metro Atlanta's rapid growth in the early postwar years had been attributable to a fundamental restructuring of economic geography. The nation was due for the rapid emergence of regional capitals, and for a number of straightforward reasons Atlanta was a leading candidate. It was less clear why some of the regional capitals, most notably Atlanta, went on to become major global players. Atlanta's lifestyle, cost, scale and transportation advantages formed a powerful combination but were not obviously special enough to assure high growth in perpetuity. The forecasting project thus had to consider the possibility that future economic forces would not require the Atlanta region to supply an ever-greater share of the nation's economic activity, and that the 2000-05 retrenchment might be a sign in this direction.

Other questions involved growth constraints, with transportation an obvious concern. It is easy to imagine that traffic jams will someday brake Atlanta's progress, although longstanding predictions of this nature have never borne out in places like Washington and Los Angeles. Water supply is a more unusual situation. Atlanta lies

downhill from a humid mountain range but relies for water upon a river basin – the Chattahoochee – that remains oddly narrow in its diagonal path across the state. All land northwest of this basin drains into North Carolina, Tennessee and Alabama. The largest flows exit via the Etowah River and thereby feed the Coosa River waterway in Alabama, making them a major concern to that state (which sued the Corps of Engineers in 1990 to prevent water diversions to Atlanta). For these reasons Atlanta has been called the most likely of the nation’s major metro areas to be growth-constrained by water supply.

The above paragraph was written in March of 2006, before the 2007 drought that left the region only a few months away from running out of water (and continues at the present writing).

A more concrete question involved economic-demographic balance. Between 2000 and 2005, the region’s employment per capita dropped from 0.528 to 0.472. Given continued employment gains at the relatively buoyant 2004-05 rate of 3.07% per year, returning to the per-capita employment level that prevailed in 2000 would require the region’s population to expand by only 1.9% per year – two-thirds of the 2000-05 rate – from 2005 to 2015. Thus the region could regain its former economic trajectory and still experience persistently slow demographic growth by historical standards. Employment was exceptionally high relative to population in 2000, both regionally and nationally, so a full return to the 2000 relationship could not be reasonably assumed in the forecasting process; but there was little guidance in positing a new economic-demographic balance.

After much deliberation, employment forecasts were prepared for the Atlanta region by forming and applying regional-national linkages as in previous studies, with no special provision for infrastructure-related contingencies. The region’s post-2000 slump registered proportionally in the predictive relationships but was not treated as a paradigm shift. Regarding economic-demographic balance, the region’s labor force participation rates were adjusted upward after 2005 by amounts only sufficient to raise its employment per capita to 0.491 by 2015 (34% of the way from the 2005 level to the 2000 peak). The latter decision has been supported by later events. As for the former decision, only time will tell.

National Forecast

The first requirement for regional forecasting was the preparation of a national employment forecast. This task built upon a BLS projection of national employment by detailed industry through 2014. (Since the early 1990s no federal agency has forecasted employment more than ten years out.) Conditions further in the future were addressed by assuming that over the long term U.S. employment would be demographically limited. That is, the number of jobs would expand proportionally with the number of persons available to fill them. The supporting arguments were that: 1) political forces would always push the economy toward full employment in the long run, even at a cost of drastic measures such as kindling inflation or cheapening the currency; and 2) the challenge of maintaining full employment would progressively abate as aging of the population reduced growth in the labor force.

The assumed demographic linkage made it possible to project total U.S. employment beyond 2014 by applying labor force participation rates to the Census Bureau's population forecasts, then allowing for unemployment. Separate participation rates were developed and applied for persons in the four abovementioned racial groups by age and sex. (Labor force participation rates covering the entire forecast period were available from a BLS file, but greater reliance was placed on rates from a more recent series accompanying the 2014 employment projections.) Total employment was obtained by assuming an unemployment rate of 5.5% in 2010 and 5% thereafter. The aggregate figures were then allocated across industries by projecting forward the industry shares specified by the BLS employment projections through 2014. Table 3 below shows the national employment totals yielded by this process, accompanied by some historical employment data and comparisons with population.

Table 3. TRENDS IN NATIONAL EMPLOYMENT AND POPULATION

Historical BLS Employment			Projected Employment and Population				
Year	No. of Workers	Annual % Chg.	Year	No. of Workers	Annual % Chg.	Population	Workers Per Capita
1975	79,749		2005	135,860		295,507	0.460
1980	93,203	3.17%	2010	142,404	0.95%	308,936	0.461
1985	100,042	1.43%	2015	148,533	0.85%	322,366	0.461
1990	111,888	2.26%	2020	152,816	0.57%	335,805	0.455
1995	119,713	1.36%	2025	157,176	0.56%	349,439	0.450
2000	134,223	2.31%	2030	162,627	0.68%	363,584	0.447
2005	135,860	0.24%	2035	169,329	0.81%	377,886	0.448

Between 1975 and 2000, the nation's employment growth often exceeded 2% per year – for example, during the late-1990s boom and periods of rapid female entry into the labor force – and never fell below 1.3% per year for any half-decade. In contrast, future employment gains are expected to proceed at less than 1% annually and fall below 0.6% per year between 2015 and 2025. This outcome is attributable to rapid population aging, and occurs despite the assumption of sharply higher labor force participation for most older population groups. (If applied to the 2005 population profile, the participation rates assumed for 2035 would yield a labor force 5% higher than the 2005 rates.) Even though most individual age groups will have larger shares of persons working than at present, aggregate employment per capita will decline after 2015 from above 0.46 to below 0.45.

The five national industries expected to register the fastest employment gains are professional-technical services, administrative support services, private education, health and social services, and arts and recreation. Each of these industries will expand by at least 1.45% per year during 2005-35, while no other sector will achieve a growth rate above 1%. This pattern involves a good deal of continuity with the past, since the given five industries were all among the seven fastest-growing sectors during 1975-2005.

Regional Employment Forecasting – Input-Output Analysis

The regional forecasting approach assumed that all long-term trends at the regional level were economically driven, i.e., that employment determined demographic characteristics rather than vice versa. This assumption would be seriously flawed for a retirement area or a declining context subject to demographic inertia, but for an economic boomtown such as greater Atlanta it should provide a close approximation to reality.

The forecasting approach used was very simple in concept. The input data consisted of employment by industry for an historical period starting in 1969. For each industry, regional employment in each year was expressed as a ratio to employment in the corresponding national industry. A straight-line trend was fitted to the ratio values, sometimes using the whole 37 years of record and sometimes using just the last 20 years. Each industry trend line was then extrapolated into the future, with no adjustment other than an upward or downward shift to make the extrapolated line depart exactly from the point for 2005. Future ratio values were determined from the trend line and applied to the forecasted levels of national employment in the given years. The figures were then assembled to yield overall descriptions of the future regional economy.

What complicated the procedure was that the employment levels used to compute regional/national ratios and establish trend lines were not in fact the employment totals for the various industries. All industries were divided into two components – a “final demand” share and a residual component serving the region’s own needs – using an input-output table. Only the final demand share of each industry’s employment was linked to the national economy and projected forward. The input-output table was then applied in reverse to reassemble the industry components and obtain overall descriptions of future regional employment.

Input-output models are basically expanded versions of the familiar economic base multiplier model, which says (when applied on the margin) that any independent economic stimulus in an area will have “multiplier” effects yielding an overall growth increment larger than the original stimulus. Input-output analysis expresses multiplier effects on an industry-specific basis by using a table of purchase coefficients to trace the individual transactions required to support an industry expansion. In static terms, input-output modeling attributes all economic activity to a set of industry components that are collectively called “final demand.” These are generally not whole industries but the estimated shares of industries that bring in revenue from the outside world. The final demand shares are typically large for manufacturing and other goods-producing activities and small to moderate for most population-serving functions (although such differences are fading in the post-industrial era).

The Gwinnett study utilized an input-output table prepared for the 29-county Atlanta-Gainesville region by the RIMS division of BEA. Since the customers of this data outlet are generally engaged in impact analysis rather than forecasting, RIMS only supplies input-output tables in inverse form. An I-O inverse is a coefficient matrix that when postmultiplied by a final-demand vector yields a vector of total employment (or output or earnings if the matrix is denominated in those terms). However, since the linear

equations comprising an input-output model yield unique solutions in both directions, a matrix inverse can also be used to solve iteratively for the final-demand vector associated with any given pattern of total activity. Thus in concept the same matrix inverse can be used to isolate final demand for historical years, then later translate forecasts of final demand back into descriptions of overall economic activity.

A major complication is that input-output coefficients are subject to change over time. The coefficients express patterns of demand for the products of various industries, and there are long-term trends in these patterns due to changes in economic structure. For example, relative demand for the employment-service industry has risen dramatically as companies substitute labor contractors and temp workers for permanent employees, and demand for health care has risen due to population aging and the increasing variety of medical treatments. Realistically isolating final demand requires projecting these changes back in time across the historical period used for trend analysis; and realistically forecasting total employment on the basis of final demand requires projecting them forward across the forecasting period. Furthermore there is need when adjusting the matrix to avoid building in an overall forecasting bias, which can exist if the matrix implicitly specifies a varying relationship between final demand and other economic activity. Such bias can be avoided by controlling the overall multiplier – i.e., the ratio of total employment to final-demand employment – specified by the matrix, as is explained momentarily.

In the present case the matrix adjustment process had to span a 37-year historical period and a 30-year forecasting period. It was accomplished by preparing a matrix for every third year and handling intermediate years by interpolation. Table 4 on the next page shows the resultant partitioning of the Atlanta regional economy for the baseline year and two prior years. The table's left-hand side shows the portions of employment assigned to final demand and its right-hand side describes total employment. Because the I-O matrix did not address them separately, two pairs of industries treated elsewhere on an individual basis are lumped together here (namely durable and nondurable goods manufacturing and accommodations and food services).

Conventional applications of input-output analysis treat all government activity as final demand, on the premise that tax payments are fundamentally different from other expenditures for goods and services. Even if this principle is followed, the use of input-output to model a whole economy requires a vector describing government inputs from other industries. The custom I-O tables delivered by RIMS no longer include such a vector (though they once did). Hence one task in addressing the Atlanta region was to estimate a government input vector using input relationships based on I-O tables from past studies. A further modification was the removal of local government from final demand. Notwithstanding theoretical considerations, local government activity – about half of which involves public education – is no less endogenous to a regional economy than any other activity, at least over the long run. This shift did not involve the insertion of local government into the structural I-O matrix. Instead local government employment was expressed for predictive purposes as a simple function of regional population.

Table 4. PARTITIONING OF REGIONAL EMPLOYMENT IN SELECTED YEARS

	Final Demand			Total Employment		
	1969	1987	2005	1969	1987	2005
Ag., mining & other extractive	6,177	9,465	9,153	10,993	14,473	12,143
Construction	8,195	23,726	43,017	33,298	81,768	130,460
Manufacturing	113,653	157,806	158,202	183,135	217,762	190,567
Wholesale trade	20,919	57,023	96,457	46,353	108,015	158,592
Retail trade	9,844	22,933	32,928	101,727	199,318	248,832
Transportation & utilities	19,793	43,023	65,771	48,390	90,601	120,650
Information	7,525	21,820	39,876	23,247	57,317	91,490
Finance, insurance & real est.	14,172	34,704	58,836	45,236	95,969	144,276
Prof. & tech. serv. and mgmt.	11,564	40,369	84,626	35,242	104,263	190,976
Administrative support serv.	3,208	16,364	50,272	16,458	71,762	191,373
Educational services	4,187	7,389	18,675	14,456	21,908	48,147
Health serv. & social assist.	3,691	15,175	41,076	22,721	79,857	187,628
Arts, entertainment & recr.	1,057	2,789	6,472	5,832	13,022	26,271
Accommodations & food serv.	5,586	21,480	41,265	35,957	116,598	195,569
Other services (incl. rental)	6,443	11,073	19,759	47,573	70,418	108,991
Federal & state government	50,920	86,111	110,483	50,920	86,111	110,483
Local government	(52,375)	(111,601)	(208,625)	52,375	111,601	208,625
Total:						
With local government in FD	339,310	682,851	1,085,494	773,913	1,540,765	2,365,074
Multiplier	2.281	2.256	2.179			
Without local gov't in FD	286,934	571,250	876,869	773,913	1,540,765	2,365,074
Multiplier	2.697	2.697	2.697			

Given the abovementioned modifications, the input-output table for the Atlanta region yielded a baseline employment multiplier – i.e., a ratio of total employment to final demand in the baseline year – of 2.697. This figure appears at the bottom of Table 4, along with the multiplier values that would be obtained if local government were considered part of final demand. The latter are within the 2.0-to-2.3 range normally associated with regional employment multipliers, so the local government shift makes a very major difference.

Controlling the multiplier in the matrix adjustment process meant pegging the adjustments in such a way that application of the matrix to data for a given year always yielded a multiplier of exactly 2.697, for every year in both the historical period and the forecast period. (In a few past studies of this type, the employment multiplier has been allowed to vary in a linear fashion over time, but maintaining a constant value is probably safer in terms of protection against forecasting bias.) As in other long-term applications of I-O, no further guidance was available for adjustment of individual coefficients other than professional judgment and familiarity with historical shifts in demand. The present study followed precedent in setting up routines to produce systematic variation in the off-diagonal elements of the matrix and the portions of the diagonal elements in excess of unity. There was a significant innovation, however, based on the principle that whatever is done to an I-O matrix going back in time should be paralleled as closely as possible by

the treatment of the matrix going forward into the forecast period. The new procedure consisted of controlling the adjustments so that the final-demand shares of employment emerging from application of the matrix always equaled a constant factor times the shares established in the baseline year. The factor varied over time but was held constant across all industries. Even though solutions with this characteristic had to be found by trial-and-error (with final-demand vectors established iteratively when working backward through the matrix inverse for historical years), this innovation plus the constant-multiplier rule turned matrix adjustment into an entirely mechanical process.

Regional Employment Forecasting – Industry Linkages

Forecasting involved linking final-demand employment in each regional industry to U.S. employment in the same industry. The linkages were established by expressing regional final demand as a percentage of national employment and fitting two trend lines to the percentages by simple linear regression (with calendar time as the independent variable). One trend line covered all 37 years in the 1969-2005 historical record, while the other was fitted to the percentages for the last 20 years, 1986 through 2005. The only discretionary aspect of the forecasting process was deciding for each industry whether the 37-year trend or the 20-year trend was more appropriate for projection into the future.

Figures 1 through 9 on the next nine pages offer graphical presentations of the resulting predictive relationships for the economic sectors listed in Table 4. The trend lines shown in these graphs have been entirely responsible for the present forecasts of both economic and demographic conditions in the Atlanta region (given the assumptions summarized at the end of this section). The graphs thus render the forecasting process fully transparent for purposes of review.

Every figure addresses two industries in two pairs of graphs. The left-hand graph in each pair describes an industry's total employment and final-demand employment for all years since 1969. The right-hand graph then plots final demand as a percentage of total U.S. employment in the same industry. Dashed lines in this graph show the 37-year and 20-year trends in the percentages (which are distinguishable by the fact that only the 37-year trend starts near the left-hand axis). Heavier dashes are used to denote whichever of the trend lines has been chosen as the basis for forecasting. The graph's right-hand portion shows the extrapolation of this line across the forecast period. In the process of extrapolation, the chosen trend line has been shifted uniformly up or down as necessary to make it pass exactly through the data point for 2005 (although the depiction of the line does not start until 2006).

It turned out that 20-year trends were chosen for eleven of the industries, while 37-year trends were used for only five. In every case but the "other services" sector, the chosen trend line was the more conservative option, i.e., was the one that yielded lower forecasts. However, there were quite a few cases such as manufacturing, wholesale trade, retail trade and health services in which the two trend relationships had virtually the same alignment. All of the chosen trend lines were upward-sloping, meaning they described past and future gains in the Atlanta region relative to the U.S.

Figure 1. TOTAL AND FINAL-DEMAND EMPLOYMENT IN EXTRACTIVE INDUSTRIES AND CONSTRUCTION

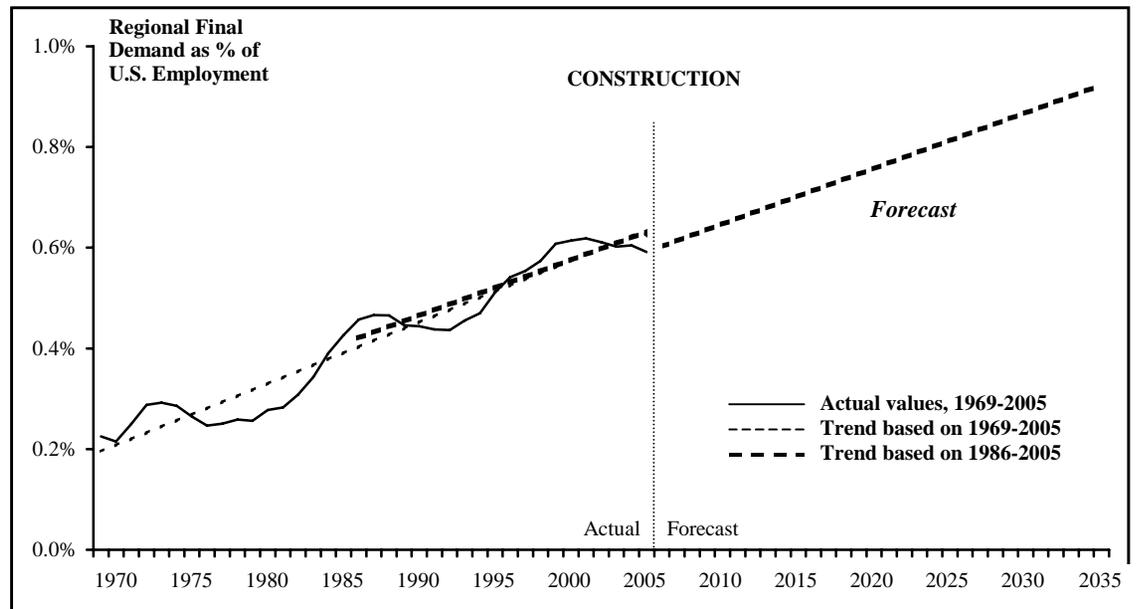
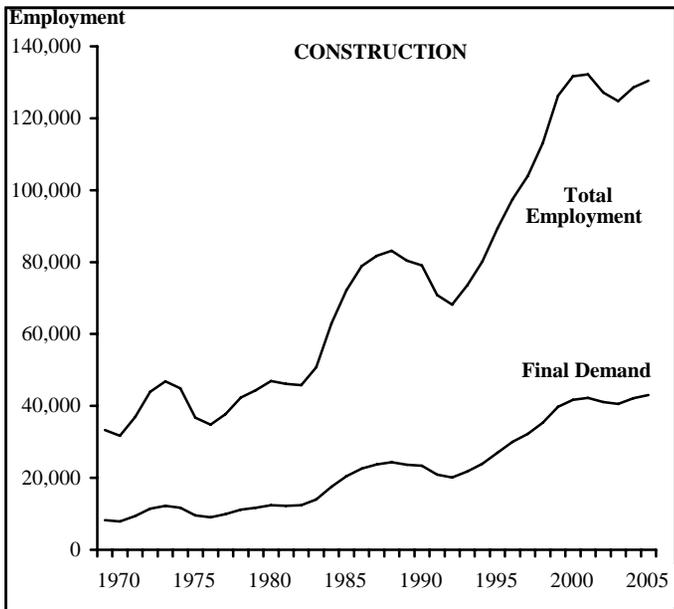
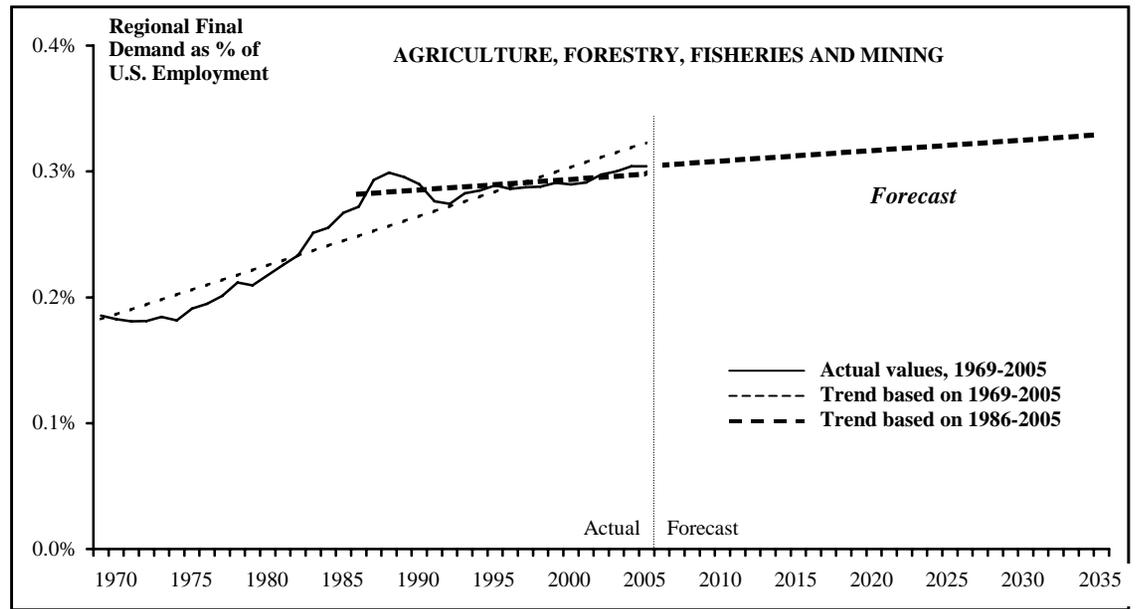
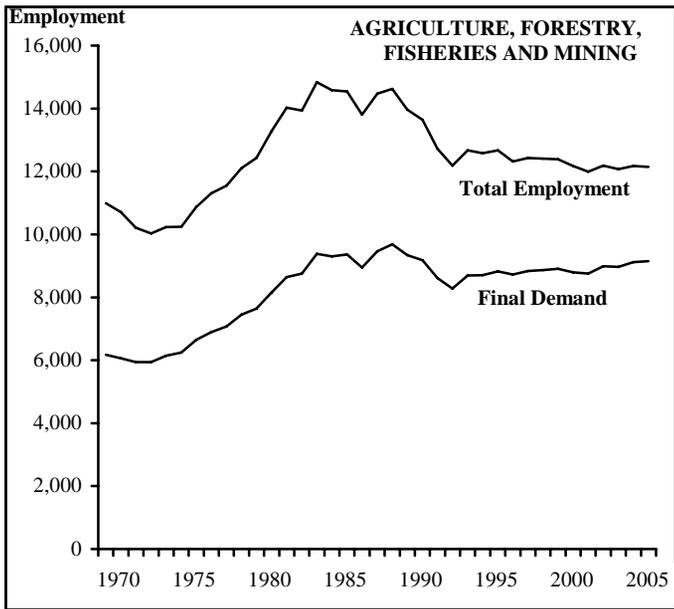


Figure 2. TOTAL AND FINAL-DEMAND EMPLOYMENT IN MANUFACTURING AND WHOLESALE TRADE

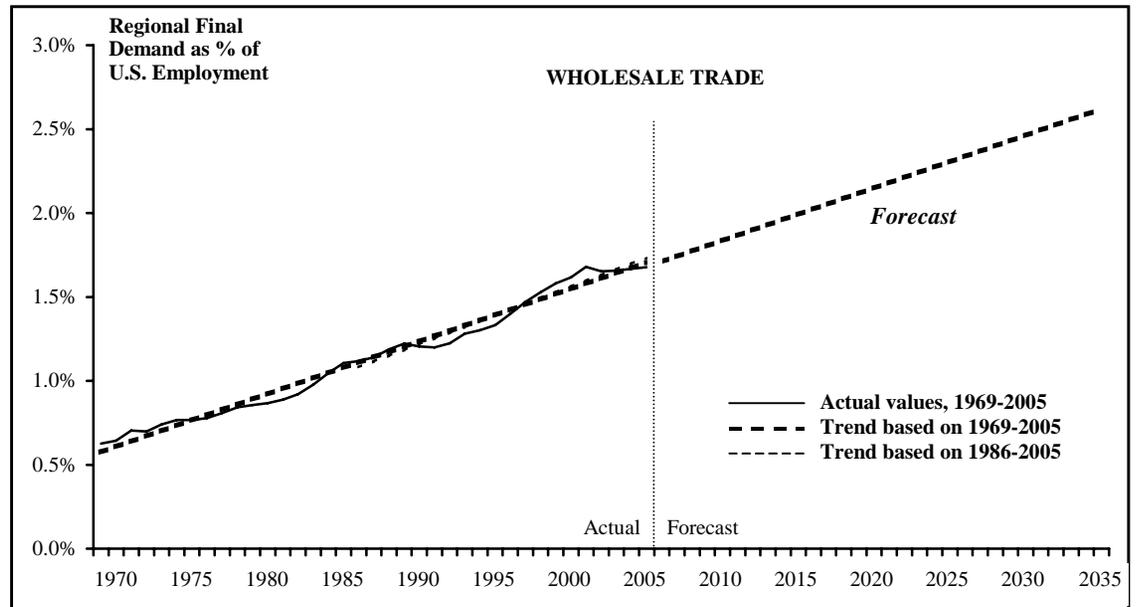
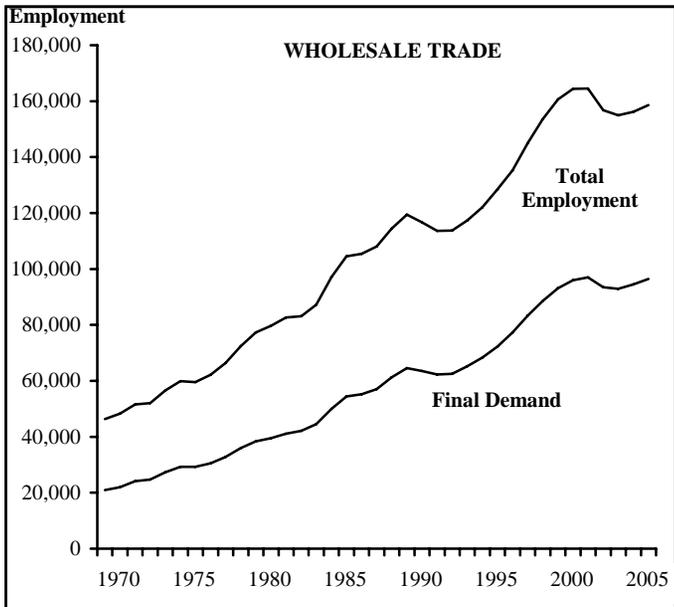
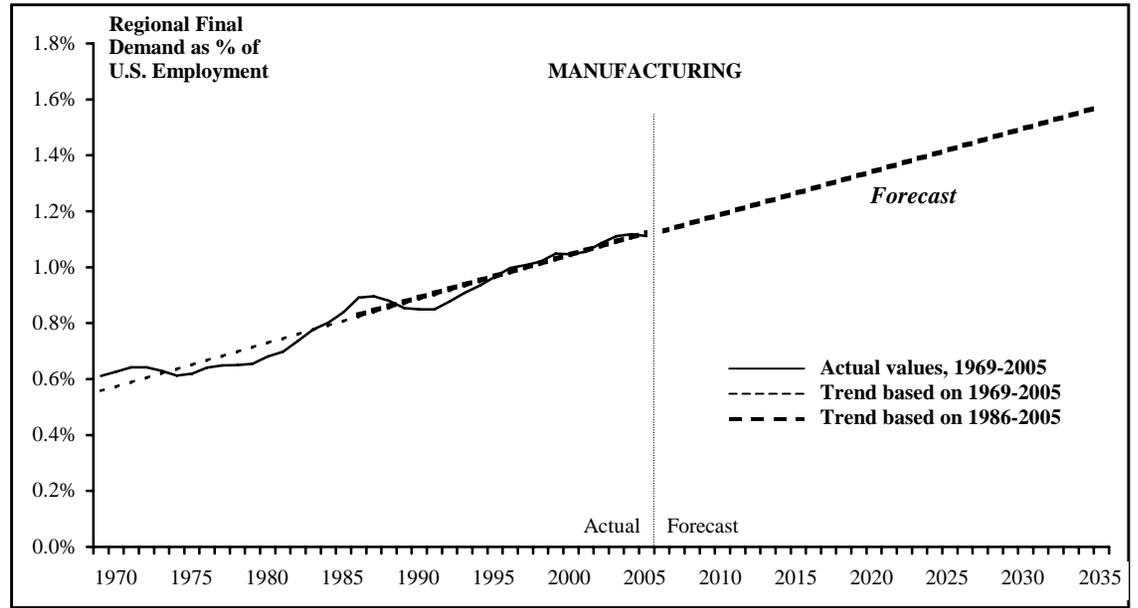
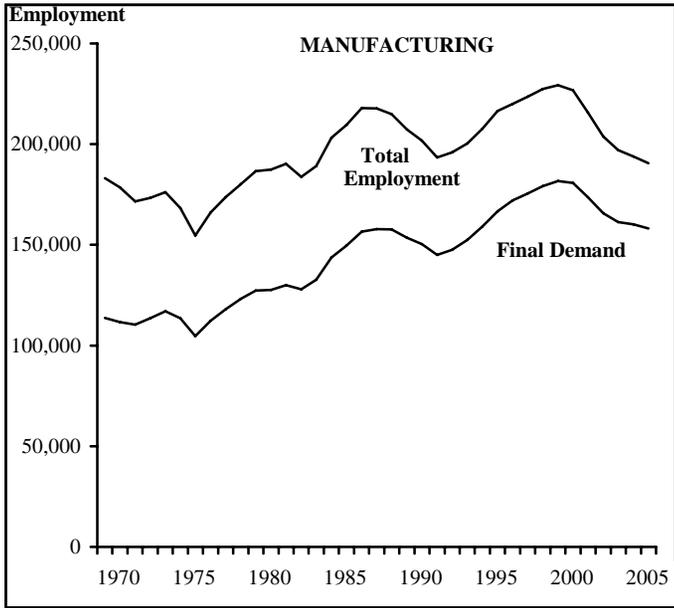


Figure 3. TOTAL AND FINAL-DEMAND EMPLOYMENT IN RETAIL TRADE AND TRANSPORTATION & UTILITIES

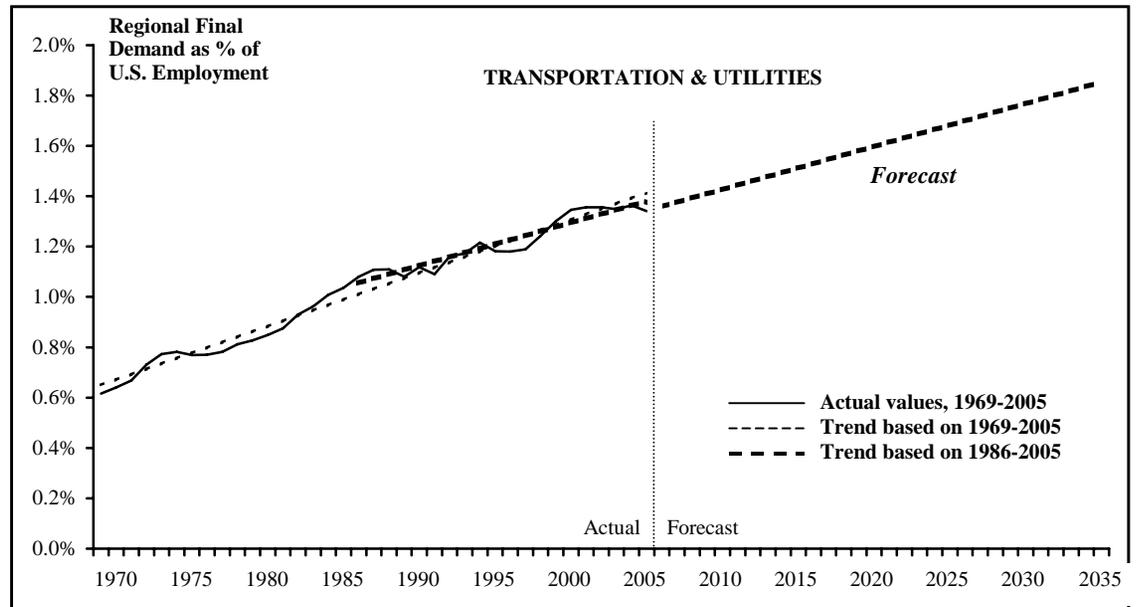
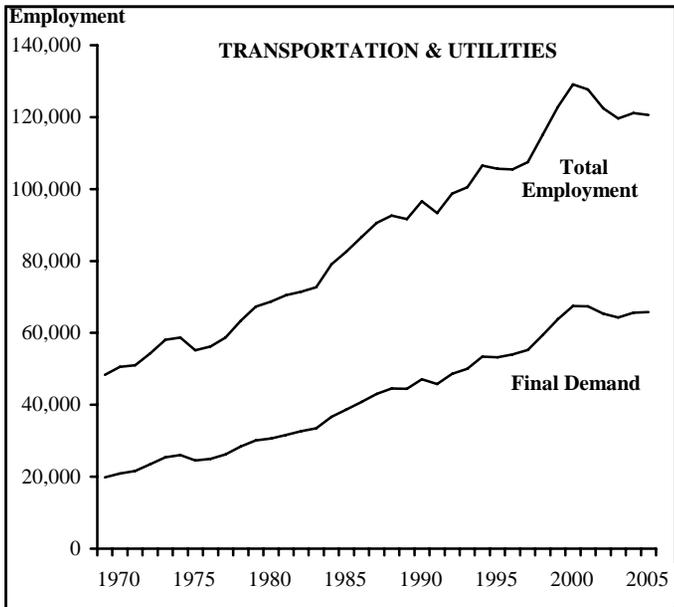
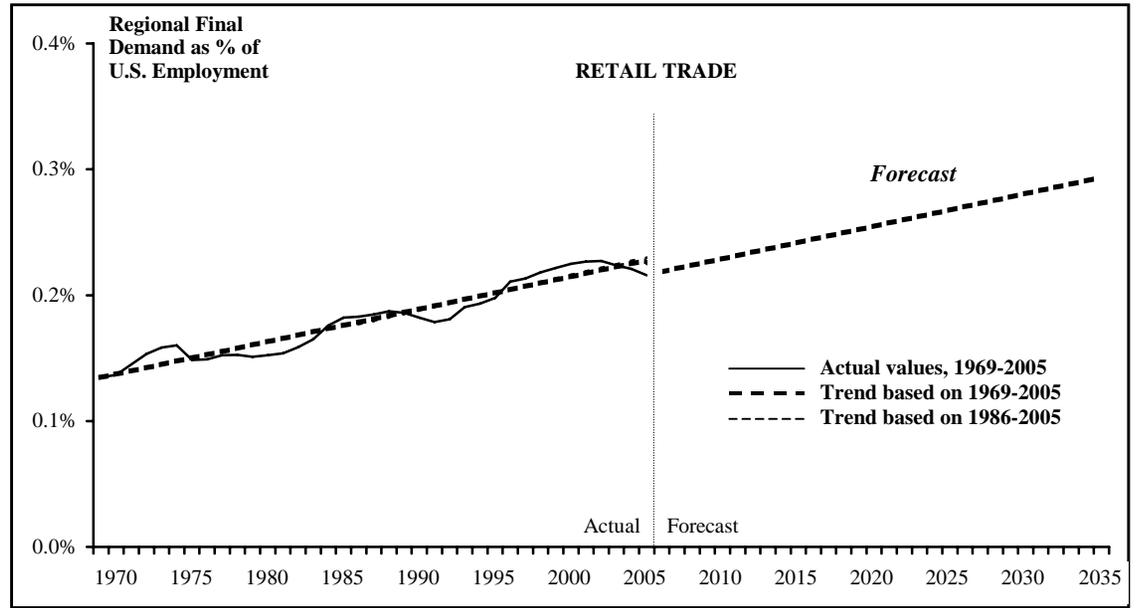
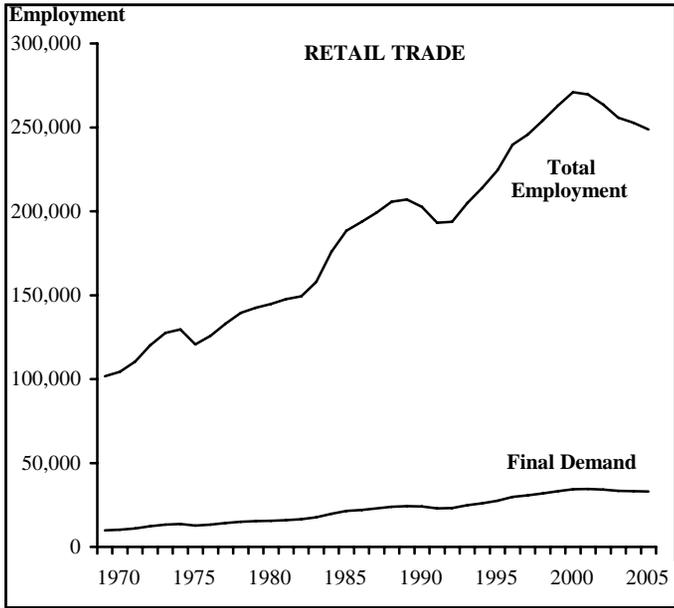


Figure 4. TOTAL AND FINAL-DEMAND EMPLOYMENT IN INFORMATION AND FINANCE, INSURANCE & REAL ESTATE

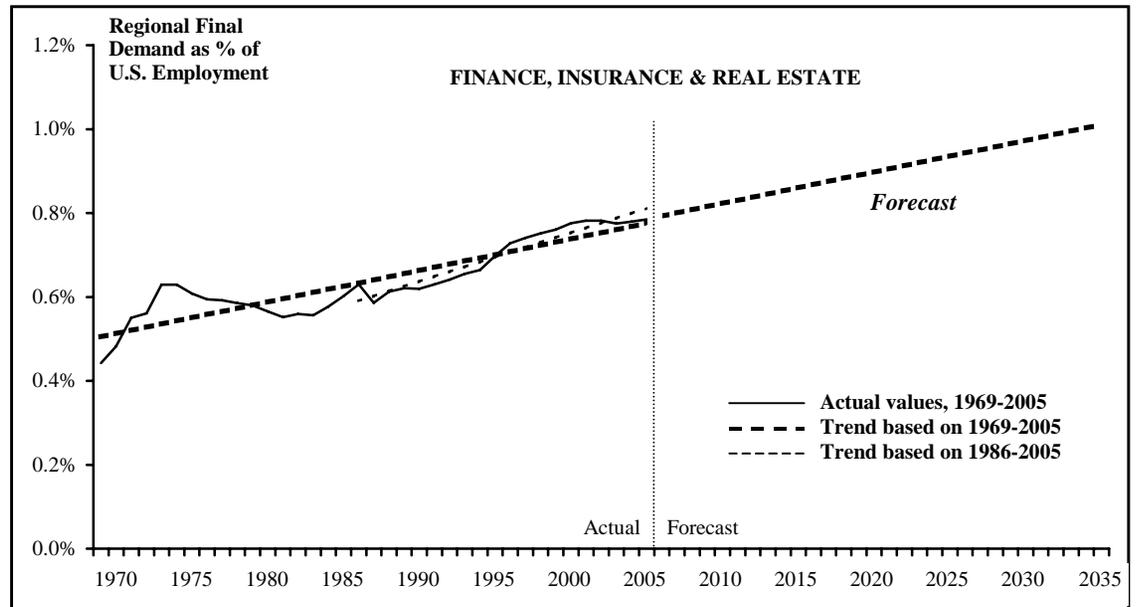
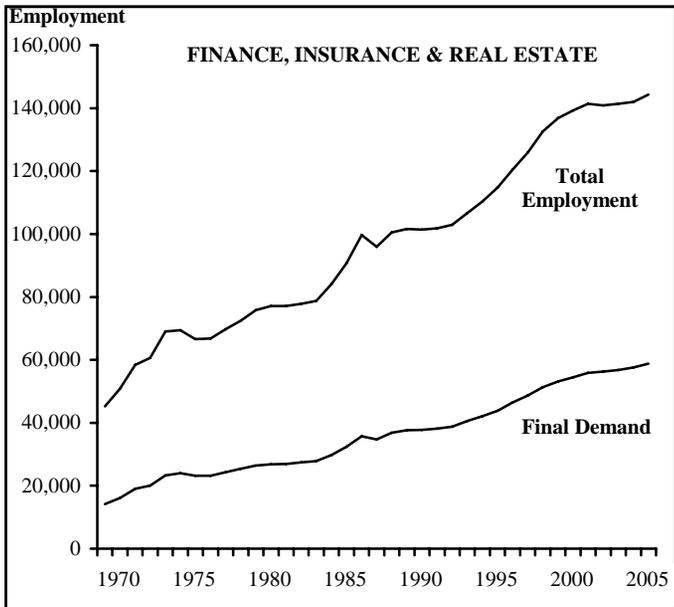
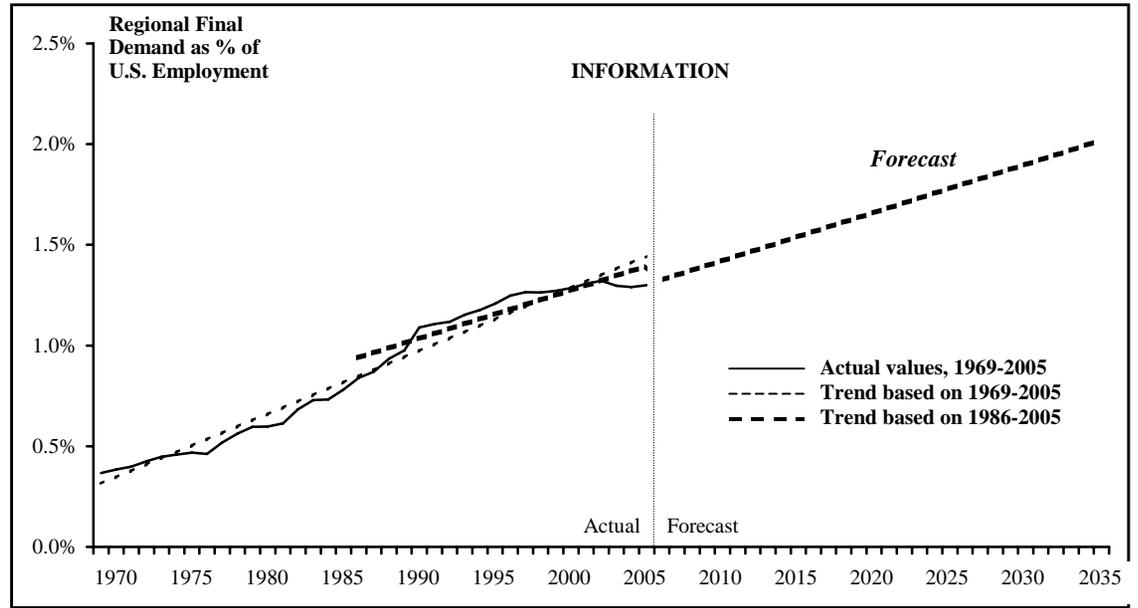
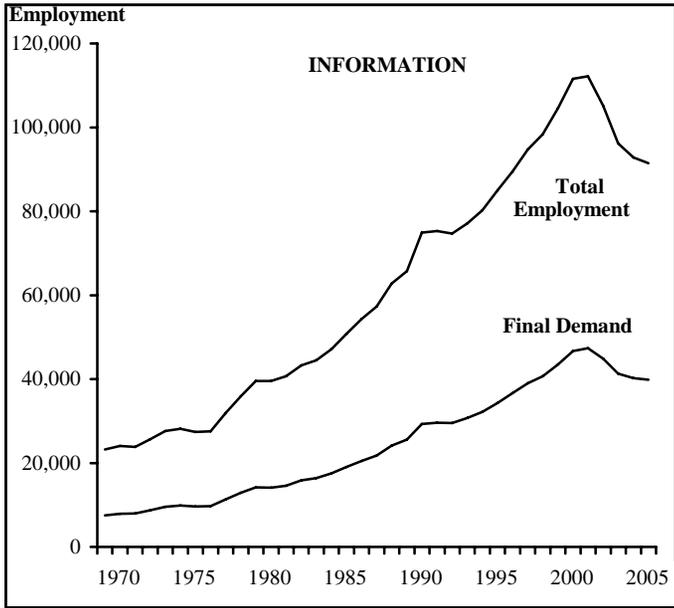


Figure 5. TOTAL AND FINAL-DEMAND EMPLOYMENT IN PROFESSIONAL-TECHNICAL AND ADMINISTRATIVE SUPPORT SERVICES

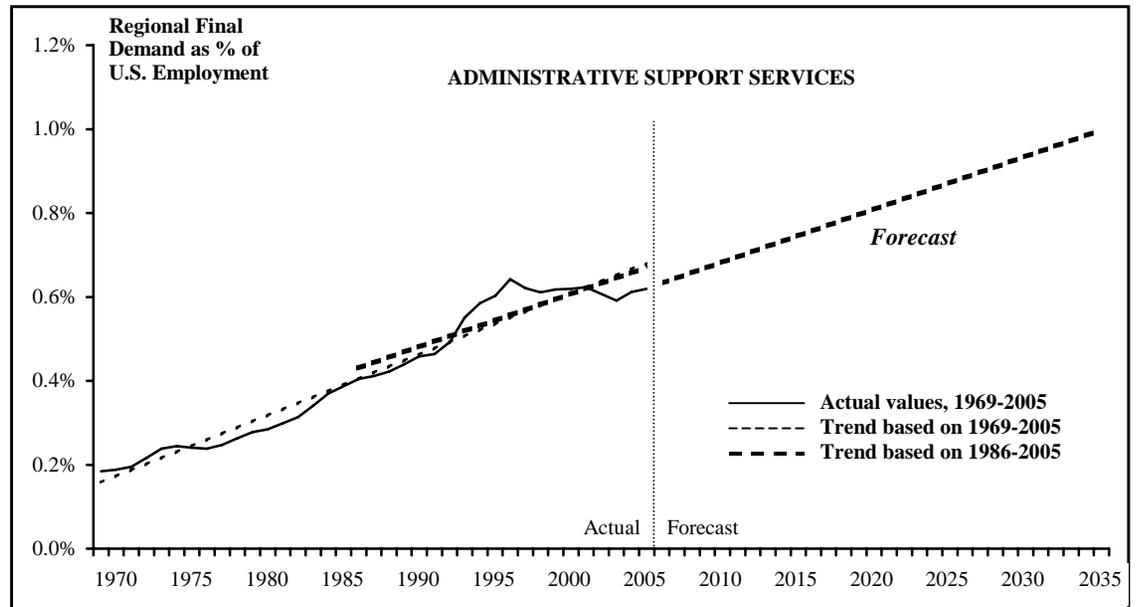
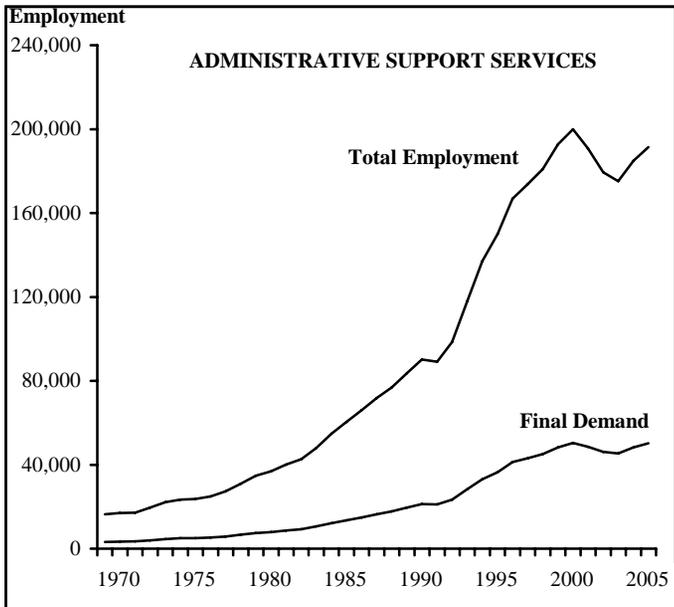
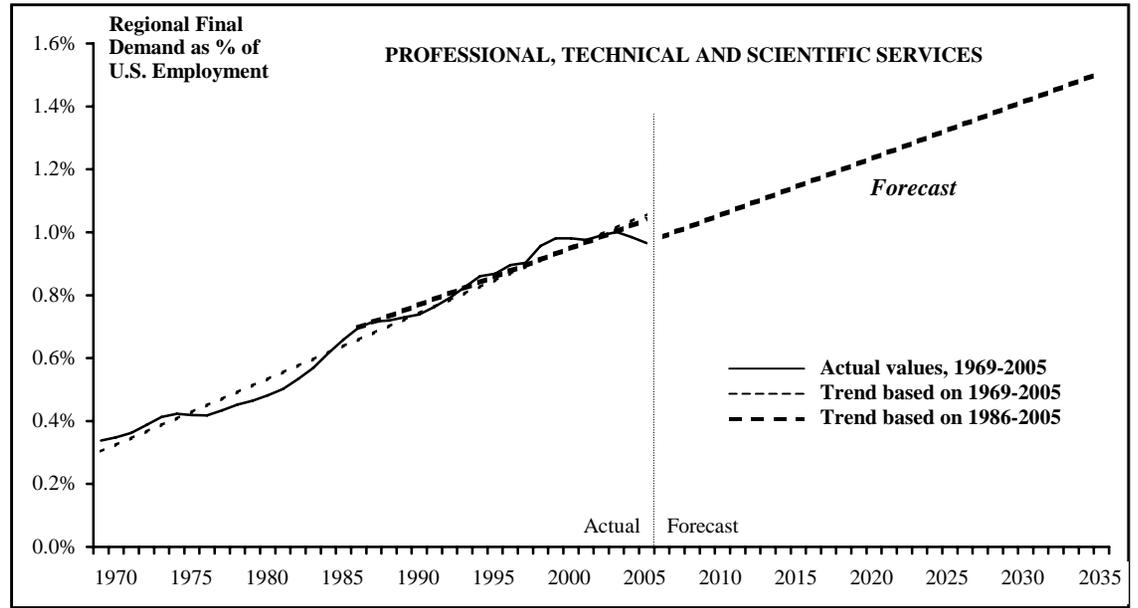
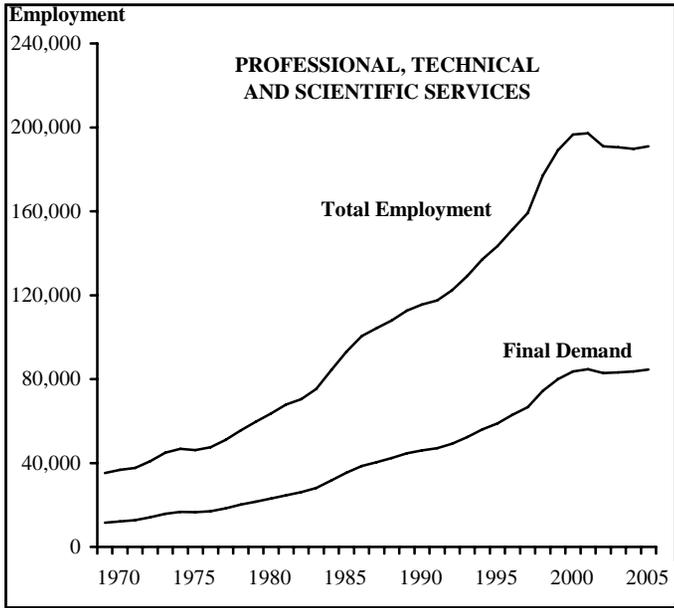


Figure 6. TOTAL AND FINAL-DEMAND EMPLOYMENT IN EDUCATIONAL SERVICES AND HEALTH CARE & SOCIAL ASSISTANCE

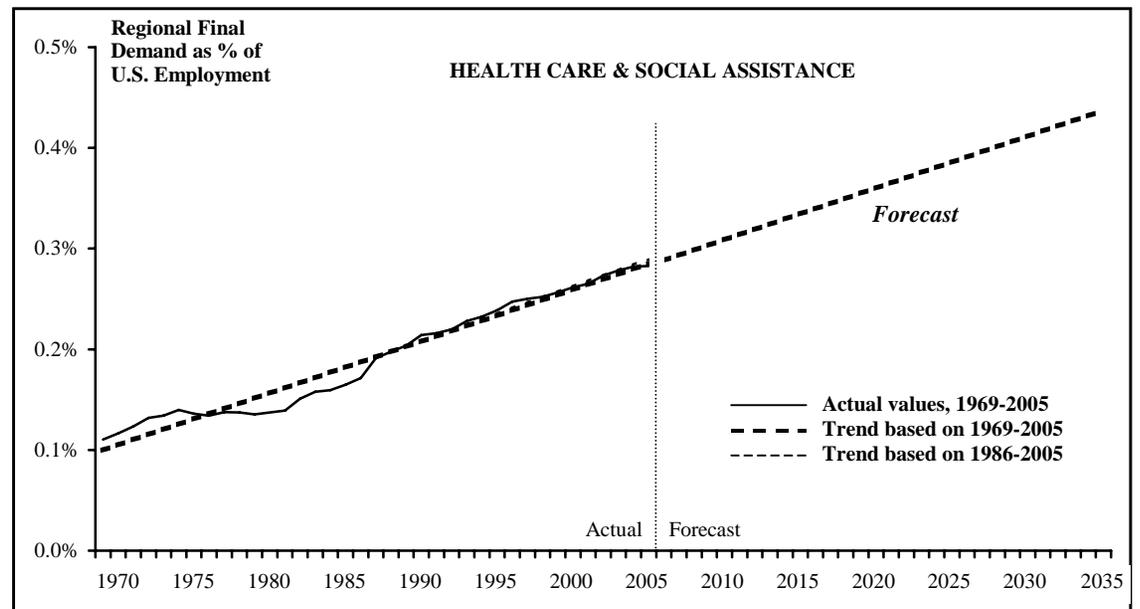
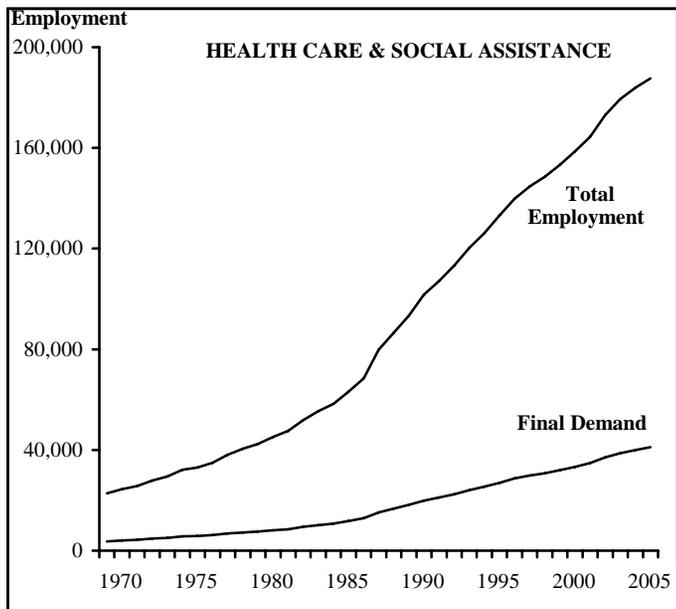
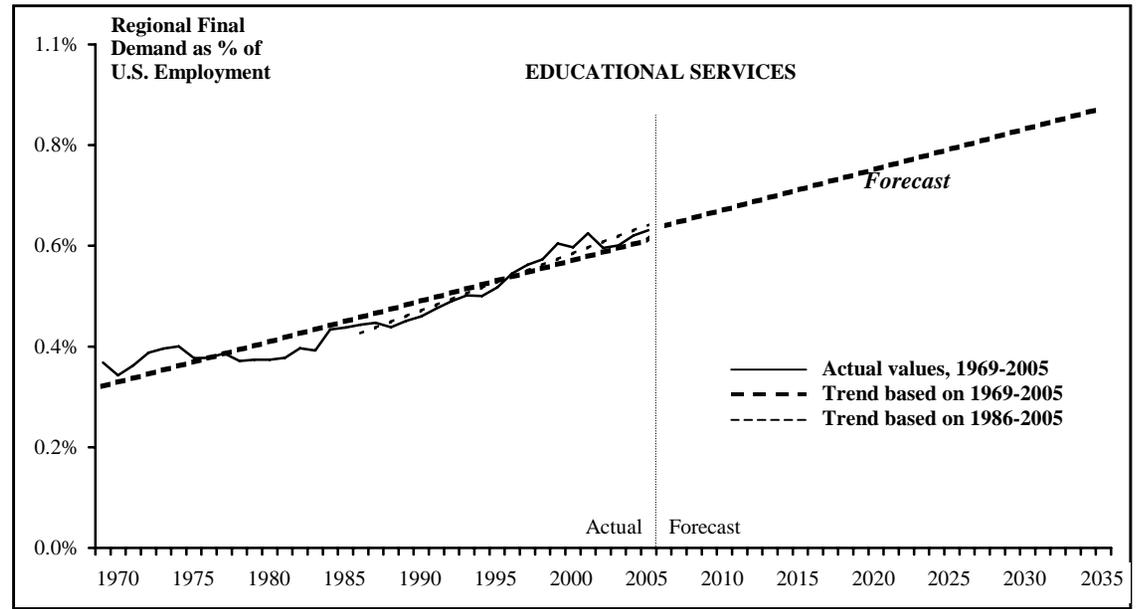
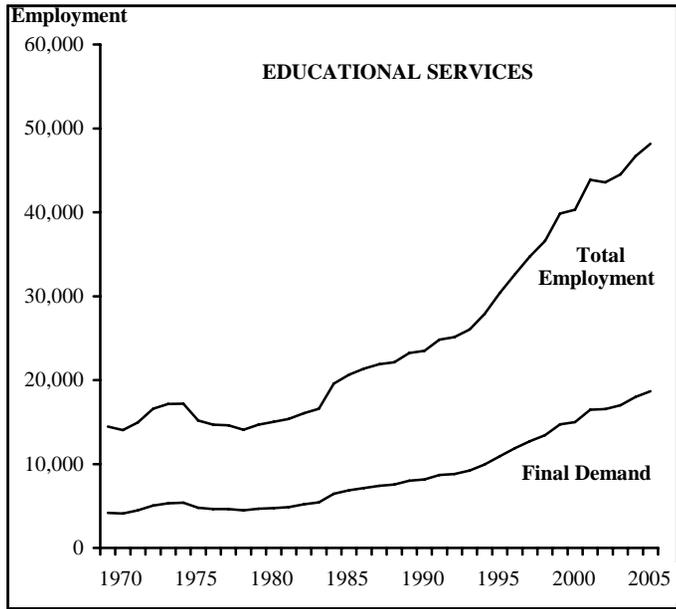


Figure 7. TOTAL AND FINAL-DEMAND EMPLOYMENT IN ARTS & RECREATION AND ACCOMMODATION & FOOD SERVICES

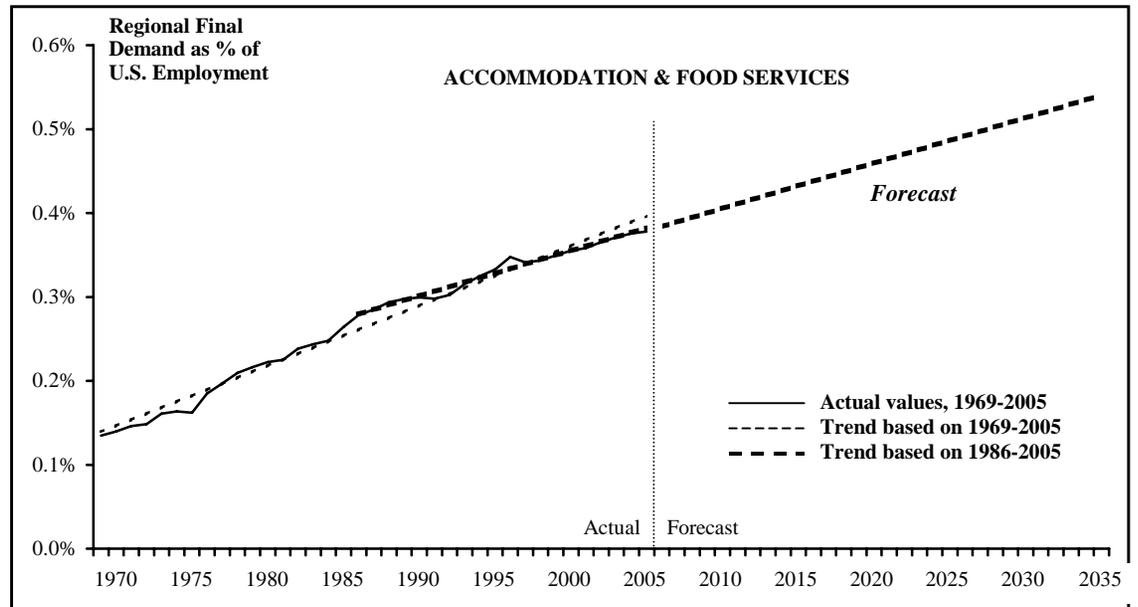
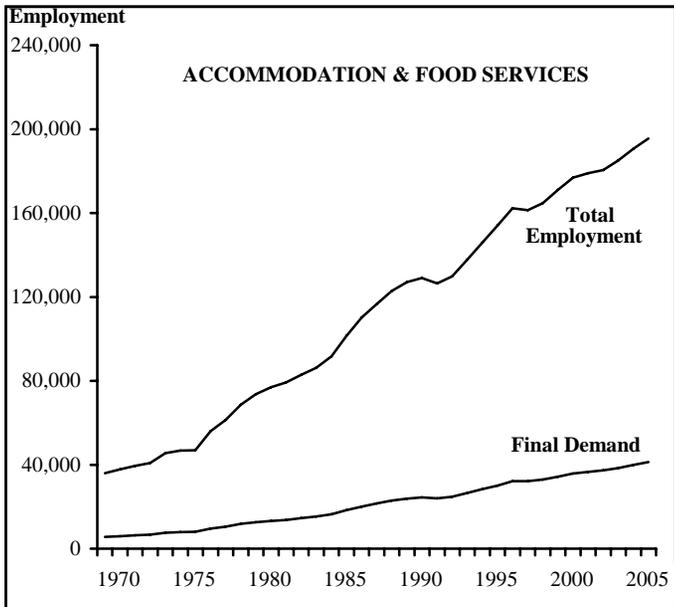
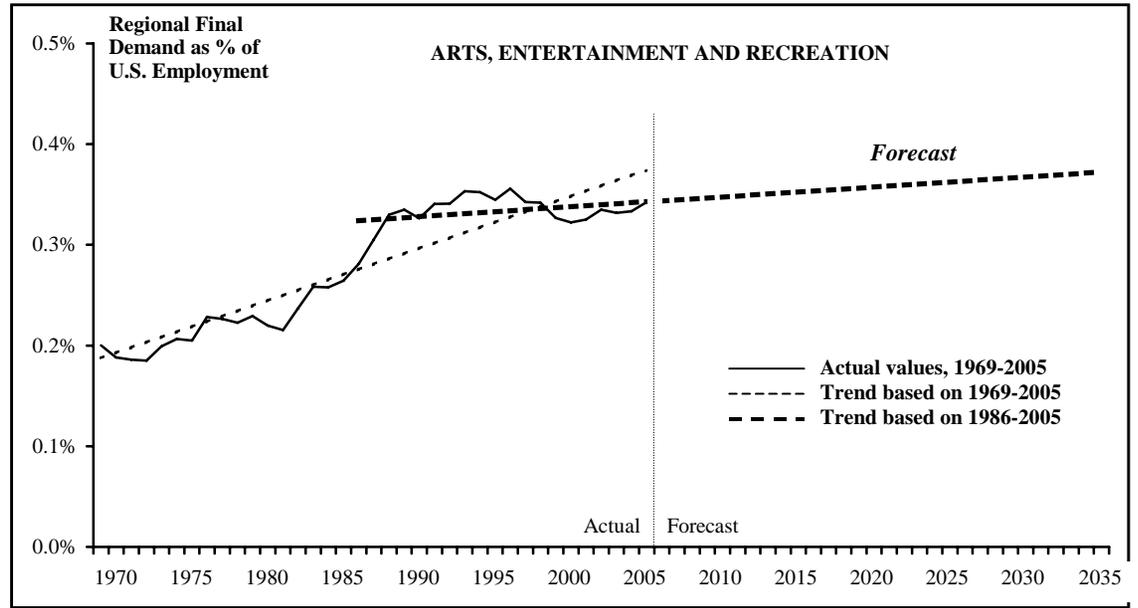
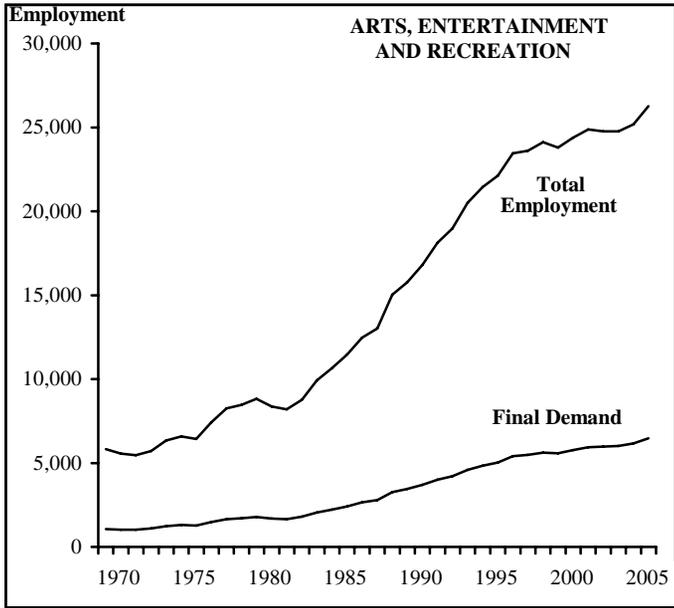


Figure 8. TOTAL AND FINAL-DEMAND EMPLOYMENT IN OTHER SERVICES AND FEDERAL & STATE GOVERNMENT

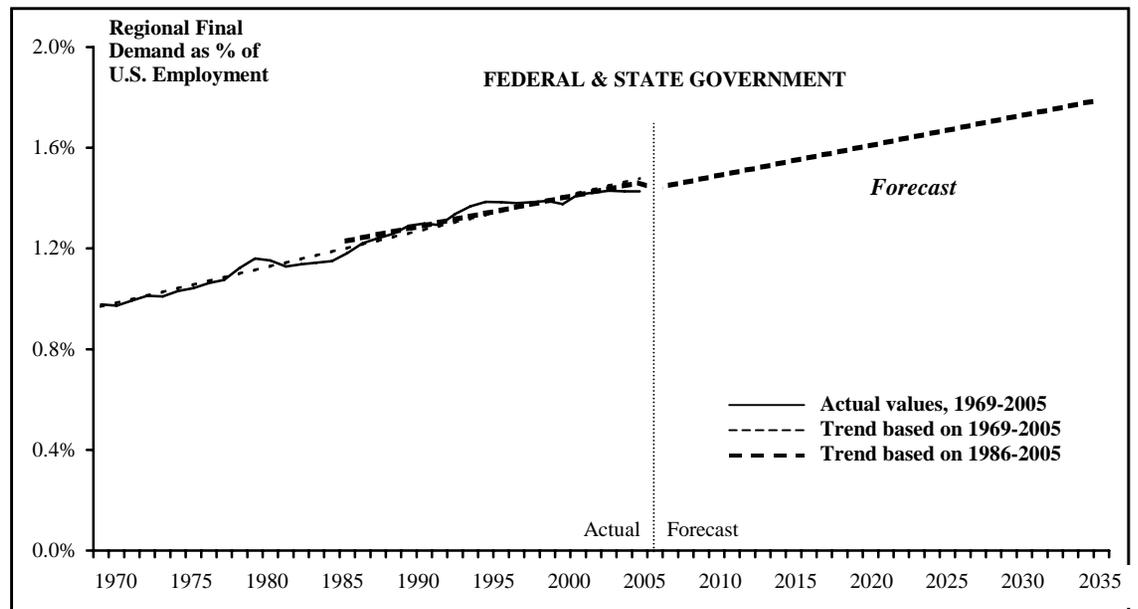
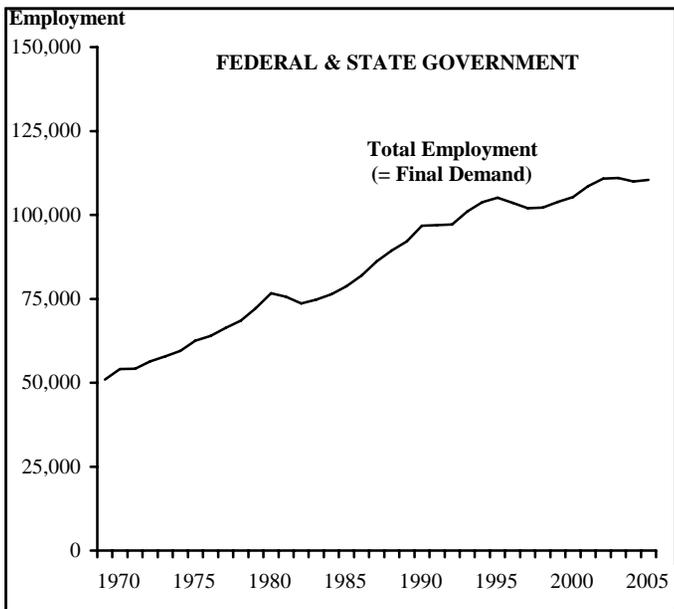
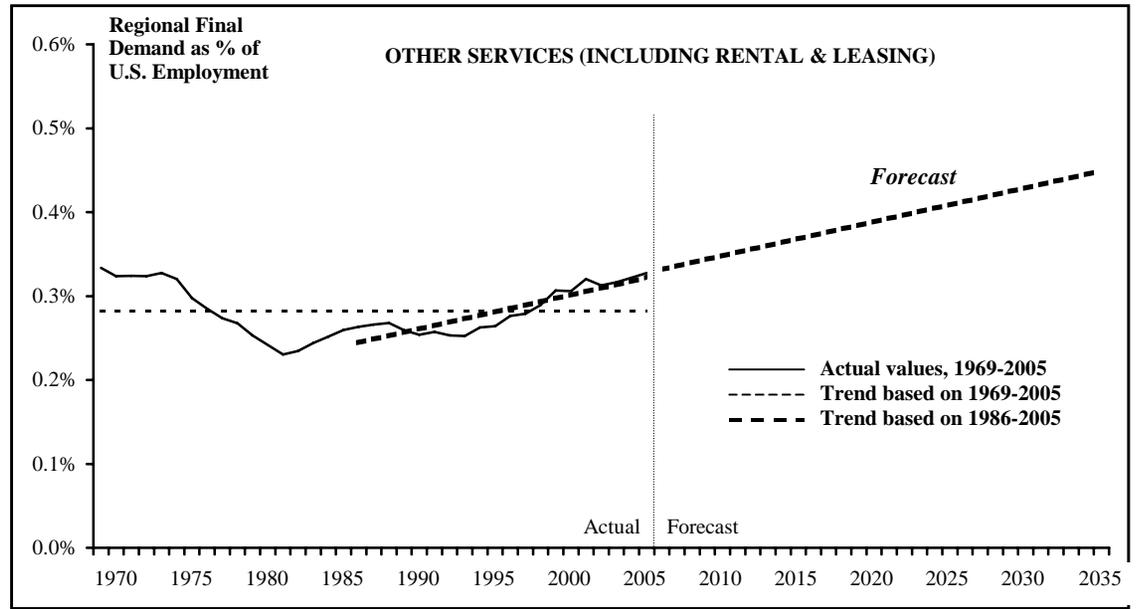
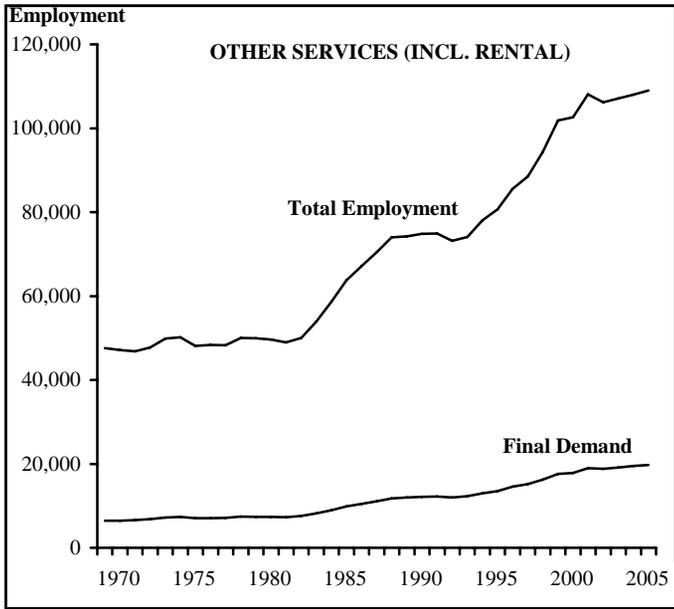
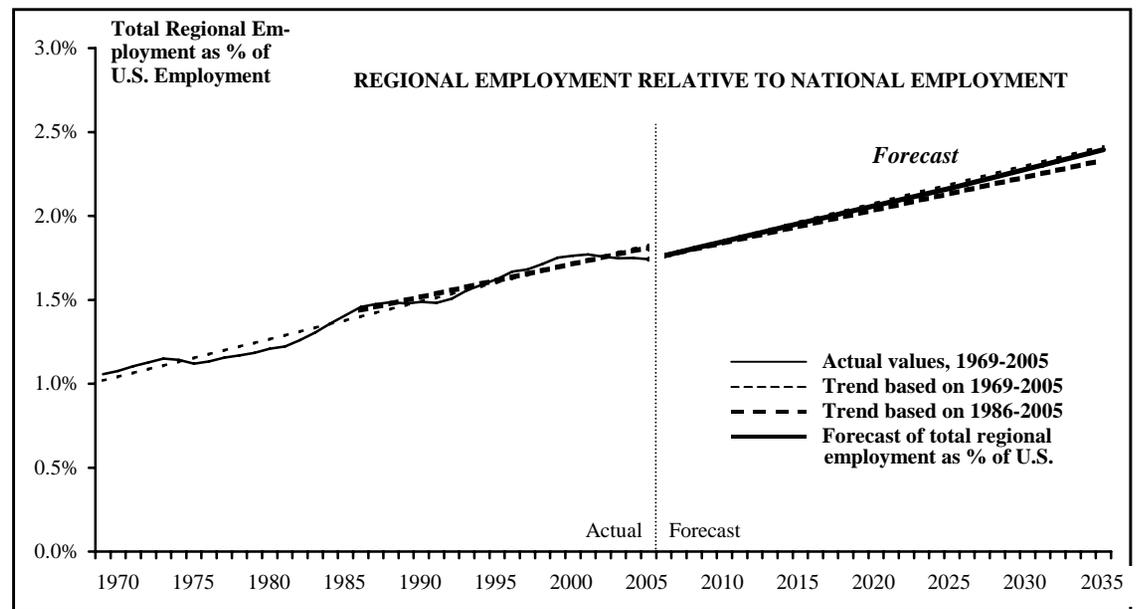
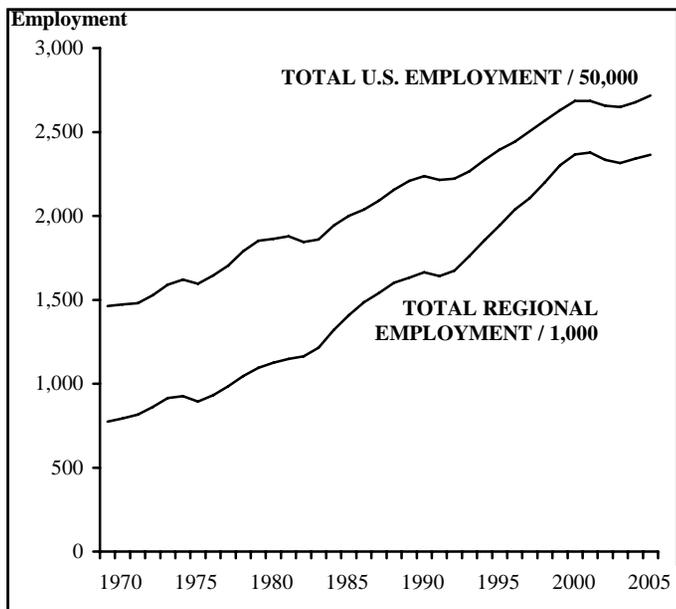
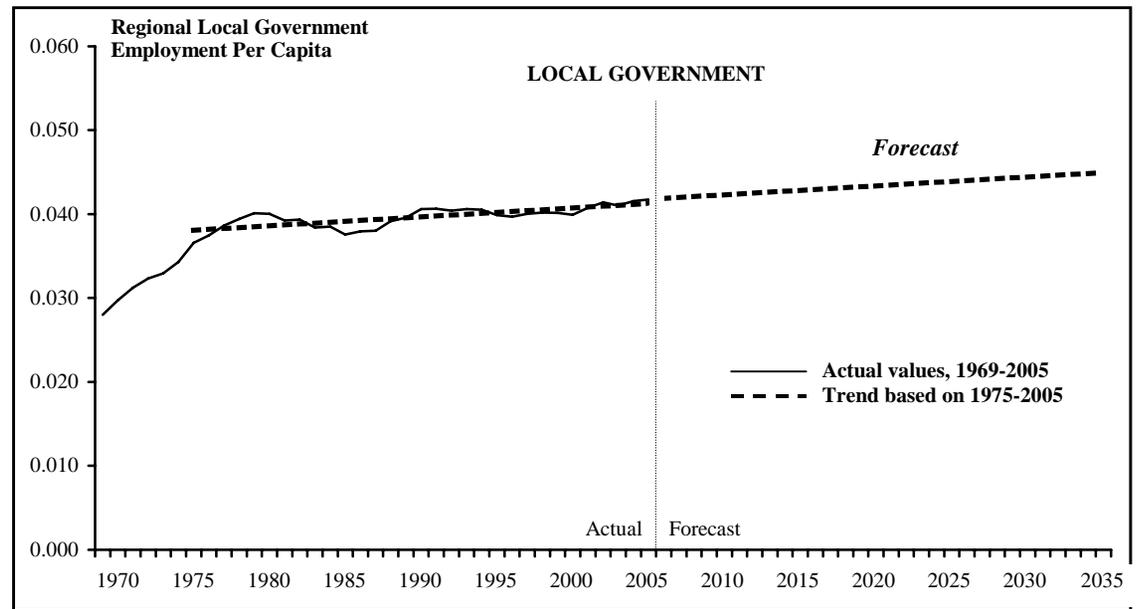
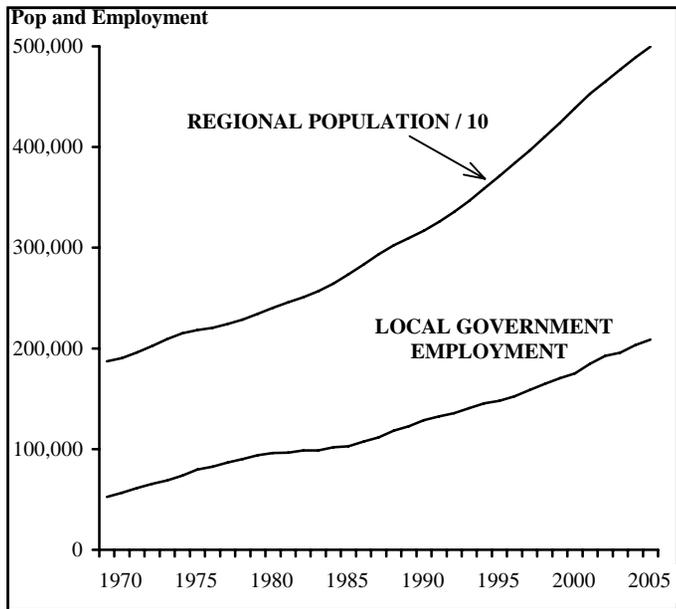


Figure 9. PREDICTIVE RELATIONSHIP FOR LOCAL GOVERNMENT, AND COMPARISON OF AGGREGATE REGIONAL FORECASTS



The shifting of trend lines to make them hold exactly for 2005 served to lower the relationships for three-quarters of all sectors and thus added an element of conservatism. The philosophy behind this step is illustrated by the graphs for the construction industry in the lower portion of Figure 1. Construction employment in the Atlanta region relative to the U.S. has long followed a strongly cyclical pattern (resembling the overall business cycle except that Atlanta stayed below trend between the national recessions of 1974 and 1981-82). This pattern has involved periods of very rapid advancement followed by retrenchment. As of 2005 the region was markedly below trend. A forecasting process that treated 2000-05 as just another slow period would extrapolate one of the historical trend lines without adjustment on the assumption that the region would soon bounce back strongly enough to resume its former oscillatory pattern. However, the forecasts reported here assumed that for construction and many other sectors, the 2000-05 stagnant period would prove to have some permanent costs. The region would regain its former capacity to outpace the nation economically, but would proceed from a lower base than would have applied if the recent slump had been less protracted.

The relationships in figures 1 through 8 do not require further commentary. The sectors featuring the most abrupt changes of trend during the historical period were agriculture, arts-recreation, and “other services” (all addressed with 20-year trend lines). Perhaps the most questionable cases were information and administrative support services, where much lower forecasts could have been obtained by projecting forward 10-year trends rather than 20-year trends.

The upper portion of Figure 9 shows the relationship used to forecast local government employment. It simply consists of a linear time trend in the region’s local government employment per capita. Because the first few years of the historical period differed substantially from the remainder in terms of this measure, the time trend covers only the 31 yearly observations for 1975 through 2005. This relationship was applied later in the forecasting sequence than those for components of final demand. The sequence involved: 1) obtaining final-demand percentages for future years from the 16 extrapolated relationships just discussed; 2) multiplying these percentages by forecasted U.S. employment to obtain final-demand estimates in absolute terms; 3) applying the predetermined multiplier of 2.697 to overall final demand to obtain total employment for each future year; 4) using cohort-survival analysis to forecast regional population on the basis of employment; 5) applying the predictive relationship from Figure 9 to estimate local government employment on the basis of population; and 6) using the input-output table to allocate future private employment among industries. The last step treated all government employment as final demand and involved the rule-based matrix adjustment process discussed above.

The relationships appearing in the lower portion of Figure 9 are offered for reasons of interest and played no role in the forecasting process. The left-hand graph in this case describes total employment in the region and the U.S. (divided respectively by 1,000 and 50,000 to situate the plots conveniently). The right-hand graph shows regional employment as a percentage of U.S. employment, with 37-year and 20-year trend lines fitted to the percentages. The right-hand portion of the graph shows these trend lines

when pegged to the 2005 percentage and extrapolated across the forecast period. Also appearing on the right-hand side is a heavy solid line describing the forecast of regional employment obtained by the steps summarized above. This line – which looks straight but actually has a slight bend – falls between the two trend lines obtained by simple extrapolation. Thus, rather than partitioning the regional economy and going through tortuous input-output computations, we could have gotten essentially the same answer by performing a simple extrapolation based on total employment. Of course, there was no way to know this ahead of time

Regional Demographic Forecasting

Regional population by race, age and sex was forecasted using familiar cohort-survival methods. The only complication was that breaking down population by race created a need to address 144 different population components.

A cohort-survival tableau “ages” a population group across a time interval – always understood here to equal 10 years, since the present analysis was structured on that basis – by observing that the end-year population in a given age bracket must equal the initial-year population ten years younger, plus births (if the initial-year population is unborn), minus deaths, plus net migration. A tableau is first established for an historical period in order to compute net migration as a residual for each population cohort. Then successive tableaus are used to address population changes across future intervals, with births, deaths and net migration computed using estimated rates and other information from the historical analysis.

For the Atlanta region much attention was devoted to establishing race-specific birth rates by age of mother and individual death rates for all race-sex-age groups. (Such rates were needed to allocate births and deaths in the historical analysis as well as to estimate future magnitudes.) The data sources included: aggregate births and deaths for the Atlanta region; race-specific birth rates by age of mother for the state of Georgia; and detailed U.S. birth and death rates, needed for various supplementary purposes including establishment of trends over time. Two notable findings from the historical analysis pertained to the Hispanic population. First, Hispanic females in Georgia – of whom over two-thirds occupied the Atlanta region – had exceptionally high birth rates, totaling well over three lifetime births per woman. Second, Hispanic net migration into the Atlanta region was skewed toward males to such an extent that it raised the male share of total Hispanic population from 55% in 1990 to 60% in 2000. The cohort-survival forecasting process assumed that both of these situations would moderate in the future, with the male share of net migration falling to 53% and birth rates declining to equal the national Hispanic rates by the end of the forecast period.

Given its dependence on census data, the historical analysis necessarily focused on the 1990-2000 interval. It was followed by an intermediate analysis addressing 1995-2005, wherein the cohort-survival tableau was used in a forecasting mode but the results were pegged to pre-established totals for race-sex groups. This analysis generated age breakdowns for 2005 and the five-year patterns of net migration summarized in Table 2.

The findings of the historical analysis yielded a three-way partitioning of net migration. For population cohorts with end-year ages not exceeding 55-59 for white males, 50-54 for white females, and 60-64 for other race-sex groups, net migration was always positive and was referenced as “economically motivated” migration (on the assumption that children accompanied working-age adults). To obtain factors for later application, the values of this migration component were expressed as percentages of total economically motivated migration. (The intermediate analysis used percentages of race- and sex-specific totals, whereas the forecast for each future interval utilized an overall percent distribution.) The second migration component consisted of negative flows for all white males above end-year age 55; for white females of end-year ages 55 through 69; and for black males in the two oldest age groups. These negative flows were expressed as percentages of average population in the individual cohorts to which they applied. The third migration component consisted of positive flows for all remaining population groups above the age of economically motivated migration. They were expressed as percentages of average total population in the racial categories where they occurred. Given these migration-related factors plus birth and death rates, the only additional input required to project the region’s population across a future time interval was an estimate of total economically motivated migration.

Net migration and labor force participation rates formed the linkages whereby demographic changes were economically driven. Labor force participation rates for the region in 2000 and 2005 were prepared from census labor force data for race-sex groups and from U.S. data on participation by age. The 2005 rates were then projected forward on the assumption that they would move in parallel with future U.S. rates (after partially rebounding in 2005-10 from their declines earlier in the decade). The rates thus established for a given year were entered into the relevant cohort-survival tableau and multiplied by its end-year population predictions to yield an estimate of the region’s total labor force. After adjustments for unemployment and net interregional commuting, the result would be an estimate of the total at-place employment consistent with the given population. A tableau’s predicted population would depend upon the assumed level of economically motivated net migration that entered its computations. So the forecasting process consisted of finding the volume of migration that would just allow the region to staff its economy at the employment level already established by the economic analysis.

Cohort-survival projections thus linked to the economic forecasts were obtained in succession for the 2005-15, 2015-25 and 2025-35 intervals. In each case the solution value of economically motivated net migration had to be found by a three-step process of trial and error. (There was also an inner iterative loop because many of the rates in the tableau multiplied averages of initial-year and end-year populations, which meant that the tableau had to converge upon solution values of the latter for whatever migration level had been assumed.) Values of demographic variables for 2010, 2020 and 2030 were obtained by interpolation using a third-degree polynomial equation, which was a means of fitting a curved line through four points.

A 5% unemployment rate was used in translating 2015, 2025 and 2035 labor force magnitudes to employment. Net interregional commuting – the number of nonresidents

working inside the region minus the number of residents working outside – equaled 1.7% of employment in 2000 and was assumed on a trend basis to reach 2.7% by 2035. A key assumption for the region’s future racial profile involved the mix of economically motivated net migration. The cohort-survival forecasts assumed that in all future years this migration component would be distributed across the four racial groups in the same proportions as during 1990-95. As suggested by Table 2 (which disregards gender and includes the second and third migration components along with the first), this distribution involved a white share intermediate between the peak of the late 1990s and the trough of 2000-05, and a Hispanic share intermediate between extremes in the other direction. The specific percentages were 25.7% white, 38.9% black, 10.6% Asian and 24.7% Hispanic. A forecasted outcome of this pattern was that persons in the white category – even with that group’s inclusion of miscellaneous races – would become a minority of the region’s population sometime in 2019.

Regional Demographic Forecast Summary

The regional forecasts thereby obtained are best described by reversing the order of presentation and addressing demographics first. Table 5 on the next page summarizes the population forecasts through 2035 by racial group. Like others to follow, this table includes some historical data and uses a horizontal line to demarcate observed quantities (or estimates thereof) from forecasted quantities. Unlike other cases, however, Table 5 repeats the line for 2005 to accommodate the racial shift described in the footnote.

The total population of the 29-county Atlanta region was forecasted to increase from just over 5 million persons in 2005 to approximately 7.6 million persons in 2030 and 8.3 million in 2035. For the first fifteen years of the forecast period, the region’s annual population gains would be smaller in both absolute and percentage terms than those observed during the 1990s, and would even fall below the average gain during 2000-05 when employment was almost static. Population growth would begin to rise appreciably after 2020, first in absolute terms and then also on a percentage basis. There would be a mild acceleration near the end of the forecasting period due to an upturn in the national employment magnitudes driving the regional forecast. Overall, the region’s forecasted annual growth rates would be modest by metro Atlanta standards, but would exceed the corresponding U.S. rates by 0.8% to 1.0% per year, with the gap steadily increasing after 2015.

The interior and lower portions of Table 5 show a demographic transition of staggering proportions. In 1990 the region’s population was nearly 72% non-Hispanic white and only 2% Hispanic. By 2035 the population will be 43% white and nearly 17% Hispanic. Meanwhile the black share of population will have increased from less than one-quarter to over one-third, and the relatively small Asian share will have quadrupled. In ascending order of importance these changes will be linked to: 1) differences in initial age distributions (with whites now having a median age 5.6 to 11.5 years older than the other groups and thus an expectation of higher deaths); 2) differences in birth rates, most importantly affecting Hispanics; and 3) differences in net migration rates. The last factor involves the assumed racial mix of net migration discussed at the end of the last section.

Table 5. FORECASTED REGIONAL POPULATION BY RACIAL GROUP

	Number of Persons by Racial/Ethnic Group					Change Per Year	
	White	Black	Asian	Hispanic	Total	Absolute	Percent
1990	2,271,623	778,212	51,660	63,358	3,164,853		
1995	2,464,579	984,446	96,309	168,596	3,713,930	109,815	3.25%
2000	2,701,199	1,237,349	151,061	297,649	4,387,258	134,666	3.39%
2005	2,845,548	1,490,731	209,681	459,867	5,005,827	123,714	2.67%
2005*	2,848,222	1,490,731	207,007	459,867	5,005,827		
2010	2,964,845	1,665,904	246,068	569,851	5,446,668	88,168	1.70%
2015	3,078,001	1,854,234	288,786	691,776	5,912,797	93,226	1.66%
2020	3,190,468	2,059,530	336,579	830,097	6,416,674	100,775	1.65%
2025	3,305,026	2,285,596	390,867	989,270	6,970,760	110,817	1.67%
2030	3,424,457	2,536,240	453,066	1,173,751	7,587,514	123,351	1.71%
2035	3,551,539	2,815,268	524,596	1,387,995	8,279,398	138,377	1.76%
% of Total							
1990	71.8%	24.6%	1.6%	2.0%	100.0%		
1995	66.4%	26.5%	2.6%	4.5%	100.0%		
2000	61.6%	28.2%	3.4%	6.8%	100.0%		
2005	56.8%	29.8%	4.2%	9.2%	100.0%		
2005*	56.9%	29.8%	4.1%	9.2%	100.0%		
2010	54.4%	30.6%	4.5%	10.5%	100.0%		
2015	52.1%	31.4%	4.9%	11.7%	100.0%		
2020	49.7%	32.1%	5.2%	12.9%	100.0%		
2025	47.4%	32.8%	5.6%	14.2%	100.0%		
2030	45.1%	33.4%	6.0%	15.5%	100.0%		
2035	42.9%	34.0%	6.3%	16.8%	100.0%		

* Line for 2005 is repeated to reflect the shift of Native Hawaiians and Pacific Islanders from the Asian category to the white-and-other category (for source-related reasons).

Table 6 on the next page describes the anticipated components of demographic transition for all categories of regional inhabitants. As indicated by the earlier discussion of cohort-survival forecasting, these components are births, deaths and net migration. Table 6 lists them in rows that refer to time intervals rather than individual years and carry forward the population totals from one interval to the next. The table's last column expresses net migration as a percentage rate for each interval.

Natural increase – births minus deaths – will continue to supply large population gains throughout the forecast period, but will stay in a range of 45,000 to 48,000 persons per year rather than increasing. Net migration will drop to a bit over half of its 2000-05 level in the remainder of the present decade, but then will rise persistently to become the dominant source of population growth after 2015 and regain its 2000-05 level by 2025-30. As a percentage rate, however, net migration is never expected to approach the magnitudes that occurred prior to 2005.

Table 6. COMPONENTS OF REGIONAL DEMOGRAPHIC TRANSITION

	Initial-Year Population	Births	Deaths	Net Migration	End-Year Population	Annual Rate of Net Migr.*
1990-95	3,164,853	294,694	109,364	363,747	3,713,930	2.12%
1995-00	3,713,930	343,824	122,044	451,549	4,387,258	2.23%
2000-05	4,387,258	375,130	146,168	389,606	5,005,827	1.66%
2005-10	5,005,827	404,656	165,088	201,273	5,446,668	0.77%
2010-15	5,446,668	426,552	189,428	229,006	5,912,797	0.81%
2015-20	5,912,797	447,076	217,379	274,181	6,416,674	0.89%
2020-25	6,416,674	474,532	249,580	329,134	6,970,760	0.98%
2025-30	6,970,760	512,114	286,798	391,438	7,587,514	1.08%
2030-35	7,587,514	567,314	329,568	454,138	8,279,398	1.14%

* Equals annual net migration divided by the average of initial-year and end-year pop.

Table 7 on the next page looks at the regional age distribution. The five age categories are standard except that a 55-to-74 group has been inserted between middle age and today's version of old age. The table's central portion gives percent distributions across the age brackets, and its lower part offers equivalent percentages for the U.S. The right-hand column shows the median ages of the regional and national populations in each year.

The regional population is expected to age over time but remain young relative to the U.S. From 2005 to 2035, the two bottom age groups will increase by 50% to 60% and the 25-to-54 group will rise by only 43%, while the 55-to-74 and 75-plus groups will respectively increase by 136% and 231%. The shares of population supplied by the various groups will generally track U.S. trends, starting from a younger profile. The region's population shares aged 0-to-17 and 25-to-54 will decline somewhat more than the corresponding national shares by virtue of starting higher. The biggest differences will involve the two top categories, with the region gaining much faster than the nation in the 55-to-74 bracket but slower in the 75-plus group.

The region's 2000 median age of just under 33 years was 2.4 years lower than the corresponding national median. The regional/national gap rose to 2.9 years in 2005 because gains in the regional median were moderated by continued high in-migration (which selects strongly for young persons). The gap is expected to decline from now until 2015, when it will reach 2.33 years, then rise after 2020. In 2035 the region's median age will be almost three years lower than the national median at that time, and will remain a shade lower than the national median in 2005.

Table 7. AGE PROFILE OF THE REGIONAL POP. WITH U.S. COMPARISONS

	Number of Persons by Age Bracket						Median Age
	0-17	18-24	25-54	55-74	75+	Total	
2000	1,167,141	419,343	2,133,479	518,677	148,618	4,387,258	32.96
2005	1,320,449	494,118	2,355,048	667,359	168,852	5,005,827	33.39
2010	1,412,203	530,433	2,469,376	843,169	191,486	5,446,668	34.38
2015	1,501,972	569,335	2,582,056	1,027,129	232,305	5,912,797	35.13
2020	1,597,073	612,597	2,710,795	1,205,855	290,354	6,416,674	35.65
2025	1,704,823	661,995	2,873,304	1,365,962	364,675	6,970,760	36.00
2030	1,832,539	719,304	3,087,291	1,494,068	454,313	7,587,514	36.17
2035	1,987,536	786,299	3,370,464	1,576,788	558,311	8,279,398	36.20
Shares							
2000	26.6%	9.6%	48.6%	11.8%	3.4%	100.0%	
2005	26.4%	9.9%	47.0%	13.3%	3.4%	100.0%	
2010	25.9%	9.7%	45.3%	15.5%	3.5%	100.0%	
2015	25.4%	9.6%	43.7%	17.4%	3.9%	100.0%	
2020	24.9%	9.5%	42.2%	18.8%	4.5%	100.0%	
2025	24.5%	9.5%	41.2%	19.6%	5.2%	100.0%	
2030	24.2%	9.5%	40.7%	19.7%	6.0%	100.0%	
2035	24.0%	9.5%	40.7%	19.0%	6.7%	100.0%	
U.S. Shares & Medians							
2000	25.7%	9.6%	43.6%	15.2%	5.9%	100.0%	35.35
2005	24.9%	9.9%	42.5%	16.6%	6.1%	100.0%	36.28
2010	24.2%	9.8%	41.3%	18.6%	6.1%	100.0%	36.96
2015	23.9%	9.3%	39.8%	20.8%	6.3%	100.0%	37.46
2020	23.9%	8.7%	38.4%	22.2%	6.8%	100.0%	37.98
2025	23.8%	8.9%	37.3%	22.1%	8.0%	100.0%	38.54
2030	23.6%	8.9%	37.0%	21.3%	9.2%	100.0%	38.98
2035	23.4%	9.0%	36.9%	20.2%	10.5%	100.0%	39.19

Regional Employment Forecast Summary

The Atlanta region’s economic recovery during the second half of the present decade is expected to raise employment by 2.32% per year, a bit less than three-quarters of the early 1990s growth rate and still further below the other rates achieved in the past century. The pace of job expansion will then decline to about 1.6% per year during the 2020s before rebounding to 1.85% per year in 2030-35. As in the case of population, these annual rates are all more than twice as large as the expected U.S. employment growth rates and exceed the latter after 2010 by a nearly constant 1% margin.

The region’s employment per capita is expected to rebound from 0.472 in 2005 to 0.487 in 2010 and 0.491 in 2015. Even though these gains far exceed the corresponding U.S. gains of less than 0.001, the region’s position will represent a greater deterioration relative to 2000 than experienced by the nation as a whole. U.S. employment per capita will lie within 5% of its 2000 peak during 2010-15, while the region is expected to

remain at least 7% below its 2000 employment per capita (0.528). The upside, however, is that for demographic reasons the region's employment per capita will hold almost constant after 2015 while the U.S. position erodes substantially.

Table 8 breaks down regional employment by industry and gives percent changes across the forecast period as a whole. The fastest-growing sectors – with percentage gains in the triple digits, leading all other industries by at least 38 points – are expected to be: professional and technical services (combined here with corporate management offices); administrative support services; educational services; and health services and social assistance. All of these were among the region's eight sectors that tripled in employment between 1975 and 2005 (the others being construction, information, arts-recreation and food services). Regarding education, a point omitted in the introductory text was that the federal data sources underlying the present forecasts relegate all public workers to the government sector regardless of their function. Hence the figures here for educational services do not cover public education, and up to half of the cited local government workers are associated with public elementary-secondary schools.

Table 8. FORECASTED REGIONAL EMPLOYMENT BY INDUSTRY

	Employment (BLS Definition)							% Chg., 2005-35
	2005	2010	2015	2020	2025	2030	2035	
Extractive activities	12,143	11,682	10,838	9,852	8,962	8,406	8,423	-31%
Construction	130,460	137,490	144,373	151,847	160,647	171,512	185,179	42%
Durable goods mfg.	95,983	100,591	100,636	98,532	96,699	97,551	103,506	8%
Nondur. goods mfg.	94,583	94,950	91,414	86,053	80,944	78,165	79,795	-16%
Wholesale trade	158,592	176,934	191,313	204,045	217,444	233,826	255,505	61%
Retail trade	248,832	269,679	284,868	297,708	311,513	329,591	355,256	43%
Trans. & utilities	120,650	131,189	138,905	145,438	152,429	161,517	174,344	45%
Information	91,490	102,993	112,618	121,528	130,888	141,862	155,613	70%
Fin., ins. & real est.	144,276	163,294	176,452	186,543	196,364	208,710	226,377	57%
Prof./tech. & mgmt.	190,976	226,296	261,689	297,880	335,593	375,552	418,482	119%
Admin support serv.	191,373	234,053	278,651	325,248	373,925	424,763	477,843	150%
Educational services	48,147	57,060	66,192	75,547	85,126	94,930	104,963	118%
Health & social srv.	187,628	225,949	265,629	306,828	349,710	394,434	441,164	135%
Arts & recreation	26,271	28,918	31,316	33,562	35,754	37,990	40,367	54%
Accommodations	22,870	24,776	26,402	27,893	29,393	31,049	33,006	44%
Food services	172,699	194,805	214,228	232,728	252,064	273,993	300,275	74%
Other services	108,991	119,450	127,582	134,752	142,326	151,671	164,152	51%
Federal & state gov.	110,483	118,899	125,108	130,377	135,971	143,158	153,205	39%
Local government	208,625	233,088	257,555	283,144	310,973	342,158	377,817	81%
Total	2,365,074	2,652,097	2,905,769	3,149,505	3,406,723	3,700,839	4,055,269	71%

County-Level Forecasting

Introduction

Forecasts for Gwinnett County were obtained using a regional allocation procedure applied in roughly a dozen other studies since 2000. The hallmark of this approach is exclusive reliance upon empirically calibrated relationships, with a minimum of subjective input. Collectively these relationships are referenced as an allocation model because they are used to allocate pre-established totals across the component areas of a region. They are obtained from cross-sectional statistical analysis of growth patterns in numerous metropolitan counties, most of which necessarily lie outside the study region, on the premise that urban development forces operate very similarly throughout the U.S. For data availability reasons the observation units in the calibration sample always consist of counties and independent cities, but the calibrated model may be used to generate forecasts for large sub-county areas (SCAs) as well as whole counties. The Gwinnett project has used the same model for region-to-county and county-to-SCA allocation in two separate phases.

The present model calibration sample consisted of 355 counties and independent cities in 34 metro areas. These included all MSAs in the eastern half of the country with populations exceeding one million, except for New York, Miami and metro areas in New England and South Florida. The aggregate 2005 population of the sample was just above 90 million. As in other studies, western metro areas were set aside because their geographically large counties would make poor observation units and their frequently mountainous terrain would complicate the estimation of land availability. The Miami-Fort Lauderdale urban complex did not cover enough counties to support the model's reliance on inter-county comparisons, and metro areas in the far Northeast were avoided for reasons of size and contiguity.

Following standard practice, the allocation model focused upon employment by industry and households by income (with households also broken down by race and dwelling unit type in external routines to be discussed later). Other demographic variables were set aside for determination outside the model on the basis of household forecasts and supplementary relationships. Employment was grouped in the nineteen categories shown above in Table 8, which consisted for the most part of two-digit NAICS industries. Income was described in relative terms by assigning households to quintiles based on the regional income distribution. (That is, each metro area's households in each year addressed by the model calibration process were assigned to five equal groups, and the income ranges thus defined were used to assign each county's households to the five groups.) The allocation model thus consisted of twenty-four equations, one for each of the targeted employment and household variables. The equations were structured to address ten-year increments rather than absolute amounts, and their predictive terms were limited in such a way that the equations could be calibrated independently and applied sequentially. The calibration process consisted of using multivariate statistical analysis to "explain" changes in the target variables throughout the 355-county sample during the 1993-2003 interval. The calibration period ended in 2003 because this was the latest year covered by a key source at the time of data assembly. The calibration database included

values of all variables for 1983 as well as 1993 and 2003 because past (i.e., 1983-1993) changes were needed as predictors of current changes.

The predictors in the equations consisted of lagged, initial, and in some cases current values of the same variables addressed by the model (usually embedded in complex functions as explained momentarily). The only quantities entering the model other than categories of employment and households consisted of area measures and dwelling unit data for estimating available land, and latitude-longitude values for computing inter-county distances. As in past studies, the eligible explanatory variables were restricted in this fashion due to the severe limitations on types of data that could feasibly be collected for hundreds of observation units.

Advantages and Disadvantages of “Demand-Side” Modeling

The exclusive reliance upon predictive relationships fitted to empirical data distinguished the present forecasting approach not only from handicraft methods but also from most forecasting models offered by proprietary and literature sources. The gains from insisting upon empirical calibration can be summarized as objectivity and realism. Objectivity is an important concern since it is very easy for forecasters, especially those professionally engaged in guiding urban development, to slip into a prescriptive mode rather than focusing strictly upon prediction. Realism is a challenge since the dynamics of urban development are extremely complex. Molding predictive relationships to observed reality is the only way to assure that they effectively subsume, if not explicitly express, the myriad influences on urban growth.

The limitations of the approach arise from the fact that the predictive relationships of the desired types can only be calibrated reliably using large samples of observations, far larger than required by statistical theory alone. One consequence is that the sample must consist primarily of geographic areas located outside the study region. Another is that for reasons of data availability the observation units must consist of whole counties and independent cities, since these are the basic building blocks of the federal data system. And a third consequence is that only certain types of variables can feasibly be obtained for use as predictors. With a few exceptions these variables are limited to the same quantities one is concerned with predicting, namely demographic measures and employment by industry.

The first two of these three limitations are less serious than they may sound. Growth patterns that are jointly observed across many metropolitan areas can normally be attributed to a given region without hazard because U.S. urban dynamics operate in a highly uniform fashion. Also, with careful treatment of the data one can reliably apply county-based relationships to SCAs that are generally smaller than counties in geographic and socioeconomic terms. What matters most is the limitation on variables available as predictors. This constraint essentially means that a system of equations calibrated in the present manner can only be a “demand-side” model as defined below.

The forecasting problem mostly consists of predicting future land development. In general, the demand for land development to support a given type of activity in a given

area is a function of the area's proximity to all other activities in the region, along with past and current growth in those activities. Sometimes natural features such as waterfront are important, but for the most part what matters is the built environment, which is measurable in terms of the same socioeconomic variables that one is concerned with predicting. What a demand-side model can do is allocate growth across a region by balancing activity-based demand of this nature against rough estimates of land availability based on the amounts of activity already present.

What a demand-side model cannot do, at least not explicitly, is allow for detailed aspects of land supply. "Supply" refers here to the amount of land in a given locality with characteristics favorable to support a given type of development. The characteristics in question include all natural and man-made conditions that can affect the probability of land conversion, whether enduring or subject to change over time. Some of the major categories are: natural land features affecting construction cost; conservation areas and other ecologically based development controls; zoning codes and comprehensive plans; and availability of infrastructure to support various kinds of land development. The key elements of infrastructure tend to be roadways and water and sewer service, which often operate on a relative basis rather than determining development feasibility in absolute terms. These and other factors shaping land supply cannot be covered explicitly in a demand-side allocation model because they cannot be quantified for all the counties and independent cities used as observation units in the model calibration process.

Much depends on the scale at which a model is applied. In general, demand-side factors dominate land development at large spatial scales, while supply-side factors become progressively more important at smaller scales. Demand-side factors clearly matter more at the county level (absent a strong commitment to countywide growth management), while supply-side influences hold sway in small areas like census tracts. Past forecasting studies have suggested that the dividing line falls at about 50 square miles, i.e., that demand-side modeling yields reliable forecasts for areas above this size. Hence there is a general rule that no SCA targeted by a forecasting project should be smaller than 50 square miles unless it already contains more than 25,000-residents, preferably many more.

"Reliable" is a relative term in this context. Stating that demand-side model outputs are normally reliable for areas above 50 square miles is not tantamount to saying that they should stand as final forecasts. What demand-side forecasting provides is a benchmark or platform from which to entertain possible revisions. A pegged demand-side model objectively describes the future conditions that market forces would produce given a continuation of the supply-related influences prevailing in the recent past. If such influences are expected to change – because of new policies, projects, et cetera – a revision process can and should be undertaken. The demand-side forecasts then provide an unambiguous starting point and a very useful context for judging relative magnitudes. Another advantage is that, while subjective judgment can never be banished from a forecasting enterprise, demand-side modeling serves to roll down the subjective element of forecast development to the SCA level and make all judgments explicit.

A final argument for the approach revolves around the fact that any variable used as a predictor in any forecasting procedure must itself be predicted. There is some basis for contending that, notwithstanding relative leverage on land development, demand-side variables tend to make better predictors than supply-side factors because they themselves are more predictable. For example, past trends and current development patterns may yield clear indications that housing demand will be heating up in county X. A new freeway to county X may make a big difference to what happens there. But given the vagaries of highway funding and environmental constraints and transportation politics, there may be more uncertainty about the freeway than the housing demand. In fact, housing demand may be the best predictor of when and if the freeway will get built. So in such situations an investigator faced with a choice of predictors would often do well to go with demand.

Basic Model Characteristics

To simulate urban growth dynamics realistically, an allocation model must at a minimum have the capacity to express: 1) possible interactions among all combinations of economic sectors and household groups; 2) the influence of events in each area on events in nearby areas; and 3) the retarding effects on growth of progressive reductions in available land. The Gwinnett approach met the first criterion by treating all economic sectors and household groups – collectively called “activities” – as eligible predictors in all equations. The only limitations were that the nineteen industries were combined into four groups for predictive purposes, and that contemporaneous change in an activity could only enter the equations for activities addressed later in the modeling sequence (to eliminate the need for simultaneous-equation estimation).

The second and third criteria must be met for an allocation model to replicate the familiar S-shaped pattern of suburban development, wherein growth initially escalates due to external influence – the propagation of demand from other areas – but eventually slows as land supply becomes constraining. Every equation of an allocation model should have the capacity to balance the advantages of centrality (proximity to existing urban development and growth) against the draw of more abundant and presumably cheaper land at less central locations. These factors clearly interact on a multiplicative rather than additive basis, since growth potential goes to zero when either proximity or available land approaches zero. Hence the capacity in question is best imparted by structuring a model so that both of these factors are embedded in most individual predictive variables. The present study employed the standard solution of using “proximity” terms weighted by equation-specific indexes of land availability.

Other than a few variables pertaining to past change and initial level of the specific activity being addressed, all of the candidate explanatory variables in each regression analysis were based upon “proximity” measures. A given area’s proximity to some activity – i.e., some category of employment or households – was computed by weighting the amount of that activity in every part of the area’s home region by an inverse function of distance to the subject area, then summing the results. Distances between areas were computed on a straight-line basis using latitude-longitude, and the inverse function was a simple gravity-model term involving three parameters (two of

which expressed terminal time and self-distance). Three different versions of each variable were computed using different combinations of gravity-model parameters. Based on past experience, these combinations were chosen so that one set caused the variable mostly to reflect internal activity levels while another yielded values reflecting an area's access to the given activity on a region-wide basis. The variables per se were not simple proximity measures but functions thereof that expressed change in proximity or initial-year proximity in relative terms. (See later discussion of the two different models.) No proximity-based variable was allowed to enter any regression equation with a negative coefficient. While negative influences among sectors and areas probably existed, prior studies had shown that permitting negative coefficients would do more to introduce spurious and counterintuitive relationships than to increase predictive accuracy.

The allocation model necessarily used the same measure of land availability when addressing all activities. This measure incorporated a functional form that was developed in the analysis of 824 urban zones noted later. It consisted of a constant divided by the same constant plus a linear function of occupied dwelling units by structure type and employment by major category. What yielded an equation-specific index was the raising of this measure to an exponent whose value was determined as part of the calibration process. The resulting available land index was used as a weighting for all proximity-based variables – i.e., entered all of the candidate independent variables other than a few pertaining to the subject activity itself. The exponent contained in the index could not be estimated as a regression coefficient. Instead the analysis involved a trial-and-error process of finding the exponent value that maximized the explanatory power of the equation as a whole. This value would be influenced by the particular set of variables included in an equation, but as found in earlier studies there was never any ambiguity about the optimal solution. The data could dictate that land availability was unimportant for a given activity, by yielding a best-fitting equation with an exponent near zero, but the approach gave land availability maximum exposure as an explanatory factor. Due to the land-intensive nature of residential development, the model calibration process yielded the usual finding of relatively high exponents for household categories (0.8 and above for the top three income quintiles) and generally lower values for employment categories (ranging from zero to 0.48 in the relative-change model, but averaging 0.51 in the share-of-change model).

Model Structure

A special characteristic of allocation modeling is that the equations involved must employ functional forms suitable for allocating fixed totals among observation units. There is no “right” way to meet this requirement, and all of the available options have both strengths and weaknesses. Past studies by this investigator have employed two different approaches, referenced as “relative-change” and “share-of-change” modeling. The present study has wound up using both.

In a relative-change model, the dependent variable in each equation equals the actual change in an activity minus the change that would have occurred if the activity had expanded at the same percentage rate in all component areas of a region. For example, if an activity has increased from 100 to 150 units in a given area and from 1,000 to 1,200

units in the region containing that area, the relative-change value for that activity in that area equals 30 units. A relative-change model uses this functional form not only for the dependent variable but also for most independent variables (i.e., those expressing past and current change in proximity measures), and the other independent variables employ analogous sorts of relative measures. Along with some convenient mathematical properties, this formulation has the advantage that it incorporates a plausible null hypothesis. If no explanatory variables are found significant in the regression analysis for some industry, the result is an equation that simply predicts a uniform expansion of the industry's employment in all component areas of each region.

A disadvantage of the relative-change approach is exposure to heteroscedasticity problems. In statistical terms, heteroscedasticity refers to the existence of unequal error variances, violating the assumptions of the general linear model. In practice it basically means excessive dominance of regression results by observations featuring large numbers or drastic changes. For example, in past studies using hundreds of observations, over half of all variation in a relative-change measure for the communications industry involved the growth of Sprint Corporation in one Kansas county; and over half of all variation in finance involved the relocation of Capital One from Richmond to its suburbs. Such dominance by individual cases is an open invitation to spurious regression results. Even if the results of an analysis are reasonable, heteroscedasticity reduces effective sample and thus tends to produce exaggerated statements of statistical significance.

Other than logarithmic transformation, which is obviously infeasible for allocation equations, the principal means of reducing heteroscedasticity is the use of divisors. A convenient feature of the general linear model is that multiplying or dividing all variables on both sides of a regression equation by a constant does not bias regression results. The quantity in question – hereafter represented as a divisor – must be constant for each observation but can vary across observations. The strategy for reducing heteroscedasticity is to choose divisors that are positively correlated across the sample with error variances, or presumed error variances. The only constraint is that for obvious reasons the divisors cannot be related directly to the dependent variable. In the Gwinnett project and similar studies, the divisor used in relative-change models has been a quantity expressing the relevant “size” of each observation. This quantity is shown near the end of the materials on the SDC model in Figure 10 below.

The share-of-change approach was developed to bypass the heteroscedasticity problem and obtain more reliable forecasts when addressing many small areas (SCAs). In concept it represents a very straightforward response to the allocation problem. Since the task is to apportion change among component areas of a region, the dependent variable in a share-of-change equation simply equals area change divided by regional change. The independent variables are similarly obtained by computing percent distributions across a region's component areas (although various weightings and combinations come into play).

The main problem with the share-of-change approach is that shares of growth are meaningless when regional change is negative, and tend to be analytically hazardous

when regional change is positive but small. Consequently change must be computed from a discounted base. If we let Y_t and Y_{t+1} stand for levels of some activity in the initial and ending years of an interval, an area's change in the given activity must be computed as: $Y_{t+1} - k*Y_t$, where k is a discount parameter. This quantity must be divided by a similarly adjusted regional change to obtain the area's share-of-change value. The parameter k must be far enough below unity to keep the adjusted regional change substantially positive, but there are no other a priori guidelines for choosing a value of k . Hence the regression analysis becomes a process of finding trial-and-error solutions for two parameters – k and the available-land exponent – rather than just one. Furthermore, while tests of significance for individual variables remain valid, R-square loses its meaning as an overall measure of goodness-of-fit. (R-square can always be elevated by lowering k , because this increases the extent to which the “change” being explained is merely the fictional recovery of activity already present.) Predictions must therefore be converted from shares to absolute changes so that the trial-and-error process can maximize explanation on those terms. Lastly the formulation does not incorporate a plausible null hypothesis, unless an equation containing only initial-year activity is considered to qualify as a “null” case. Yet in spite of these problems, the share-of-change formulation often yields results superior to those from relative-change models, particularly for households.

The Gwinnett study was originally intended to rely only upon a share-of-change model. When such a model was calibrated, however, its ability to replicate 1993-2003 events in the 355-observation sample was considered inadequate. (This judgment was based on comparisons of total households and total employment like those shown graphically in figures 13 and 14 below.) Hence a relative-change model was also calibrated, and the forecasting process relied upon both. The quantities selected as forecasts for a given activity equaled the predictions from the share-of-change model, or the predictions from the relative-change model, or some weighted average of these values, depending upon which provided the best explanation of 1995-2005 changes for counties in the Atlanta region. (The comparisons in figures 13 and 14 were based upon weightings optimized for the whole 355-observation sample in 1993-2003, which were not always the same.) For economic sectors this strategy turned out to place slightly more overall reliance on the relative-change model than the share-of-change model. For household groups, there was still exclusive reliance on the share-of-change model for coverage of standard allocation relationships, but the “racial loop” described below involved the introduction of racial avoidance effects that could only be established in the relative-change model.

Figure 10 on the next page summarizes the regression model characteristics just discussed, addressing first the relative-change model and then the share-of-change model. Figure 11 on the second following page outlines the computation of proximity measures. Figures 12A and 12B on the third following page then describe the classes of independent variables tested in the two models.

Figure 10. Explanation of Regression Models

Units of observation: counties (and independent cities) grouped by region.

Quantity under analysis: Y = employment in some industry or households
in some income group.

Objective is to explain change in Y from year t to year $t+1$.

Let \hat{Y}_t = the regional sum of Y in year t .

RELATIVE-CHANGE MODEL

Null hypothesis: All counties in each region gain Y at the same percentage rate.

The dependent variable is then the difference between the observed value of Y_{t+1} and the value that would have prevailed given growth from year t at the regional rate.

Dependent Variable = $Y_{t+1} - Y_t * (\hat{Y}_{t+1} / \hat{Y}_t)$ (before denominator)

Dependent variable sums to zero, and all independent variables are structured to have zero sums (before application of denominator).

Liability of model: Dependent variable is likely to be dominated by a relatively few large observations. (Heteroscedasticity problem.)

Response: Divide both sides of equation by a quantity that is constant for each observation but varies across observations. This divisor “ U ” is computed as follows. (It can be disregarded when applying the calibrated equation.)

Divisor: $U = (E_t * \hat{Y}_t / N)^{0.25}$ where E is total county employment and
 N is the number of counties in the region

H (total households) is substituted for E when Y pertains to households.

SHARE-OF-CHANGE MODEL

Quantity analyzed is each county’s share of regional change in Y (times number of counties in the region to yield a mean of unity for each region and the sample).

Liability: Shares of change are meaningless unless regional change is appreciably positive and nearly all county changes are positive.

Consequently change must be computed relative to a discounted initial value.

Dependent variable = $N * (Y_{t+1} - k * Y_t) / (\hat{Y}_{t+1} - k * \hat{Y}_t)$

where k is a parameter determined when fitting the equation

Complication: R-square is inflated because part of what’s being explained (namely the portion of Y_{t+1} equaling $(1-k) * Y_t$) consists of activity that’s already present.

R-square is also inflated because the null hypothesis states that growth in Y (absolute, not %) is the same in all counties, which is grossly implausible.

Resolution is to use ordinary significance tests when developing each equation for a given value of k , but to select an equation that minimizes unexplained variance in Y_{t+1} rather than the dependent variable as analyzed.

Figure 11. Computation of Proximity Measures

A majority of predictors incorporate “proximity measures” obtained by summing activity levels across all areas (counties) of a region when weighted inversely by distance to the area for which the measure is being computed. The proximity measures contained in any given independent variable pertain to one of the nine major types of activity covered by the model (four employment categories and five household groups; see elsewhere). Here the activity is just called “A” without subscripts for year or type of activity. A proximity measure for area “j” is computed as follows (where the summation across i includes j):

$$\text{Proximity measure: } P_j = \sum_i A_i / (D_{ij} + F_j + g)^r$$

where: A_i is the level of the given activity in area i;
 D_{ij} is the straight-line distance between centroids of areas i and j;
 g is a “terminal time” parameter (expressed in miles);
 F_j is an estimate of internal travel distance in area j; and
 r is a distance-decay exponent.

The internal distance term F_j is a function of land area and includes a parameter h . Thus computing a proximity measure requires assumed values of three parameters: r , g , and h . Customarily three versions of each variable are computed using the following values and tested independently: ($r=2.0$, $g=5$, $h=5$); ($r=2.5$, $g=5$, $h=5$); and ($r=2.5$, $g=3$, $h=3$). The strongest predictors in the present study have overwhelmingly involved the last of these sets of parameter values (as has generally been found in prior studies). Hence the final equations have been limited to variables incorporating these values.

Land Availability Term

In the dynamics of urban growth, proximity to an attractant (activity) is interactive with the amount of land available for development. Impact on growth goes to zero as either proximity or land availability goes to zero. Hence in the model predictors, proximity measures are always multiplied by a land availability term. This term always pertains to the initial year of the prediction interval (i.e., year t) even though one of the proximity measures may pertain to another year. It is defined as follows (omitting the subscript t):

$$\text{Land availability index: } V = ((M \cdot c / (c + W)) / (\text{Regional mean of } M \cdot c / (c + W)))^s$$

where: c is a constant; M is land area in square miles;
 W is a linear combination of employment by industry and
occupied dwelling units by structure type; and
 s is an exponent to be determined when fitting the equation.

The exponent s (which can go to zero, expressing no land-availability impact) is held the same across all predictors in an equation. Its best-fitting value is determined by trial-and-error. The present analyses have used values of c and parameters in W obtained from previous studies. The hope is that better land availability measures based on Maryland statewide data can be substituted in the model-pegging process.

Since proximity measures are always multiplied by land availability, it is convenient to denote the product as another quantity Z :

$$\text{Weighted proximity measure: } Z = P \cdot V \quad \text{Regional sum: } \hat{Z}$$

Figure 12A. Independent Variables Tested in Relative-Change Model

- 1) Variables pertaining to all activity groups – restricted to positive relationships
- Past change $(Z_t - (Z_{t-1} * \dot{Z}_t / \dot{Z}_{t-1})) / U$
- Current change $(Z_{t+1} - (Z_t * \dot{Z}_{t+1} / \dot{Z}_t)) / U$ (cases limited)
- Initial level $(Z_t - (\dot{Z}_t / N)) / U$
- 2) Variables pertaining to household groups only – restricted to positive relationships
Let: X = activity level (not proximity measure); and O = X*V
- Relative initial level $(O_t - (S_t * \dot{O}_t / \dot{S}_t)) / U$
where S = sum of households across groups
- 3A) Variables pertaining to activity under analysis – restricted to positive relationships
Let: L = activity level (not proximity measure); and O = L*V
- Past change $(L_t - (L_{t-1} * \dot{L}_t / \dot{L}_{t-1})) / U$
- Initial level $(O_t - (\dot{O}_t / N)) / U$
- Relative initial level $(O_t - (R_t * \dot{O}_t / \dot{R}_t)) / U$ where R is the sum of households or employment across groups
- 3B) Variables pertaining to activity under analysis – restricted to negative relationships
- Initial level Same as above except O = L/V
- Relative initial level Same as above except O = L/V

Figure 12B. Independent Variables Tested in Share-of-Change Model

(Parameter k = 0.6 or 0.75 for “basic” employment, 0.7 or 0.8 for wholesale-transportation-utilities employment, and 0.9 for all other activity categories.)

- 1) Variables pertaining to all activity groups – restricted to positive relationships
- Past change $N * ((Z_t - (k * Z_{t-1})) / (\dot{Z}_t - (k * \dot{Z}_{t-1})))$
- Current change $N * ((Z_{t+1} - (k * Z_t)) / (\dot{Z}_{t+1} - (k * \dot{Z}_t)))$ (cases limited)
- Initial level $N * (Z_t / \dot{Z}_t)$
- Let S = level of activity under analysis divided by regional sum of this activity
- Weighted past change $N * (S * (Z_t - (k * Z_{t-1}))) / (\text{reg. sum of } S * (Z_t - (k * Z_{t-1})))$
- Weighted current change $N * (S * (Z_{t+1} - (k * Z_t))) / (\text{reg. sum of } S * (Z_{t+1} - (k * Z_t)))$
- Weighted initial level $N * (S * Z_t) / (\text{regional sum of } S * Z_t)$
- 2) Variables pertaining to activity under analysis (with quantity L as defined above)
- Past change $N * (L_t - (k * L_{t-1})) / (\dot{L}_t - (k * \dot{L}_{t-1}))$ pos. rel.s only
(here k is the value used in computing the dependent variable)
- Initial level $N * L_t / \dot{L}_t$ negative relationships permitted

Sequencing of Variables

The “activity groups” referenced in Figure 12 consisted of households in the five quintile categories plus employment in four aggregate industry groups – not the nineteen separate industries for which equations were estimated. Industries were aggregated when used as predictors because experience had shown that entertaining them separately would create too much latitude for spurious results. The nine activity groups were as follows:

- Employment in extractive activities, manufacturing and nonlocal government
- Employment in transportation, utilities and wholesale trade
- Employment in professional, technical and administrative support services plus finance, management functions and accommodations.
- Households in five quintile groups
- Employment in educational, health, food and “other” services plus retail trade, arts-recreation, construction and local government

The activity groups were part of a sequencing strategy to limit mutual determination among the variables addressed by the model. If current changes in all activities had been entertained as predictors in all equations, the resulting model would have required the use of simultaneous-equation estimation techniques (e.g., two-stage or three-stage least-squares) that would have hopelessly burdened the calibration process. Consequently the variables were grouped and addressed in the sequence shown above, under the constraint that the equations for variables in any given group could only contain predictors pertaining to groups appearing earlier in the sequence. Thus for example current change in upper-income households could serve as a predictor of current change in retail trade but not wholesale trade. This convention maintained a one-way flow of causation through the model. Accordingly, the sequence was intended to place the economic sectors in descending order of locational independence: from “basic” sectors with special locational determinants, to office functions with mixed requirements, to consumer-oriented functions driven largely by household location.

Other Modeling Considerations

The Atlanta area has been characterized by very rapid racial transition. Until 1990 this mainly involved substitutions of African-American for white inhabitants, but the pattern has since broadened with the rapid influx of Hispanic and Asian migrants to the region. The present study was not concerned with race per se, but racial breakdowns were needed to estimate general parameters such as household size and labor force participation rates. Hence an independent research project was undertaken to quantify racial avoidance and attraction behaviors. In this research project and the subsequent racial breakdowns of households in the model-related data samples, the following four categories were utilized: 1) non-Hispanic white (plus minor groups not belonging elsewhere); 2) black or African-American; 3) Asian; and 4) Hispanic regardless of race. Assignments of households to these categories were based on the status of the householder as described by household members to the census. For convenience the categories are referenced as “racial” even though Hispanic status is strictly a matter of language and/or cultural heritage.

The racial investigation looked at 1990-2000 interactions among racial groups in urban zones generally measuring between 10 and 20 square miles. The observation units were created by exhaustively partitioning three major metropolitan areas – Atlanta, Dallas-Fort Worth and Washington-Baltimore – into a total of 824 component zones. The racial analysis addressed twenty separate household groups, namely the four racial categories broken down by income quintile. For each of these twenty groups, the 1990-2000 household changes observed across the 824-observation sample were entered as dependent variable in a regression analysis wherein the candidate explanatory variables included: 1) initial numbers of occupied dwelling units by structure type; 2) 1990-2000 changes in occupied dwelling units by structure type; 3) each zone's 1990 household profile by race and income; and 4) 1990-2000 changes in some but not all household groups by race and income. The restrictions on explanatory use of current household changes were mostly relevant to avoidance relationships (negative linkages) and reflected a sequencing strategy like that just discussed for the allocation model. The sequence was defined in terms of race only, and after some experimentation was established as: black, Hispanic, Asian, white. This arrangement provided maximal opportunity to estimate the “white flight” that was expected to be quantitatively most important.

The estimated racial interactions turned out to be far stronger than expected. The interactions consisted of “attraction” relationships established by positive regression coefficients and “avoidance” relationships involving negative coefficients. The former were mostly linkages of household change to pre-existing households in the same racial category, reflecting the tendency of ethnic groups – especially Asians and Hispanics – to congregate in delimited areas. The avoidance relationships were mostly negative linkages to current household-change variables and were found to exist for at least some income groups wherever such relationships were permitted by the sequencing of equations. The relationships for white households were especially strong, expressing a tendency for whites at all income levels to move away from households in all three minority groups. A question left unanswered by the analysis, however, was the extent to which avoidance effects might dissipate when measured for progressively larger areas, because some of the households relocating for avoidance reasons might not move great distances (or more generally, because all of the comings and goings for a particular group might yield only localized displacement effects on a net basis).

The results of the racial study were incorporated in the forecasting process via the following steps. First, the racial interaction equations were recalibrated to increase their usability. Along with the explanatory variables listed above, the original versions of the equations included proximity measures like those employed in the allocation model. These played only marginal roles in the equations and hence were eliminated to increase their applicability. Also, new equations were estimated for the five black household groups using the 355-observation model calibration sample rather than the zone sample, which allowed the use of 1980-1990 black household change as a predictor. (Due to problems of area definition and data assembly, collecting 1980 racial data for the 824-observation zone sample was out of the question.) This step yielded equations with much greater predictive power and had little cost since current-change avoidance relationships were ruled out for black households by the sequencing arrangement.

Second, the recalibrated equations were used to compute attraction and avoidance effects for the 355 counties in the model calibration sample (based on full racial/income breakdowns of 1993 and 2003 households in that sample). These effects were aggregated in various ways so that they were specific only to income quintiles and hence were usable in the allocation-model equations. Then they were tested as predictors of household change in the relative-change model. To address dissipation of avoidance with area size, the avoidance effects were weighted by a quantity equaling 15 (the typical zone size in square miles) divided by county area in square miles, all raised to an exponent. The exponent was determined by trial-and-error in the regression analysis and allowed for possibilities ranging from no dissipation (exponent = zero) to virtual disappearance of avoidance effects in large areas. It turned out that, because the modeling context offered so many other relevant variables to credit with positive changes, no racial attraction variables were found significant in any of the household equations. However, weighted avoidance variables proved highly significant in the relative-change equations for the top three income quintiles. The versions that worked best covered only white households (i.e., white avoidance of other households). The regression results and their implications are summarized at the top of the next page. In theory, if the 355-observation and 824-observation samples reflected the same race-related behaviors, the regression coefficients for the given variables should have equaled unity and the dissipating influence of area size should have registered entirely in the exponents of the weighting factors. In actuality the coefficient estimates came in well below unity – at 0.41 to 0.76 – and thus captured some of the difference between zone-level and county-level effects. The table’s bottom portion shows the relative levels of avoidance predicted for areas the size of Gwinnett County and its component SCAs. For example, the entries in the last column say that for upper-income households, white avoidance behavior can be expected to have about one-third as much net impact in Gwinnett County as a whole – but over half as much impact at the SCA level – as it would in a zone measuring 15 square miles.

	Regression Results for White Avoidance Variables		
	Middle-Income Households	Upper-Middle-Inc. Households	Upper-Income Households
Weighting-factor exponent	0.28	0.25	0.25
Regression coefficient	0.4079	0.4784	0.7617
t-statistic	5.48	4.46	2.80
Significance level	<0.01%	<0.01%	0.5%
Predicted relative impact at:			
433 sq. miles (Gwinnett Co.)	0.16	0.21	0.33
50 sq. miles (typical SCA)	0.29	0.35	0.56

Third, when the two sets of allocation-equation results were assembled in a framework for predictive use, a “racial loop” was established outside this framework to break down the quintile household forecasts by race. The external routines were called a “loop” because a circular process was required to enforce consistency between the racial breakdowns and the model’s inputs and predictions. The loop consisted of two sets of computational routines. The first set generated forecasts of occupied dwelling units by

structure type, using empirical relationships based on the 355-observation sample that linked dwelling characteristics to households by income. This component was needed because the equations from the racial investigation used dwelling units by structure type as predictors along with household variables. The second set of routines incorporated the racial equations per se. Given updated values of dwelling units by type and households by income, these routines generated initial breakdowns of income-specific households by race, then enforced consistency between these estimates and two sets of control totals (for region-wide households by race and income from the regional forecasts, and for county households by income from the allocation model). The results were then used to update the racial attraction and avoidance effects entered in the allocation framework, which initially were guesses based on forecasts for the prior interval. Several computational trips around the loop (which involved an internal cycle in its second part, plus iterative solutions at two points) were required to obtain overall convergence of estimates for a given interval.

When the forecasting process was designed, some discretion was exercised in deciding which race-related effects should be directly included in the allocation-model framework, with the choices turning upon the composite model's predictive accuracy for Atlanta counties in 1995-2005. The avoidance effects for white upper-middle-income and upper-income households – computed using the parameters shown in the two right-hand columns of the above table – were included in the framework, but the avoidance effect for middle-income households did not improve predictive accuracy and hence was not included. This meant that the tendency of white middle-income households to avoid households of other races would affect the forecasted racial distributions for counties, but not their income distributions (which were the sole province of the allocation model). On the other hand, racial attraction effects were included for the two bottom household groups even though these effects had not been attributed statistical significance in the model calibration process. This decision was justified by improvements in predictive accuracy – particularly for Gwinnett – and the fact that dissipation with area size should not be an issue for attraction. The chosen attraction terms covered only Hispanic and Asian households, not blacks. They were computed as in the racial investigation, but their values for future years were capped in a fashion that kept attraction from spiraling upward as the base numbers of Hispanic and Asian households increased.

The household forecasting tableau simply added the two positive attraction effects and the two negative avoidance effects to the predictions from the share-of-change equations for the relevant household groups. Adjustment factors were then added to the predictions for all five household groups (thereby creating “pegged” values), and the results were scaled to enforce consistency with regional control totals. The outputs were then sent through the racial loop. Back came new attraction and avoidance effects for substitution into the tableau, and the cycle was repeated until the new effects precisely equaled those already assumed.

The consideration of race in the county-level forecasting process was intended solely to improve the accuracy of the income-specific household forecasts and the projections of household size. The race-specific numbers were never subjected to the

expert review process or released as project outputs. However, the structure-type breakdowns obtained in the racial loop had a further purpose of linking the household forecasts to the land use categories employed in parcel-level forecasting. Hence these breakdowns were carried through expert review and finalized on that basis.

Model Performance

Since forecasting is an activity that targets the unknowable, the possible ways of evaluating a forecasting project are limited to: 1) examining and pondering all aspects of its methodology; and 2) looking at the ability of its procedures to “predict” events that are already known. The graphs on the next four pages are offered to support the second type of evaluation. Figures 13 and 14 show the present study’s predictions of 1993-2003 change in total employment and total households for the 355-county model calibration sample (based on procedures lacking attraction effects and the racial loop). Figures 15 and 16 show similar predictions for Atlanta-area counties in 1995-2005, based on the same forecasting procedures subsequently applied to future intervals. Each graph plots predicted change on its vertical axis and actual change on its horizontal axis, with a 45-degree line included to show where all data points would lie if the forecasting process were perfectly accurate.

When the model equations were calibrated, all variables were computed using actual values of employment and households. When the equations were applied in predictive mode, however, the current-change variables were all based on predictions generated earlier in the process. (What linked the parallel applications of relative-change and share-of-change equations was the use of pooled predictions to compute current-change variables for activity groups.) This allowed errors to cumulate across the process – as they would when the equations were applied to future intervals about which nothing was known. The graphs in figures 13 through 16 describe applications of the equations in predictive mode, hence suggest the levels of error that would prevail when they addressed the first forecasting interval.

Figures 13 and 14 include labels on some of the points that represent major outliers or pertain to Atlanta-area counties. For employment, the model had trouble with two of the largest urban-core counties – Philadelphia and Wayne, MI (Detroit) – because these counties respectively overcame a long-term downtrend and an adverse industry mix. For households, the model’s worst performance consisted of underpredicting change in Collin County, TX, a phenomenally fast-growing area north of Dallas.

Figures 15 and 16 include labels on the points for all major counties in the Atlanta region. Each graph has three points pertaining to Fulton County: one for the county as a whole and two for county subdivisions that are referenced as North Fulton and Central & South Fulton. (As noted earlier, Fulton was divided at the northern Perimeter Road and treated as two separate counties.) The model’s worst performances in the study region consisted of underpredicting employment change in DeKalb County and all types of growth in Henry County. An extenuating circumstance in the former case was that the error was not terribly large in percentage terms – at 5.3% of total employment – since the actual pattern for DeKalb involved slow growth from a high base.

Figure 13

ACTUAL VERSUS MODEL-PREDICTED CHANGE IN EMPLOYMENT DURING 1993-2003
FOR COUNTIES AND INDEPENDENT CITIES IN THE MODEL CALIBRATION SAMPLE

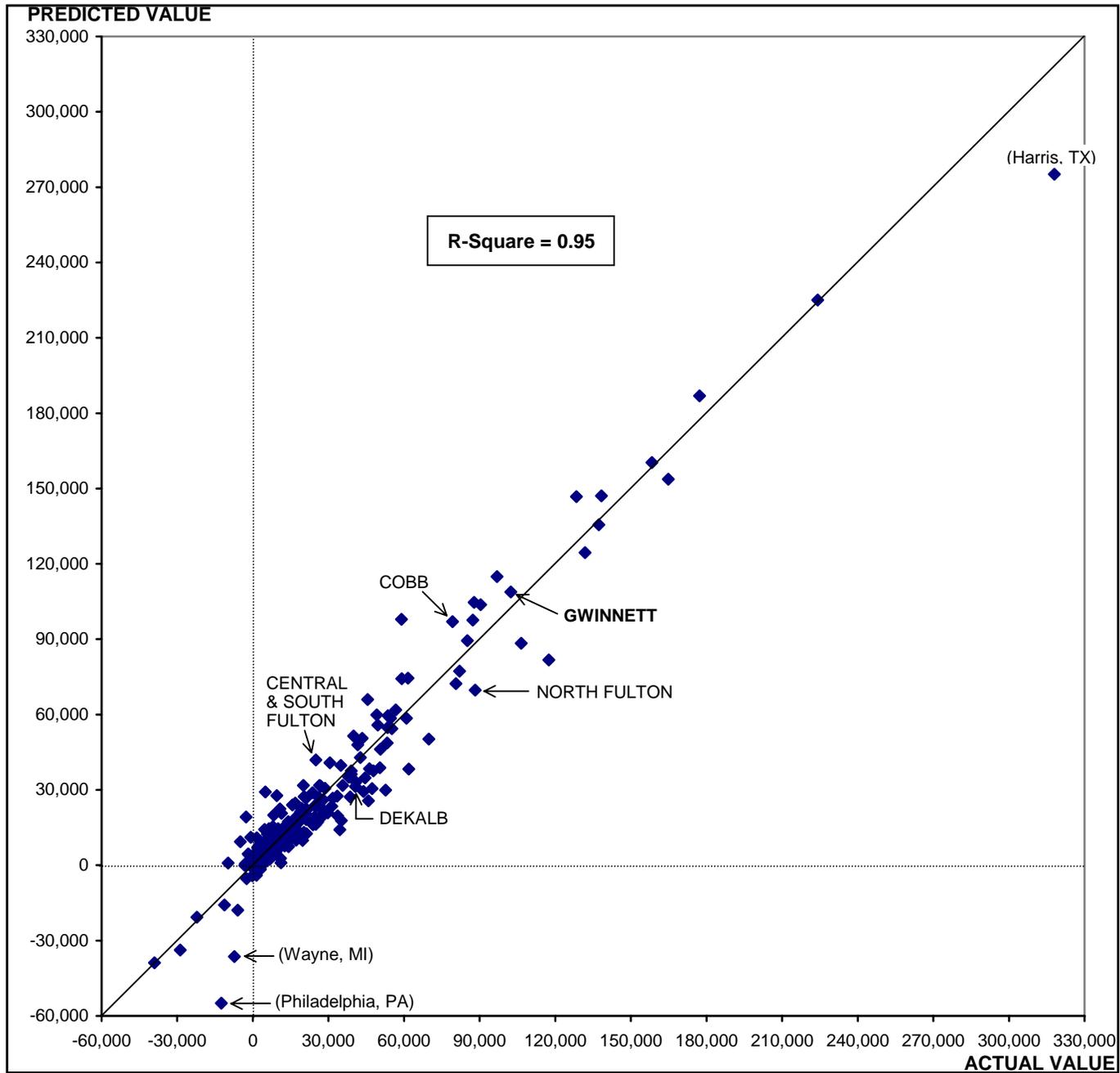


Figure 14

ACTUAL VERSUS MODEL-PREDICTED CHANGE IN HOUSEHOLDS DURING 1993-2003
FOR COUNTIES AND INDEPENDENT CITIES IN THE MODEL CALIBRATION SAMPLE

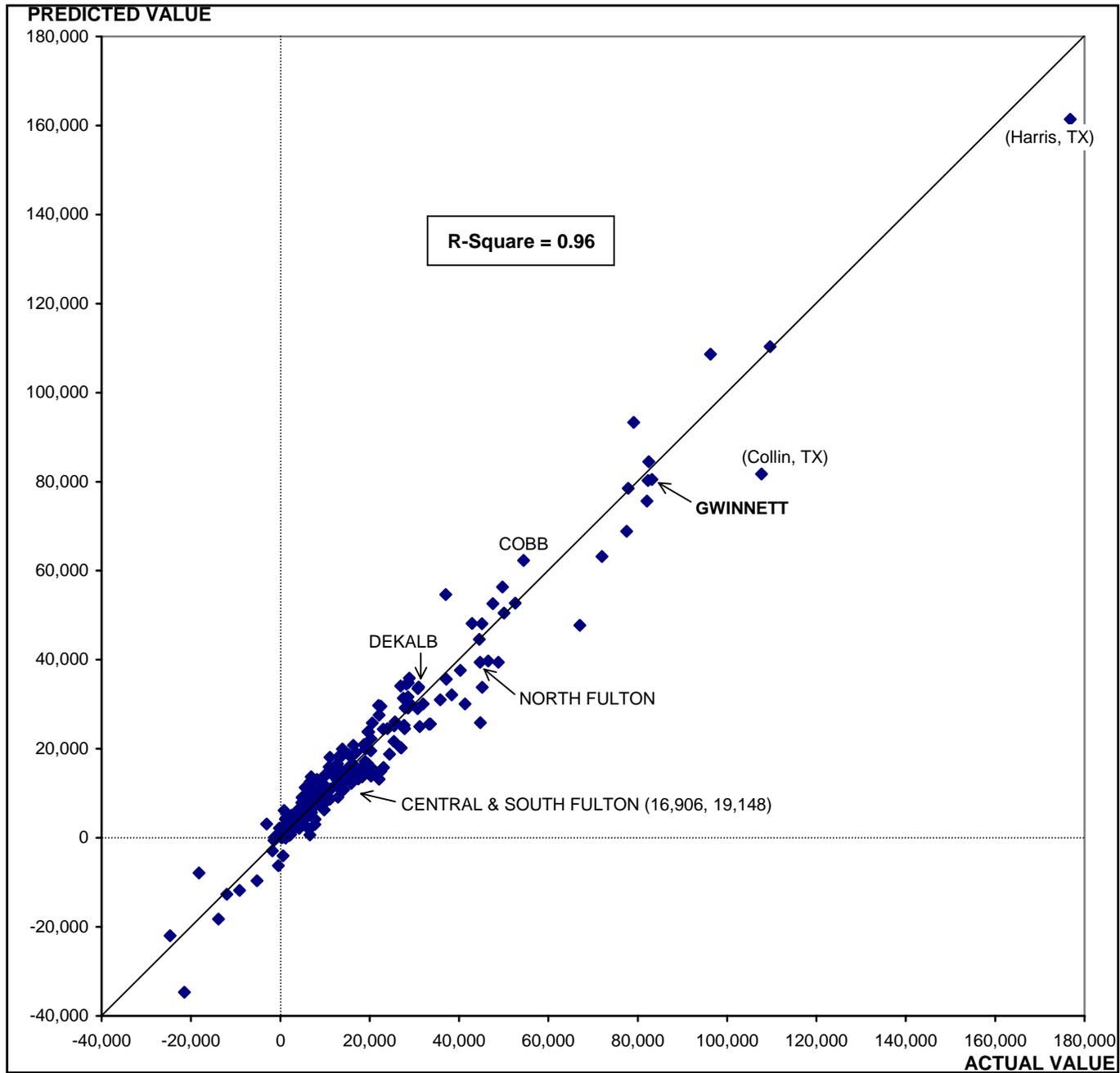


Figure 15

ACTUAL VERSUS MODEL-PREDICTED CHANGE IN EMPLOYMENT
DURING 1995-2005 FOR COUNTIES IN THE STUDY REGION

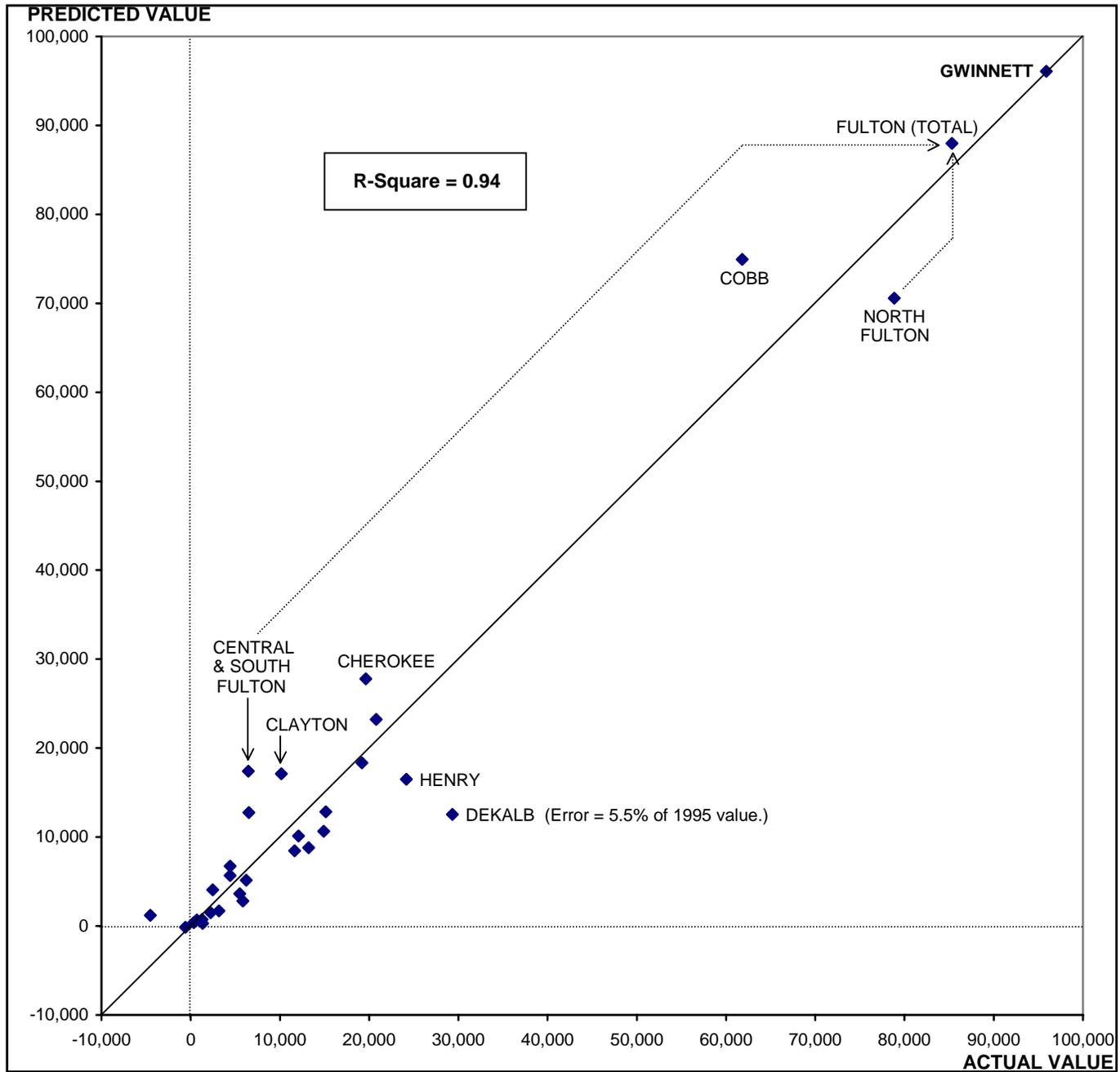
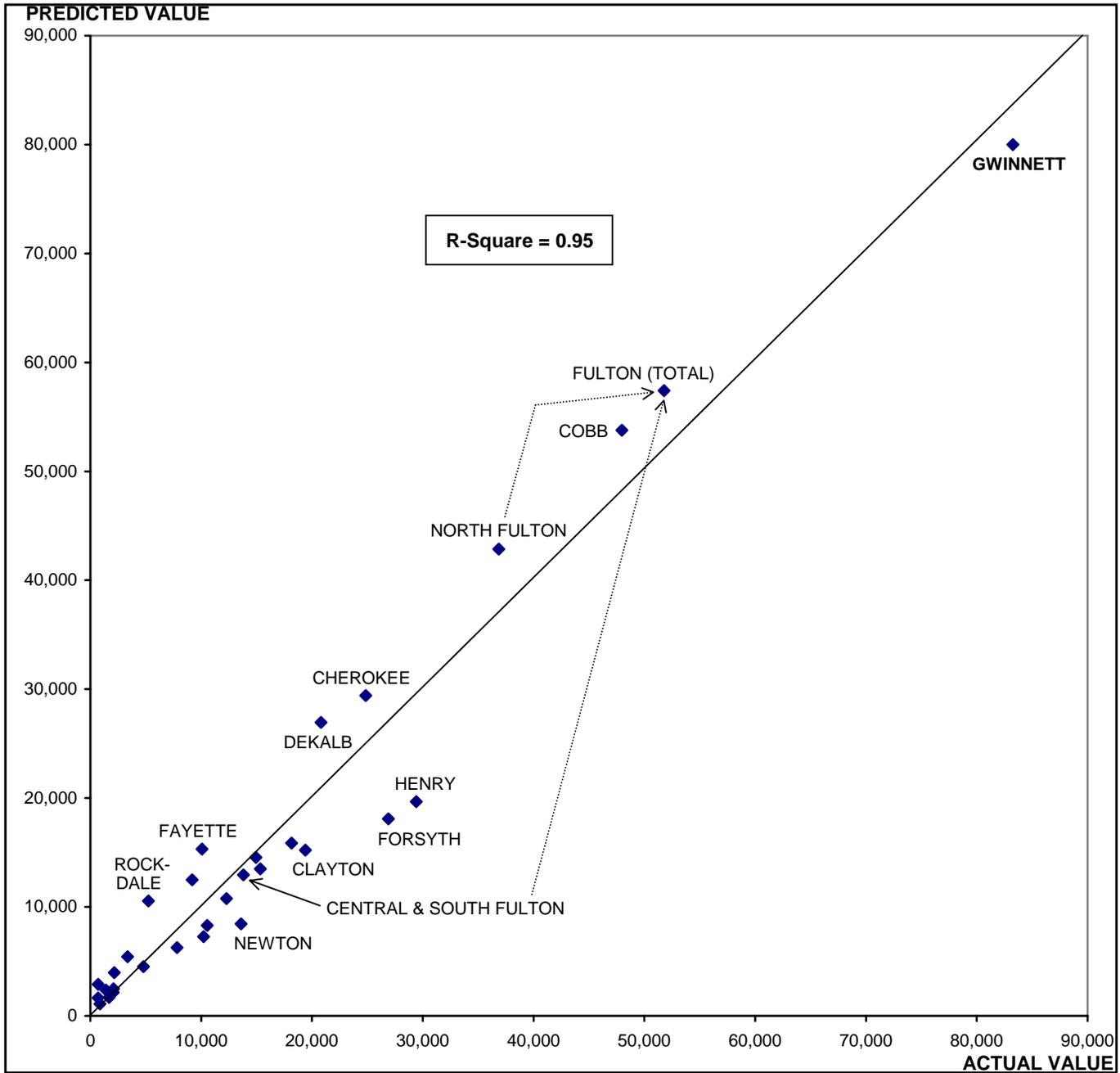


Figure 16

ACTUAL VERSUS MODEL-PREDICTED CHANGE IN HOUSEHOLDS
DURING 1995-2005 FOR COUNTIES IN THE STUDY REGION



County Forecasts

The application of model equations to the Atlanta region was the basis for a model-pegging process. This consisted of computing residuals – the same as prediction errors, but with opposite signs – and then compensating for these deficiencies. Following standard practice, the compensation consisted of including reduced versions of the 1995-2005 residuals as additive “adjustment factors” in the model equations used to address future intervals. The residuals were reduced in part to allow for various offsetting effects and in part to enforce a gradual convergence of predictions with those yielded by the regression-based portions of the equations.

The forecasting process then consisted of applying the pegged model equations recursively to three future intervals: 2005-15, 2015-25 and 2025-35. In each round of forecasting the outputs obtained for the previous interval became the new model inputs, i.e., the basis for updating all predictors including the land availability index. Throughout the process the regional magnitudes established in the earlier regional forecasting task served as control totals, usually applying on an incremental basis. Following the model application, values of all variables for future years ending in zero were obtained via an interpolation process that involved fitting third-degree polynomial equations to the model-predicted values for 2005, 2015, 2025 and 2035. Demographic variables not covered directly by the model were then estimated using supplementary relationships. For example, residential population was estimated using independent forecasts of group-quarters population and future population per household, plus various conversion factors related to racial breakdowns. The supplementary relationships were obtained outside the modeling framework but were all empirically derived using data from the 355-observation and 824-observation samples.

Tables 9 and 10 on the next two pages summarize the resulting forecasts for all counties in the Atlanta region. The given numbers pertain only to the 2005 baseline year and the 2030 forecast year. (There are some slightly inconsistencies between the these forecasts, the regional totals presented earlier and the Gwinnett SCA breakdowns appearing later because the process was subject to numerous revisions.)

Table 9 describes total employment, total households and total population, with 2005-30 changes expressed in absolute and percentage terms. Gwinnett County is expected to achieve the highest absolute 2005-gains in all three variables (though Fulton would be well ahead if not split into two parts). In percentage terms, however, Gwinnett is forecasted to lag the region as a whole by four percentage points for employment and nine to ten percentage points for the two demographic variables.

Table 10 gives the actual and expected percent distributions of households by income quintile. The Gwinnett figures show declines in the shares of households occupying the upper three quintiles and increases in the two bottom quintile shares. This lowering of the county’s income profile would continue a trend that started in the 1980s. (The county’s combined share in the top two quintiles fell from 55% in 1980 to 52% in 1990 and 47% in 2005.) Thus according to the benchmark forecast, Gwinnett will be a fully middle-class rather than upper-middle-class area by 2030.

Table 9. SUMMARY OF COUNTY-LEVEL FORECASTS FOR THE ATLANTA REGION

	Total Employment				Households				Population			
	2005	2030	Change	% Ch.	2005	2030	Change	% Ch.	2005	2030	Change	% Ch.
Barrow County	16,974	40,824	23,850	141%	20,895	44,129	23,233	111%	59,130	118,760	59,630	101%
Bartow County	38,581	62,549	23,969	62%	31,658	61,296	29,637	94%	88,650	162,939	74,289	84%
Butts County	7,368	17,698	10,330	140%	7,179	18,288	11,109	155%	20,931	50,888	29,958	143%
Carroll County	36,435	61,063	24,628	68%	38,369	74,141	35,772	93%	104,626	193,541	88,915	85%
Cherokee County	47,748	133,851	86,103	180%	63,569	130,831	67,261	106%	181,871	353,359	171,488	94%
Clayton County	115,047	145,553	30,506	27%	91,879	126,940	35,061	38%	267,031	356,181	89,150	33%
Cobb County	321,009	413,356	92,347	29%	245,978	292,662	46,684	19%	661,526	767,649	106,123	16%
Coweta County	34,452	62,182	27,730	80%	38,391	76,784	38,393	100%	108,776	205,222	96,446	89%
Dawson County	7,214	39,480	32,267	447%	7,657	28,910	21,253	278%	19,559	73,118	53,559	274%
DeKalb County	335,543	379,279	43,736	13%	251,853	270,583	18,730	7%	677,053	724,958	47,905	7%
Douglas County	40,085	69,948	29,863	74%	40,509	69,052	28,542	70%	111,341	180,051	68,710	62%
Fayette County	44,355	83,978	39,622	89%	36,189	56,501	20,312	56%	103,486	153,696	50,210	49%
Forsyth County	42,680	173,283	130,603	306%	48,256	130,184	81,928	170%	138,282	346,330	208,048	150%
Fulton N. of I-285	194,846	345,125	150,278	77%	119,321	174,899	55,579	47%	312,177	442,275	130,097	42%
Fulton Central & S	529,437	690,940	161,503	31%	220,461	294,160	73,698	33%	554,937	738,908	183,971	33%
Gwinnett County	315,838	482,890	167,052	53%	246,140	361,827	115,687	47%	719,849	1,019,166	299,317	42%
Hall County	69,041	108,252	39,211	57%	54,999	100,290	45,291	82%	164,525	291,190	126,665	77%
Haralson County	8,200	14,254	6,053	74%	10,917	20,893	9,977	91%	28,245	50,798	22,553	80%
Heard County	2,673	4,334	1,662	62%	4,204	7,976	3,772	90%	11,326	20,335	9,009	80%
Henry County	47,655	118,136	70,481	148%	57,855	131,128	73,273	127%	165,621	355,475	189,855	115%
Jasper County	3,233	7,096	3,864	120%	4,813	12,890	8,076	168%	13,055	32,927	19,873	152%
Lamar County	3,972	5,120	1,148	29%	5,899	9,186	3,287	56%	16,365	24,365	8,000	49%
Meriwether County	6,194	8,873	2,679	43%	8,690	13,564	4,874	56%	22,887	34,116	11,230	49%
Newton County	20,970	53,945	32,975	157%	30,826	69,984	39,158	127%	85,441	186,691	101,250	119%
Paulding County	24,869	66,903	42,034	169%	38,114	84,803	46,688	122%	110,817	230,936	120,119	108%
Pickens County	7,278	30,002	22,724	312%	11,266	32,970	21,703	193%	28,281	80,447	52,166	184%
Pike County	3,370	6,910	3,540	105%	5,608	13,014	7,406	132%	16,018	35,137	19,119	119%
Rockdale County	35,475	57,256	21,781	61%	26,965	37,731	10,766	40%	78,123	106,182	28,059	36%
Spalding County	26,021	32,342	6,321	24%	22,907	29,787	6,880	30%	61,153	76,411	15,258	25%
Walton County	18,631	59,616	40,985	220%	26,372	67,184	40,812	155%	74,746	178,369	103,622	139%
Total Region	2,405,192	3,775,039	1,369,847	57%	1,817,741	2,842,583	1,024,842	56%	5,005,827	7,590,420	2,584,593	52%

Table 10. PERCENT DISTRIBUTIONS OF COUNTY HOUSEHOLDS BY INCOME QUINTILE, 2005 AND 2030

	2005 (Actual)						2005 (Forecast)					
	Lower	Lower Middle	Middle	Upper Middle	Upper	Total	Lower	Lower Middle	Middle	Upper Middle	Upper	Total
Barrow County	19.8%	23.0%	27.3%	19.9%	10.1%	100.0%	14.1%	21.6%	30.1%	22.3%	11.9%	100.0%
Bartow County	22.6%	23.4%	24.4%	19.3%	10.3%	100.0%	17.7%	20.1%	28.8%	23.0%	10.4%	100.0%
Butts County	26.8%	23.7%	24.2%	16.5%	8.9%	100.0%	17.0%	16.8%	30.6%	23.2%	12.3%	100.0%
Carroll County	32.9%	20.8%	20.8%	15.6%	9.9%	100.0%	28.3%	15.9%	22.8%	19.8%	13.2%	100.0%
Cherokee County	12.3%	16.6%	20.4%	25.1%	25.6%	100.0%	11.3%	16.2%	20.0%	24.3%	28.2%	100.0%
Clayton County	24.7%	28.0%	23.2%	16.5%	7.7%	100.0%	28.6%	28.7%	21.7%	15.0%	6.0%	100.0%
Cobb County	15.5%	18.8%	20.1%	21.3%	24.2%	100.0%	20.6%	22.3%	17.7%	17.7%	21.7%	100.0%
Coweta County	16.7%	16.9%	23.3%	25.0%	18.1%	100.0%	12.0%	14.2%	27.9%	27.3%	18.5%	100.0%
Dawson County	18.8%	21.4%	24.8%	19.1%	15.9%	100.0%	11.2%	14.8%	24.5%	22.8%	26.7%	100.0%
DeKalb County	21.6%	22.2%	20.6%	18.4%	17.2%	100.0%	27.7%	23.8%	17.1%	14.7%	16.7%	100.0%
Douglas County	20.0%	23.3%	22.5%	20.4%	13.9%	100.0%	21.8%	25.1%	22.5%	19.2%	11.4%	100.0%
Fayette County	10.9%	13.8%	17.8%	24.6%	33.0%	100.0%	14.1%	16.1%	16.2%	22.7%	30.9%	100.0%
Forsyth County	11.6%	11.2%	14.8%	25.4%	37.0%	100.0%	11.0%	10.7%	15.3%	24.1%	38.8%	100.0%
Fulton N. of I-285	10.6%	13.9%	15.4%	19.5%	40.7%	100.0%	13.5%	16.1%	12.9%	17.9%	39.6%	100.0%
Fulton Central & S	35.1%	20.4%	15.0%	12.7%	16.8%	100.0%	33.1%	19.9%	14.2%	13.9%	19.0%	100.0%
Gwinnett County	13.5%	18.8%	20.8%	24.1%	22.8%	100.0%	18.0%	21.9%	18.9%	21.5%	19.7%	100.0%
Hall County	23.6%	22.4%	21.7%	18.5%	13.8%	100.0%	21.2%	20.9%	22.2%	20.0%	15.7%	100.0%
Haralson County	39.6%	25.2%	17.2%	11.7%	6.3%	100.0%	33.6%	21.0%	18.6%	15.7%	11.1%	100.0%
Heard County	33.8%	25.9%	19.9%	15.1%	5.2%	100.0%	15.5%	19.7%	26.4%	25.2%	13.3%	100.0%
Henry County	12.3%	18.3%	23.3%	27.2%	19.0%	100.0%	11.7%	18.0%	25.0%	26.5%	18.8%	100.0%
Jasper County	25.4%	26.2%	24.9%	15.9%	7.6%	100.0%	11.0%	21.7%	31.7%	23.4%	12.1%	100.0%
Lamar County	27.7%	27.0%	23.1%	14.2%	8.1%	100.0%	13.9%	23.3%	31.6%	21.3%	9.9%	100.0%
Meriwether County	36.5%	24.6%	17.7%	14.2%	7.0%	100.0%	20.8%	19.4%	25.9%	22.7%	11.2%	100.0%
Newton County	20.0%	23.9%	24.0%	20.5%	11.6%	100.0%	15.0%	21.5%	28.5%	22.6%	12.4%	100.0%
Paulding County	14.3%	19.9%	25.3%	27.8%	12.6%	100.0%	12.1%	19.0%	28.6%	28.3%	11.9%	100.0%
Pickens County	23.7%	24.0%	23.3%	17.4%	11.6%	100.0%	14.7%	17.7%	25.1%	23.5%	19.1%	100.0%
Pike County	23.7%	20.5%	26.1%	18.3%	11.4%	100.0%	15.4%	15.5%	31.6%	23.9%	13.5%	100.0%
Rockdale County	19.1%	21.8%	18.8%	21.2%	19.1%	100.0%	23.7%	25.3%	14.2%	19.9%	16.8%	100.0%
Spalding County	33.9%	24.1%	20.3%	13.7%	8.1%	100.0%	31.0%	22.5%	22.0%	15.3%	9.1%	100.0%
Walton County	21.6%	20.6%	20.7%	22.7%	14.4%	100.0%	13.4%	14.5%	25.4%	26.5%	20.1%	100.0%
Total Region	20.0%	20.0%	20.0%	20.0%	20.0%	100.0%	20.0%	20.0%	20.0%	20.0%	20.0%	100.0%

Table 11 below presents the Gwinnett forecasts in more detail. (Similar results were obtained for all counties in the region-to-county allocation process.) The industry groups covered in the employment tabulation are the 19 NAICS industries discussed previously, which were replaced in later steps by the 8 SIC industry groups required for transportation modeling. The forecasted Gwinnett gains generally follow the pattern shown for the region in Table 8, with the largest increases occurring in the professional, management, administrative support, educational and health service sectors. The county is also expected to achieve a relatively large gain in arts, entertainment and recreation.

The expected Gwinnett trend in household income has just been discussed. The last line of Table 11 shows the county's expected population growth rates over the 5-year intervals from 2005 to 2030, which progressively taper off from 2.0% to 0.9% per year.

Table 11. GWINNETT COUNTY FORECASTS

	2005	2010	2015	2020	2025	2030
Employment by Industry						
Extractive activities	629	527	440	369	313	272
Construction	21,681	23,071	24,175	25,061	25,797	26,454
Durable goods mfg	16,269	16,215	15,481	14,400	13,311	12,548
Nondurable goods mfg	6,625	7,648	8,106	8,189	8,085	7,984
Wholesale trade	32,891	36,126	38,055	39,167	39,952	40,897
Retail trade	42,663	46,464	48,407	49,082	49,082	48,997
Transportation & utilities	6,170	6,512	6,719	6,875	7,066	7,378
Information	10,280	12,395	13,690	14,389	14,716	14,896
Finance, insur & real est	20,407	24,678	27,836	30,192	32,056	33,740
Professional & mgmt serv	28,947	36,591	43,421	49,550	55,091	60,158
Admin support services	31,609	38,669	45,560	52,245	58,688	64,852
Educational services	3,336	4,455	5,675	6,941	8,194	9,379
Health & social services	20,307	25,263	30,177	34,996	39,667	44,134
Arts, entertainment & rec	2,966	4,209	5,058	5,578	5,836	5,895
Accommodations	1,746	1,831	1,873	1,883	1,874	1,859
Food services	22,905	26,036	28,309	29,968	31,261	32,434
Other services incl rental	15,559	17,584	19,089	20,251	21,247	22,256
Fed. & state government	5,325	6,062	6,566	6,920	7,204	7,499
Local government	26,157	29,774	33,045	36,046	38,851	41,538
Total	316,472	364,112	401,682	432,102	458,291	483,169
Households by Income						
Lower Quintile	33,122	39,213	45,388	51,707	58,231	65,018
Lower-Middle Quintile	46,329	52,961	59,496	65,989	72,496	79,073
Middle Quintile	51,298	56,255	60,438	63,865	66,558	68,535
Upper-Middle Quintile	59,214	64,789	69,427	73,134	75,914	77,774
Upper Quintile	56,177	60,520	64,026	66,886	69,290	71,427
Total	246,140	273,738	298,775	321,582	342,489	361,827
Total Population						
Number	719,849	795,444	861,985	920,660	972,657	1,019,166
Annual % Change		2.0%	1.6%	1.3%	1.1%	0.9%

SCA Forecast Preparation and Review

Gwinnett County was subdivided into eight sub-county areas (SCAs) for purposes of analysis and forecasting. As shown in maps elsewhere, SCAs 1 through 7 circle the county in a clockwise direction from its northern corner to its northwestern margin, while SCA 8 is a central territory including Lawrenceville. SCAs 1, 2 and 3 are partly rural with 2005 population densities around 1,000 persons per square mile. (See the last line of Table 12 below.) SCA 6 – spanning the inner portion of I-85 – is the most intensively developed area with a 2005 population density of about 3,263 persons per square mile, and the other SCAs range from approximately 1,800 to 2,000 persons per square mile. Table 12 on the next page presents the baseline values of leading variables for the eight SCAs. Employment is now classified by SIC rather than NAICS industries, and some of the county totals are modified slightly from the region-to-county allocation outputs shown earlier..

Forecasts were prepared for the eight SCAs using the same methodology as the region-to-county allocation, with the same model equations and forecasting steps. The only differences involved the model-pegging process and the weighting of predicted values from the relative-change and share-of-change equations. This task was conducted in mid-2006 and the results were modified slightly a few months later. Then the model-based forecasts were subjected to an expert review process in October-December of 2006. The review panel, consisting of project team members and county representatives, evaluated the forecasts against known development trends and land availability in the various SCAs and reached consensus on appropriate changes.

Tables 13 through 15 on the second through fourth following pages present the resulting SCA forecasts for 2030, showing both the model-based figures and the forecasts that emerged from the review process. Table 13 covers employment, Table 14 addresses population and households by income, and Table 16 addresses households by dwelling-unit type. The review process and accompanying investigations yielded some changes in baseline as well as forecasted values of variables, most notably for employment in SCA 4. The 2005-30 percent changes in the tables compare the revised 2030 forecasts with the revised baseline values (which are the ones appearing in Table 12).

The largest employment revisions in relative terms were increases in the 2030 forecasts for SCAs 1, 2 and 4. These increases were mostly offset by reductions in the 2030 employment predicted for SCA 6 (which currently has about 37% of the county's jobs). The most prominent revisions in total 2030 households consisted of a decrease for SCA 8, where land availability was considered an issue, and an increase for SCA 4. The revisions for individual income categories had the effect of raising the 2030 income profiles for SCAs 1, 2 and 8 and modestly lowering those for the other five SCAs. Table 15 shows 2005-30 percent changes for all dwelling types rather than just total occupied dwellings (households), because predicted shifts toward higher-density types are a major feature of the forecasts. Accentuation of this feature was a major impact of the revision process, which greatly reduced the detached housing shares of new development in SCAs 5 and 8.

Table 12. BASELINE (2005) VALUES OF VARIABLES FOR SUB-COUNTY AREAS (SCAs)

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Employment by SIC Industry									
Construction	1,709	4,160	3,085	1,316	2,561	4,871	2,678	5,228	25,608
Manufacturing	1,620	2,708	438	386	635	12,571	3,304	7,807	29,469
Transportation, commun., util.	581	718	192	152	326	5,508	2,538	3,461	13,476
Wholesale trade	2,121	2,049	370	496	583	17,327	4,252	9,576	36,775
Retail trade	4,162	6,950	3,300	2,553	6,121	27,716	5,828	11,663	68,292
Finance, insurance, real estate	1,379	1,123	1,374	734	1,511	8,667	2,511	4,703	22,002
Services	5,212	6,036	3,851	2,552	7,181	33,995	10,890	18,446	88,162
Government	2,221	3,460	2,644	1,105	3,138	7,209	3,064	9,212	32,054
Total	19,004	27,206	15,254	9,294	22,056	117,864	35,064	70,095	315,838
Households by Income Quintile									
Lower	2,224	2,115	2,375	1,809	2,795	13,886	2,596	5,347	33,147
Lower Middle	2,562	4,302	5,278	2,887	4,576	17,097	3,120	6,480	46,301
Middle	2,590	6,523	6,612	3,045	5,875	15,279	4,195	7,217	51,337
Upper Middle	3,255	8,303	8,067	3,291	8,709	12,424	6,033	9,068	59,149
Upper	2,755	8,487	6,293	3,041	9,713	7,345	9,434	9,137	56,206
Total	13,386	29,730	28,625	14,074	31,668	66,030	25,378	37,249	246,140
Occupied Dwellings By Units in Structure									
Single-Family Detached	10,870	27,736	26,469	11,954	29,413	27,168	18,807	29,406	181,824
SF Attached & Duplex	530	744	871	451	862	6,991	1,346	2,852	14,647
3 to 9 Units	566	330	268	874	755	14,372	2,356	1,769	21,290
10 or More Units	375	409	422	274	347	16,628	2,717	2,752	23,925
Mobile Home & Misc.	1,044	511	596	521	291	869	152	470	4,453
Total	13,386	29,730	28,625	14,074	31,668	66,030	25,378	37,249	246,140
Population and Density									
Population (April 1)	37,335	90,232	83,813	41,948	94,304	190,680	70,012	111,524	719,849
Land Area in Square Miles	37.0	92.8	82.9	23.3	45.1	58.4	38.5	54.8	432.9
Population Per Square Mile	1,008	972	1,011	1,799	2,092	3,263	1,820	2,035	1,663

Table 13. FORECASTED 2030 EMPLOYMENT BY SIC INDUSTRY

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Original Forecast									
Construction	2,001	4,919	2,965	866	1,771	6,779	3,443	4,275	27,020
Manufacturing	1,251	3,410	1,323	319	1,304	9,479	3,466	5,271	25,823
Transportation, commun., util.	1,452	2,125	1,480	454	1,514	5,660	3,645	3,593	19,923
Wholesale trade	2,741	4,008	1,645	651	1,447	13,431	4,503	12,704	41,131
Retail trade	6,917	14,797	7,821	2,151	8,341	31,053	8,773	16,715	96,569
Finance, insurance, real estate	2,815	4,274	3,777	584	1,924	11,620	4,721	7,888	37,602
Services	10,065	17,084	13,639	5,075	15,874	59,386	26,397	37,355	184,876
Government	3,361	7,034	4,805	1,694	4,348	9,104	4,668	14,933	49,947
Total	30,602	57,650	37,456	11,796	36,524	146,512	59,615	102,734	482,890
Revised Forecast									
Construction	2,913	6,085	5,431	1,407	3,095	4,454	3,613	5,581	32,579
Manufacturing	1,778	4,798	1,186	604	1,207	8,578	3,384	6,890	28,426
Transportation, commun., util.	1,121	2,419	615	405	856	6,418	3,334	4,498	19,666
Wholesale trade	3,665	5,963	1,155	1,009	1,695	15,441	5,737	12,390	47,055
Retail trade	6,196	13,300	7,629	2,973	7,275	26,867	8,100	14,829	87,168
Finance, insurance, real estate	2,821	5,177	3,416	946	2,019	9,702	4,726	8,505	37,314
Services	11,603	19,280	12,292	5,947	15,199	52,571	22,602	39,672	179,166
Government	4,056	7,457	6,200	1,901	4,747	10,148	5,041	11,966	51,516
Total	34,155	64,479	37,925	15,191	36,094	134,179	56,538	104,331	482,890
Percent Change, 2005-30	80%	137%	149%	63%	64%	14%	61%	49%	53%
Revised Minus Original									
Construction	913	1,166	2,466	540	1,324	-2,325	170	1,306	5,559
Manufacturing	526	1,388	-137	285	-96	-901	-81	1,620	2,603
Transportation, commun., util.	-331	294	-865	-50	-658	758	-310	905	-257
Wholesale trade	925	1,954	-490	357	248	2,010	1,235	-315	5,924
Retail trade	-721	-1,498	-193	822	-1,066	-4,187	-673	-1,887	-9,402
Finance, insurance, real estate	6	904	-361	362	95	-1,918	6	618	-288
Services	1,539	2,197	-1,347	872	-676	-6,815	-3,795	2,317	-5,709
Government	696	423	1,395	206	399	1,044	373	-2,967	1,570
Total	3,552	6,829	468	3,394	-430	-12,333	-3,077	1,597	0

Table 14. FORECASTED 2030 HOUSEHOLDS BY INCOME AND 2030 POPULATION

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
<u>Households by Income</u>									
Original Forecast									
Lower Quintile	3,994	5,540	5,674	3,533	5,885	21,766	6,263	12,363	65,018
Lower-Middle Q.	4,779	9,677	10,120	4,268	7,738	21,868	7,128	13,494	79,073
Middle Quintile	4,754	12,881	11,934	3,440	6,810	12,974	6,162	9,581	68,535
Upper-Middle Q.	5,710	15,724	13,638	3,382	8,769	11,495	7,991	11,066	77,774
Upper Quintile	5,060	13,119	10,396	2,617	9,212	9,668	11,040	10,316	71,427
Total	24,296	56,941	51,763	17,239	38,413	77,771	38,584	56,819	361,827
Revised Forecast									
Lower Quintile	3,948	5,693	5,719	3,972	6,146	22,273	6,327	11,154	65,231
Lower-Middle Q.	4,849	9,827	10,879	5,190	8,409	20,908	6,593	12,180	78,836
Middle Quintile	4,927	13,220	12,301	3,813	6,790	12,829	5,889	8,817	68,586
Upper-Middle Q.	6,042	16,076	14,307	3,535	8,591	11,416	7,607	10,159	77,735
Upper Quintile	5,304	14,338	9,739	2,995	9,094	9,011	10,559	10,397	71,438
Total	25,071	59,155	52,945	19,505	39,030	76,437	36,975	52,709	361,827
% Chg., 2005-30	87%	99%	85%	39%	23%	16%	46%	42%	47%
Revised Forecast Minus Original Fore.									
Lower Quintile	-46	153	45	439	260	507	64	-1,208	213
Lower-Middle Q.	70	150	759	922	672	-960	-535	-1,314	-236
Middle Quintile	174	339	367	373	-20	-145	-273	-764	51
Upper-Middle Q.	332	353	669	153	-178	-78	-384	-906	-39
Upper Quintile	245	1,220	-658	378	-117	-657	-480	82	11
Total	774	2,214	1,182	2,265	617	-1,334	-1,609	-4,110	0
<u>Population</u>									
Original Forecast									
Original Forecast	65,896	166,025	145,799	49,177	110,407	216,549	102,964	162,349	1,019,166
Revised Forecast									
Revised Forecast	67,835	172,102	149,239	55,561	112,183	213,073	98,799	150,373	1,019,166
% Chg., 2005-30	82%	91%	78%	32%	19%	12%	41%	35%	42%
Revised Forecast Minus Original Fore.									
Revised Forecast Minus Original Fore.	1,940	6,077	3,440	6,385	1,776	-3,477	-4,165	-11,976	0

Table 15. FORECASTED 2030 HOUSEHOLDS BY NUMBER OF DWELLING UNITS IN STRUCTURE

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Original Forecast									
Single-Family Detached	17,867	50,104	45,287	13,885	34,262	30,806	25,223	40,276	257,709
SF Attached & Duplex	1,992	2,990	2,950	1,044	2,518	8,087	3,719	5,607	28,907
3 to 9 Units	1,879	2,274	1,741	1,256	1,001	16,502	4,397	4,177	33,226
10 or More Units	2,342	1,470	1,670	899	558	22,116	5,207	6,647	40,910
Mobile Home & Misc.	216	103	115	155	74	260	39	113	1,075
Total	24,296	56,941	51,763	17,240	38,413	77,770	38,584	56,819	361,827
Revised Forecast									
Single-Family Detached	18,965	49,896	45,818	14,107	30,999	29,374	24,440	36,258	249,855
SF Attached & Duplex	2,111	4,075	3,715	1,701	3,464	7,396	2,947	4,779	30,188
3 to 9 Units	1,628	2,484	1,709	1,974	2,624	15,340	3,936	4,611	34,307
10 or More Units	2,157	2,598	1,585	1,584	1,886	24,154	5,617	6,953	46,534
Mobile Home & Misc.	209	102	119	139	58	173	35	107	943
Total	25,071	59,155	52,945	19,505	39,030	76,437	36,975	52,709	361,827
% Change 2005-30,									
Revised Forecast									
Single-Family Detached	74%	80%	73%	18%	5%	8%	30%	23%	37%
SF Attached & Duplex	298%	448%	327%	277%	302%	6%	119%	68%	106%
3 to 9 Units	188%	653%	538%	126%	248%	7%	67%	161%	61%
10 or More Units	475%	535%	276%	478%	444%	45%	107%	153%	94%
Mobile Home & Misc.	-80%	-80%	-80%	-73%	-80%	-80%	-77%	-77%	-79%
Total	87%	99%	85%	39%	23%	16%	46%	42%	47%
Revised Forecast									
Minus Original Fore.									
Single-Family Detached	1,097	-208	531	222	-3,264	-1,432	-783	-4,018	-7,854
SF Attached & Duplex	119	1,084	765	657	946	-691	-772	-828	1,281
3 to 9 Units	-251	211	-32	719	1,623	-1,162	-460	435	1,082
10 or More Units	-185	1,128	-85	685	1,328	2,037	410	306	5,624
Mobile Home & Misc.	-7	0	4	-16	-16	-86	-4	-6	-132
Total	774	2,214	1,182	2,265	617	-1,333	-1,609	-4,110	0

Development of Planning Scenarios

All of the foregoing discussion has pertained to the development of a benchmark forecast expressing a most-likely outcome for Gwinnett given no change from the present in public policies related to land use. The further work requirements related to SCA-level forecasting consisted of supporting the project team in the development of alternative scenarios and contributing to the TAZ allocation task.

Scenario development was initiated near the end of 2006 in conjunction with the review process just described. At that time the revised benchmark forecast was dubbed a project scenario (which was not a foregone conclusion) and given the name “Middle-of-the-Road.” Three other scenarios were also tentatively identified and quantified: one involving lower employment and demographic magnitudes than the benchmark forecast and two involving higher magnitudes. Further deliberation of planning issues led the project team to set aside the second-highest scenario in the spring of 2007 and the low scenario somewhat later. Meanwhile the Middle-of-the-Road alternative was modified slightly, with total employment rising by 1% and total population and households up by 2%, due to various factors including a higher-than-expected population estimate for 2006 and decision to convert all demographic variables from an April 1 basis to a July 1 basis.

Then in early August the high alternative – referenced as the “Gateway” scenario – was thoroughly reformulated. The aims were to: 1) optimize the fiscal consequences of this alternative, given a finding that the county risked major exposure to fiscal stress; 2) improve the county’s competitive position vis-à-vis the burgeoning Route 400 corridor; and 3) assure that the Gateway scenario was potentially achievable. Relative to the former version, the new Gateway scenario featured: moderately lower employment, household and population totals; substantially more economic growth and high-end residential development in the I-85 corridor and the county’s northwestern margin, supported by enhanced transportation improvements; and a greater continuation of low-density estate development, much without sewer service, in the county’s present rural areas.

Tables 16 and 17 on the next two pages describe the final versions of the Middle-of-the-Road and Gateway scenarios, respectively. Income is now described using the system required by the transportation model, involving a four-way classification to be explained later.

The three rows of percentages in Table 17 describe for each SCA the extent to which the Gateway exceeds the Middle-of-the-Road scenario in total employment, total households and total population. The first show that the Gateway scenario involves much higher employment in SCAs 1 and 6, more moderate excesses in SCAs 7 and 8, and substantially lower employment elsewhere. The other percentages show a similar pattern for demographics, except that only SCAs 2 and 3 have lower households and population in the Gateway alternative than the Middle of the Road scenario.

Table 16. CHARACTERISTICS OF MIDDLE-OF-THE-ROAD SCENARIO

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Employment									
Construction	2,942	6,146	5,485	1,421	3,126	4,498	3,649	5,637	32,905
Manufacturing	1,796	4,846	1,198	610	1,219	8,664	3,418	6,959	28,710
TCU	1,132	2,443	621	409	865	6,482	3,368	4,543	19,863
Wholesale tr.	3,702	6,022	1,167	1,019	1,712	15,596	5,794	12,514	47,525
Retail trade	6,258	13,433	7,705	3,003	7,348	27,135	8,181	14,977	88,039
FIRE	2,850	5,229	3,451	956	2,039	9,799	4,774	8,590	37,687
Services	11,719	19,473	12,415	6,006	15,351	53,097	22,828	40,068	180,958
Government	4,097	7,531	6,262	1,920	4,795	10,250	5,091	12,086	52,031
Total	34,496	65,124	38,304	15,343	36,455	135,520	57,104	105,374	487,719
Households by Relative Income									
Bottom 14.3%	2,863	3,996	3,841	2,392	4,171	14,225	4,086	7,498	43,073
Next 31.94%	7,836	15,645	16,967	7,793	12,498	33,880	10,592	18,735	123,947
Next 35.22%	10,927	29,054	25,310	7,165	15,155	22,025	13,253	18,388	141,277
Top 18.54%	4,165	12,110	8,312	2,477	7,904	7,218	9,755	8,931	60,871
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168
Households by Units in Struct.									
SF Detached	19,422	51,014	46,921	14,209	31,082	29,575	24,761	34,650	251,633
SFA & duplex	2,233	4,360	3,936	1,780	3,654	7,426	3,049	6,103	32,540
3 to 9	1,712	2,668	1,843	2,058	2,847	15,370	4,061	5,096	35,655
10 or more	2,284	2,702	1,662	1,695	2,119	24,876	5,794	7,640	48,773
Mobile home	141	61	69	86	25	101	21	62	567
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168
Households by Persons in HH									
1 person	5,735	11,742	9,825	3,858	6,914	20,830	8,492	11,042	78,438
2 persons	7,890	17,864	16,443	5,549	11,300	21,450	11,245	14,324	106,066
3 persons	5,036	12,648	11,471	4,193	8,678	13,929	7,490	11,222	74,666
4 persons	4,409	11,945	10,424	3,807	8,078	10,040	6,884	10,435	66,023
5 persons	1,701	4,336	4,317	1,592	3,217	5,650	2,451	4,218	27,482
6 persons	589	1,576	1,323	535	1,052	2,867	766	1,507	10,215
7+ persons	430	692	626	294	489	2,581	361	804	6,277
Total	25,791	60,804	54,430	19,828	39,728	77,348	37,688	53,552	369,168
Population by HH Status									
In households	69,752	169,756	153,290	56,278	114,069	212,447	100,691	151,597	1,027,880
In group qtr.s	231	7,363	325	223	241	3,533	210	1,374	13,500
Tot. population	69,983	177,120	153,615	56,501	114,310	215,980	100,901	152,972	1,041,380

Table 17. CHARACTERISTICS OF GATEWAY SCENARIO

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Employment									
Construction	5,849	6,520	4,161	1,435	2,871	8,864	5,182	7,464	42,344
Manufacturing	2,304	3,827	669	451	778	10,209	3,530	7,407	29,175
TCU	2,058	2,079	355	264	508	10,048	4,309	5,448	25,069
Wholesale tr.	6,573	4,282	672	726	964	20,410	7,429	15,007	56,063
Retail trade	9,066	12,322	4,584	2,597	6,231	36,760	8,722	15,648	95,929
FIRE	5,237	4,556	2,151	836	1,697	18,440	6,250	10,195	49,363
Services	24,411	17,964	7,581	4,324	10,471	90,270	33,184	51,985	240,190
Government	6,971	6,319	3,889	1,397	3,548	15,633	5,896	13,165	56,818
Total	62,471	57,867	24,061	12,030	27,068	210,632	74,501	126,319	594,950
% Above Mid.	81%	-11%	-37%	-22%	-26%	55%	30%	20%	22%
Households by Relative Income									
Bottom 14.3%	4,566	2,758	2,596	1,647	2,563	14,782	3,111	6,172	38,196
Next 31.94%	11,474	12,495	13,061	6,539	9,547	44,932	9,541	17,597	125,186
Next 35.22%	15,292	25,869	21,466	8,830	18,418	37,997	17,691	25,397	170,961
Top 18.54%	5,602	12,227	8,020	3,502	10,509	8,987	14,798	12,391	76,036
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378
% Above Mid.	43%	-12%	-17%	3%	3%	38%	20%	15%	11%
Households by Units in Struct.									
SF Detached	22,305	42,668	38,910	14,054	31,041	37,884	26,577	37,550	250,988
SFA & duplex	5,361	4,599	3,151	2,035	4,126	11,713	5,161	6,985	43,130
3 to 9	3,652	2,969	1,535	2,323	3,242	21,028	5,543	7,123	47,415
10 or more	5,369	3,051	1,465	1,969	2,575	35,888	7,818	9,767	67,903
Mobile home	247	63	81	139	53	184	43	132	942
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378
Households by Persons in HH									
1 person	8,226	10,391	8,210	4,005	7,268	29,163	10,449	12,895	90,608
2 persons	11,295	15,648	13,619	5,739	11,643	29,472	13,376	16,421	117,212
3 persons	7,211	11,095	9,510	4,338	8,959	19,123	8,957	12,891	82,083
4 persons	6,309	10,443	8,622	3,934	8,290	13,762	8,135	11,906	71,402
5 persons	2,435	3,791	3,569	1,645	3,299	7,730	2,894	4,809	30,171
6 persons	844	1,379	1,095	553	1,080	3,941	907	1,722	11,521
7+ persons	616	604	517	304	500	3,507	423	912	7,382
Total	36,934	53,349	45,142	20,519	41,038	106,698	45,142	61,557	410,378
Population by HH Status									
In households	99,854	148,699	126,964	58,201	117,458	291,782	119,876	173,643	1,136,476
In group qtr.s	231	7,378	326	223	241	3,539	210	1,376	13,524
Tot. population	100085	156,076	127,289	58,424	117,700	295,321	120,086	175,019	1,150,000
% Above Mid.	43%	-12%	-17%	3%	3%	37%	19%	14%	10%

Table 18 describes in percentage terms the income distributions specified by the two scenarios. As shown by the differences of percentages in the table's last section, the Gateway scenario involves a significantly higher income profile overall (measured as the sum of differences for the two upper income groups). The income gaps are especially large for SCAs 4, 5, 7 and 8. Only SCA 1 – which would have much more employment and housing of higher-density types in the Gateway scenario – has a lower income profile in the Gateway than the Middle-of-the-Road scenario.

Table 18. INCOME DISTRIBUTIONS IN FINAL SCENARIOS

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	Total
Middle-of-the-Road									
Bottom 14.3%	11%	7%	7%	12%	10%	18%	11%	14%	12%
Next 31.94%	30%	26%	31%	39%	31%	44%	28%	35%	34%
Next 35.22%	42%	48%	46%	36%	38%	28%	35%	34%	38%
Top 18.54%	16%	20%	15%	12%	20%	9%	26%	17%	16%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Gateway									
Bottom 14.3%	12%	5%	6%	8%	6%	14%	7%	10%	9%
Next 31.94%	31%	23%	29%	32%	23%	42%	21%	29%	31%
Next 35.22%	41%	48%	48%	43%	45%	36%	39%	41%	42%
Top 18.54%	15%	23%	18%	17%	26%	8%	33%	20%	19%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Difference									
Bottom 14.3%	1%	-1%	-1%	-4%	-4%	-5%	-4%	-4%	-2%
Next 31.94%	1%	-2%	-2%	-7%	-8%	-2%	-7%	-6%	-3%
Next 35.22%	-1%	1%	1%	7%	7%	7%	4%	7%	3%
Top 18.54%	-1%	3%	2%	5%	6%	-1%	7%	3%	2%
Total	0%	0%	0%	0%	0%	0%	0%	0%	0%

Additional Variables and Allocation Support

Along with allocation modeling and support for scenario development, the present work component was responsible for: 1) forecasting SCA values of variables other than those yielded directly by the allocation model; 2) converting several variables to different classification systems; and 3) generating TAZ forecasts of all relevant variables based on the results of parcel-level allocation by another party. The following paragraphs will discuss the activities briefly without getting into the details of baseline estimation.

The variables yielded directly by the county-to-SCA allocation process and the development of alternative scenarios consisted of employment by industry, households by income quintile, and households by structure type (from the model's external loop). The required additional variables were population by household status, households by size (number of persons), and households cross-tabulated by income and size. Some of the additional and converted variables have already been cited in the previous tables.

Forecasting population on the basis of households required: 1) preparing independent estimates of population in group quarters (usually very small); 2) developing relationships to translate household population between two different types of racial classification (namely classification by race of individual versus race of householder); and 3) estimating and projecting values of population per household for the four racial groups. Assistance in population forecasting was the main payoff from the model-based forecasting of households by race as well as income, because population per household varied dramatically among racial groups. An outcome was that, even with average household size assumed to decline markedly for most individual groups, only modest decreases in overall household size were forecasted for Gwinnett and its SCAs due to the rising presence of groups with large households, particularly Hispanics.

The breakdowns of SCA households by number of persons per household were developed, like most of the TAZ-level variables discussed below, by working forward from the 2005 baseline in five-year increments, with the results for each year serving as inputs to computations for the next. The focus of attention was the percent distribution of households among size categories (these being one person, two persons, and so on up to seven-plus persons). For each SCA in each year, the solution consisted of finding the number of percentage points that had to be shifted from each size category to the next higher or lower category (usually lower) to convert the prior year's distribution to a new distribution that exactly accounted for the SCA's predetermined household population. (The household cross-tabulation by income and size will be explained momentarily.)

The conversions of employment by industry and households by income to new classification systems were accomplished by developing conversion matrices for the baseline year and applying these without modification to future years. Like the quintile system, the new income classification expressed relative rather than absolute income, based on the regional income distribution, but its four categories accounted for varying shares of households. These shares – 14.30%, 31.94%, 35.22% and 18.54% – equaled the proportions of regional households with incomes of under-\$19,999, \$20,000-\$49,999, \$50,000-\$99,999 and \$100,000-plus as reported by the 2000 census. (The region in this case consisted of the 20 counties addressed by the Atlanta Regional Commission rather than the 29 counties relevant elsewhere.)

The tabulations of households by number of dwelling units per structure had to be converted into a land-use classification system based partly on residential density. As in other cases, the conversions for future years were accomplished using a matrix developed from baseline data, but an extra feature was the need to add estimates of vacant dwellings so that the forecasts covered all dwelling units. The resulting figures, along with the converted employment forecasts, were delivered to serve as SCA control totals for the allocation of land uses to individual parcels by the consultant charged with that effort.

The cross-tabulation of households by income and size involved twenty-four categories: the four income groups just described times six household size categories (wherein the top group covered households containing six-plus rather than seven-plus

persons). The immediate requirement was to prepare such cross-tabulations for the baseline year. The only available information other than marginal totals for income and size was a cross-tabulation for the region as a whole obtained from the ARC. This table was mathematically analyzed to establish characteristic relationships among cells (which ultimately involved a typology of 34 cases based on relative magnitudes). The relationships were then applied to 2005 Gwinnett households by income and size to develop baseline cross-tabulations for all TAZs. These cross-tabs were aggregated to the SCA level and projected forward for use as control totals, but ultimately were used only for checking purposes as explained momentarily.

The final steps in the work effort described here consisted of generating TAZ-level variables for input to the transportation model. The cross-tabulation of households by income and size was the ultimate concern (along with employment variables that did not require processing), but multiple steps were required for its production.

The SCA-to-parcel allocation process yielded land-use variables for 2030 aggregated to the TAZ level. The first processing step involved a deduction of vacant units and a reverse application of the conversion matrix to yield 2030 TAZ households by dwelling structure type. Values for intermediate years (referring as elsewhere to years ending in 5 and 0) were then estimated by interpolating between the 2005 and 2030 values using SCA-specific factors that yielded consistency with the model-based SCA control totals.

Population and households by size category were addressed in reverse order. TAZ household size distributions were projected from each year to the next by applying the percentage-point shifts developed in the SCA-level estimation process and using an iterative procedure to reconcile the results with the SCA control totals. Households were converted to numbers of persons in each category (using average top-group sizes from the SCA estimation process). These figures were summed to yield household population, then added to estimates of group-quarters population to yield total TAZ population.

Tabulations of future TAZ households by income were estimated using a series of regression equations that linked income percentages to shares of households by structure type, plus household growth and dummy variables for SCAs. The percentages obtained for a given year were added to adjustment factors that were specific to each income category in each TAZ (and were based like the regression equations on 2005 data). The resulting figures were then converted to absolute numbers and reconciled via iterative procedures with control totals. The controls in this case were TAZ-level household sums (from the structure-type interpolation process) and SCA totals for income groups.

The cross-tabulations of households by size and income for TAZs were developed for each year using the tabulation for the previous year and the separate tabulations by size and income already developed for the current year. Based on the distributions of previous-year values, two provisional versions of the cross-tabulation were prepared for each TAZ, one preserving the correct income profile and one preserving the correct size profile. These were then averaged and became the basis for two new versions, with the

correct income and size profiles enforced as before. This process was continued until convergence was achieved at values consistent with both the income and size profiles. The same methodology was applied at the SCA level to yield the abovementioned figures intended for use as control totals. However, a three-way reconciliation proved to be computationally intractable, so the numbers were only reconciled with the marginal totals at the TAZ level, and when aggregated to the SCA level they were not fully consistent with the independent SCA figures. The differences were considered unimportant since both sets of numbers were estimates. The resulting TAZ cross-tabulations for 2030 became the principal basis for transportation modeling when combined with the SIC-classified employment forecasts.

Appendix D – Economic Development Overview

Robert Charles Lesser & Co., LLC (RCLCO) has prepared an introduction to Gwinnett County, its context within the larger Atlanta Region, and the key issues identified impacting growth and trends within the county. The following represents a summary of these issues and trends.

For the purposes of this report the “Atlanta region” refers to the 10-county Atlanta Regional Commission (ARC) planning area comprised of the following member counties: Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, and Rockdale.

ARC’s 13 county forecasting area, which includes the 10 member counties plus Coweta, Forsyth, and Paulding counties, as well as the 28-county Atlanta MSA will also be referenced in this document. These 13 counties represent approximately 90% of the MSA population and a larger share of employment.

Atlanta Regional Context

The Atlanta region has been among the most rapidly growing metropolitan areas in the United States over the past 15+ years. As with many Sunbelt cities, people and businesses have flocked to Atlanta driven by its favorable quality of life, mild climate, relatively low cost structures, diverse and expansive labor market, full spectrum of affordably priced housing options, infrastructure (including highway and airport), and general perception as the center of a thriving Southeastern economy.¹

The Atlanta region experienced one of its longest and most impressive periods of growth in the post-recession 1990s with the addition of 556,600 new jobs and a population increase of nearly 872,000 new residents (a net increase in employment of 606,000 and in population of 1,045,066 in the central 13 counties)². Shortly before the recession in the early 2000s, the Atlanta region was adding nearly 100,000 residents annually, bringing the total population to 3.4 million (4.1 million in the 20 county MSA³) and employment to nearly 2 million by 2000.

While the recession in the early 2000s curbed the region’s dynamic growth for a few years, the region has recovered well and is adding population at a rate equal to or even greater than experienced in the 1990s. According to Atlanta Regional Commission estimates, between 2000 and 2006 the 10-county region added an average of more than 82,000 people per year, compared to 87,000 on average in the 1990s. Claritas estimates from 2007 put the 10-county growth even higher at over 88,000 on average since 2000. Somewhat counter-intuitively, employment growth, while still relatively strong, has diminished somewhat since 2000, with an average of around 23,500 additional jobs each year, compared to the 56,000 average in the 90s. However, since

¹ The impact of the current water crisis has not been quantified or accounted for in any growth projections. It is possible that a significant and extended drought could dampen the actual performance of the metro economy.

² Source: US Census Bureau

³ The Atlanta MSA was expanded from 20 to 28 counties in 2003

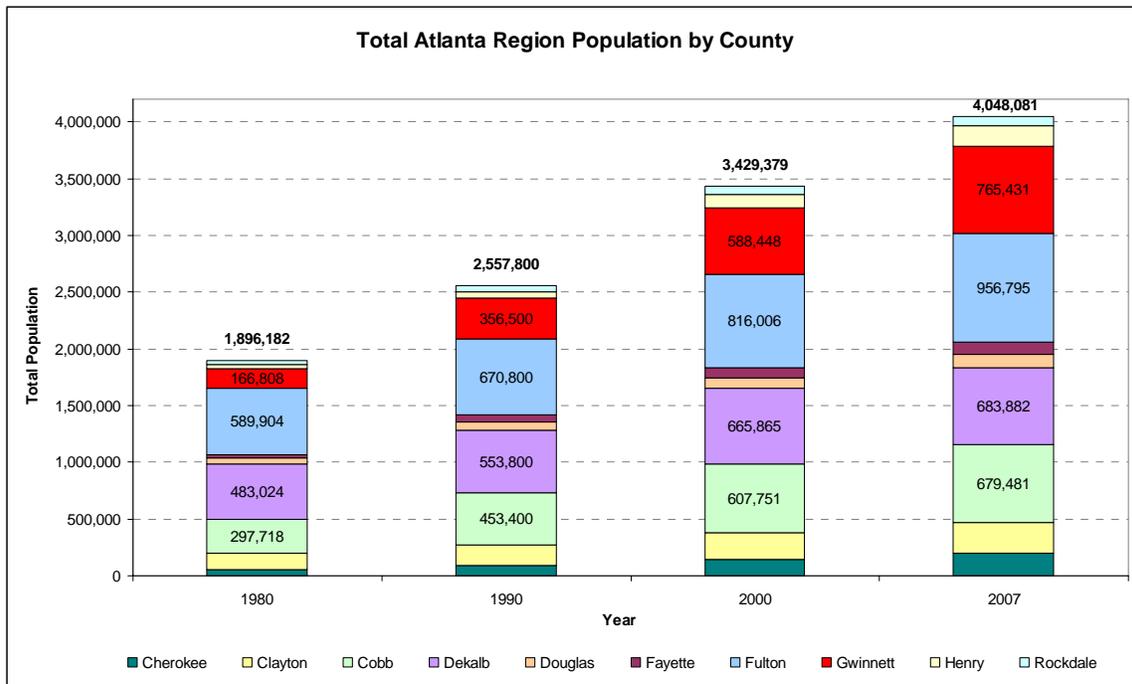
the recovery from the recession of the early 2000s, the job growth statistics have been much stronger. It should be noted that several economists believe these estimates to be quite low, with increasing job growth potentially occurring in entrepreneurial jobs or others that may not show up on the radar. This belief is fostered by the strong population gains occurring with unemployment remaining low, indicating job growth must be higher than indicated.

Initial indications are that beginning in late 2007 or early 2008 the national economy entered a period of slow to negative growth. Although the duration and severity of the downturn is unknown at this time, it is likely to have a softening effect on employment and population growth in metro Atlanta for the next few years.

Concentration and Direction of Growth

The highest population levels, attained through historically significant growth, in the Atlanta region are found in Atlanta’s core (most urban) counties.

Figure 1: Total Population by County, 1990 – 2007

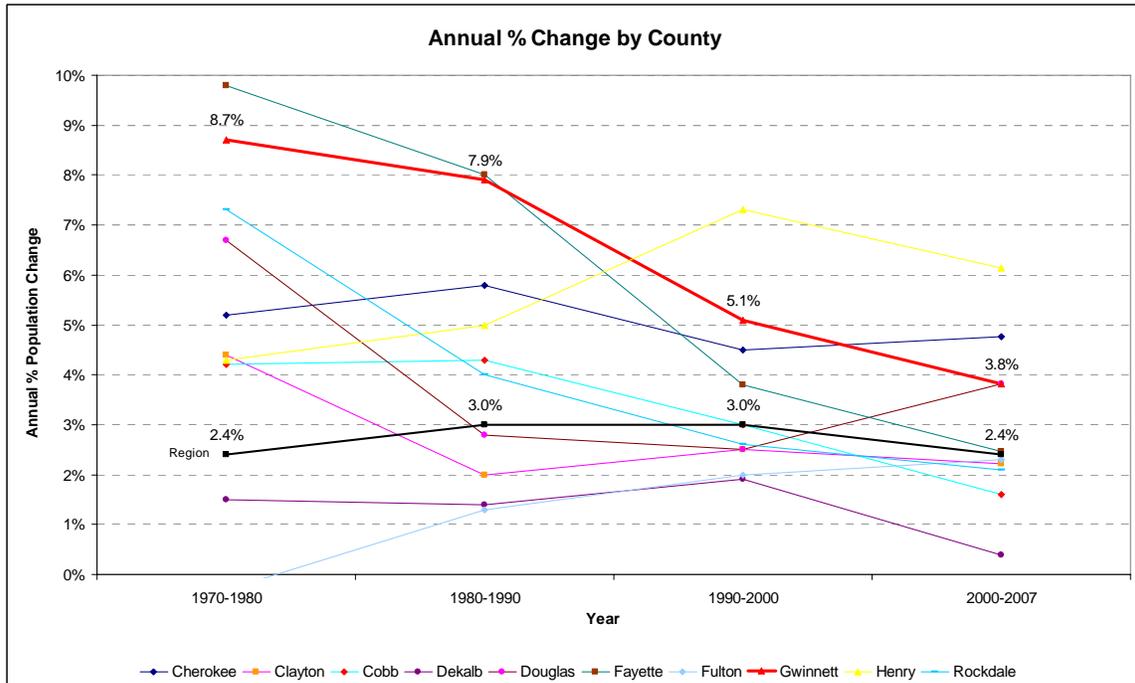


Source: US Census; 2007 figures from Claritas, Inc.

Population and employment growth has largely occurred in the region’s “favored quarter”, in which Gwinnett lies. The favored quarter is defined as the radiating quarter of an MSA where the bulk of the executive housing and white-collar jobs locate, and the largest portion of new housing growth, both executive and more affordable, is developed. Atlanta’s favored quarter largely equates to area north of Downtown between I-75 and I-85 and anchored by Georgia 400 and the Chattahoochee River.

Between 1990 and 2000, nearly 80% of the region's job growth occurred within the favored quarter. Although an increasing amount of growth has located in areas outside of the favored quarter in the last few years, the large majority of growth will continue to move up I-75, I-85 and Georgia 400.

Figure 2: Annual Population Change by County, 1970 - 2007



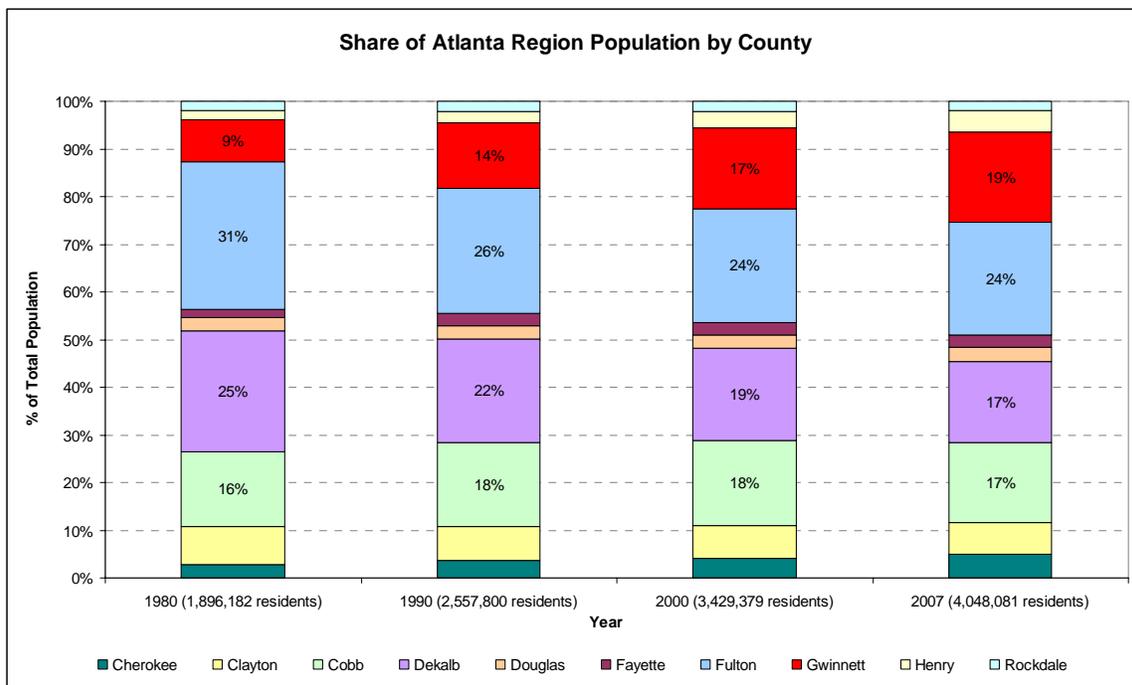
Source: US Census; 2007 figures from Claritas, Inc.

Much of the new office development is anticipated to occur in the metro cores within the favored quarter. Metro cores are concentrations of employment and regional activity and have evolved as the metro area continues to grow. Atlanta's largest urban cores include Downtown, Midtown, Buckhead, Central Perimeter and Cumberland-Galleria. These latter three cores are examples of 3rd generation cores; cores that were largely founded in the 1970s and evolved into major employment and activity concentrations in the 1990s. These cores, which dominated office growth in the 1980s, have since seen gradual declines in their capture (although still seeing positive growth) of new office and retail demand, losing share to newer 4th generation cores, (typically more amorphous and somewhat "edgeless") located even further out. The strongest example of a 4th generation core in Atlanta is the Georgia 400 North corridor in North Fulton, which accounted for close to half of the region's office growth in the late 1990's and 2000's. The other two major 4th generation cores are Town Center on I-75 and Gwinnett Place Mall and Sugarloaf areas in Gwinnett. During the 1990s and early 2000s, mature 3rd Generation cores consistently lost ground to these newer cores in part due to significant traffic congestion along major freeways feeding the cores. However, the events of the past few years indicate that this continued outward expansion may be slowing down somewhat. Most notably, the resurgence of Downtown as a place for new construction

office and housing has made headlines, as has the evolution of Central Perimeter as both an employment, and now housing core. While this reinvestment in core submarkets is a noticeable trend, the 4th generation cores should still expect to capture large amounts of future growth due to their proximity to many executives' homes and their relative affordability as compared to more in-town locations.

Gwinnett and its historically pro-growth mentality, variety of housing options which accommodate a range of prospective buyers and renters, expanding office cores, popular malls and retail centers, new civic and cultural amenities such as the Gwinnett Center, and acclaimed school system has been the primary beneficiary of this suburban growth, doubling its share of the region's residents from 9% in 1980 to 18.9% in 2007.⁴ The County was the fastest growing county in the nation in 1984 and has consistently remained in the top 100 since that time.⁵ Fulton and DeKalb have lost the greatest proportion of population with each conceding 7-8% of their share of the metro population in the past 27 years (i.e. Fulton has gone from 31% of the population to 24% and DeKalb from just over 25% to less than 17%).

Figure 3: Share of Atlanta Region Population County, 1980 - 2007



Source: US Census; 2007 figures from Claritas, Inc.

In terms of absolute growth, Gwinnett continues to rank among the counties with the most robust growth in the nation. According to the US Census, between April 1, 2000

⁴ Source: 2007 figures from Claritas, Inc.

⁵ Source: Metro Atlanta Chamber of Commerce, US Census

and July 1, 2006, Gwinnett ranked ninth in the nation in absolute population growth (adding over 168,000 people).

However, given Atlanta's primary development pattern being the "drive for value," a significant portion of buyers are likely to opt for suburban areas even further out than Gwinnett and will fuel growth for the next ring of counties. This is illustrated in the counties experiencing the most rapid percentage growth, many of which rank among the fastest growing counties in the nation.

Figure 4: *Population Growth Estimates by County for the Fastest-Growing US Counties, 2000 - 2006*

U.S. Rank	Geographic area	Population estimates		2000 to 2006	
		2006	2000	Net Change	Percent Change
1	Flagler County, FL	83,084	49,835	33,249	66.7
2	Kendall County, IL	88,158	54,520	33,638	61.7
3	Rockwall County, TX	69,155	43,074	26,081	60.5
4	Loudoun County, VA	268,817	169,599	99,218	58.5
5	Forsyth County, GA	150,968	98,407	52,561	53.4
6	Pinal County, AZ	271,059	179,537	91,522	51.0
7	Douglas County, CO	263,621	175,766	87,855	50.0
8	Henry County, GA	178,033	119,344	58,689	49.2
9	Paulding County, GA	121,530	81,608	39,922	48.9
10	Lyon County, NV	51,231	34,501	16,730	48.5
11	Newton County, GA	91,451	62,001	29,450	47.5
22	Barrow County, GA	63,702	46,144	17,558	38.1
24	Cherokee County, GA	195,327	141,903	53,424	37.6
32	Jackson County, GA	55,778	41,589	14,189	34.1
43	Lee County, GA	32,495	24,757	7,738	31.3
47	Walton County, GA	79,388	60,687	18,701	30.8
51	Effingham County, GA	48,954	37,535	11,419	30.4
58	Douglas County, GA	119,557	92,244	27,313	29.6
61	Coweta County, GA	115,291	89,215	26,076	29.2
64	Dawson County, GA	20,643	15,999	4,644	29.0
65	Pickens County, GA	29,640	22,983	6,657	29.0
69	Gwinnett County, GA	757,104	588,448	168,656	28.7
82	Bryan County, GA	29,648	23,417	6,231	26.6

Source: US Census

Employment growth in Gwinnett County has also been relatively strong over the past few years, averaging more than 5,000 net new jobs per year from 2000 to 2006.⁶ Over the past three years, the Northeast/ I-85 corridor (which includes Gwinnett County) has captured slightly more than its "fair share" of office absorption (representing 10% of current space compared to 12% of absorption).⁷ While there has been much discussion of shifting attitudes towards more "inside-the-perimeter" lifestyle, Gwinnett County and

⁶ Source: Atlanta Regional Commission estimates

⁷ Source: CoStar 4th Quarter 2007 Office Guide

the rest of the suburbs still constitute a large capture of the metro area's employment growth; a trend which is likely to continue over the next few decades.

These growth trends of the past 25 years are forecasted to continue (by ARC) over the next 25 years with Gwinnett continuing to lead the way in growth. Fueled by a continually expanding economy, led by services and retail trade, and corresponding job creation and evolution of suburban cores, the 13-county area is expected to increase by 1.3 million jobs and 2.7 million residents between 2000 and 2030, for total employment of 3,355,269 and a total population of 5,962,177.

The Atlanta Regional Commission estimates that Gwinnett County will add 400,246 residents and 224,101 jobs during this 30-year period, leading all other counties in population growth and ranking second behind Fulton County employment growth. As a result, Gwinnett is estimated to have a 2030 population of 988,694 and employment of 516,001, surpassing DeKalb County as the 2nd largest population in the region, and overtaking both Cobb and DeKalb to also gain the secondary position in regard to employment; trailing only Fulton County in both cases.

Six Major Issues Impacting Gwinnett Today

Based on this larger context and RCLCO's knowledge and experience in Gwinnett County, we have identified six significant issues that should be explored further in the planning process, and that will shape growth and investment in Gwinnett in the coming years.

1. Gwinnett is transitioning from an industrial job center to a more office-oriented job center;
2. Demographically, the area is rapidly diversifying both in terms of racial and ethnic composition as well as in the types (age, size, etc.) of households being attracted;
3. Housing continues to serve the full spectrum in terms of price points;
4. Gwinnett serves as a major regional shopping destination for the I-85 corridor;
5. Several areas, particularly those in the south of the county are struggling with revitalization; and
6. Currently Gwinnett lacks a "center" or downtown area, although multiple centers are emerging as cities are reinvesting in their downtowns.

The following represents a more detailed discussion of these major trends.

1. Gwinnett Non-Retail Job Growth is Transitioning from Primarily Industrial to Office

Historically, Gwinnett's economy has been concentrated in warehouse, distribution, manufacturing, and retail services jobs. Interstate 85 has been the primary distribution corridor in the Southeast, which has driven demand for industrial and business park space throughout the county. Consistent with evolution of metro cores discussed earlier, the Gwinnett/I-85 corridor represents an emerging office core as jobs continue to follow executive housing growing between the Chattahoochee River and I-85.

While the industrial market in Gwinnett County remains strong, supply of land fueling this market is decreasing significantly, resulting in increasing growth in exurban areas such as Jackson County, as well as southern counties where land is cheaper, such as Henry and South Fulton counties.

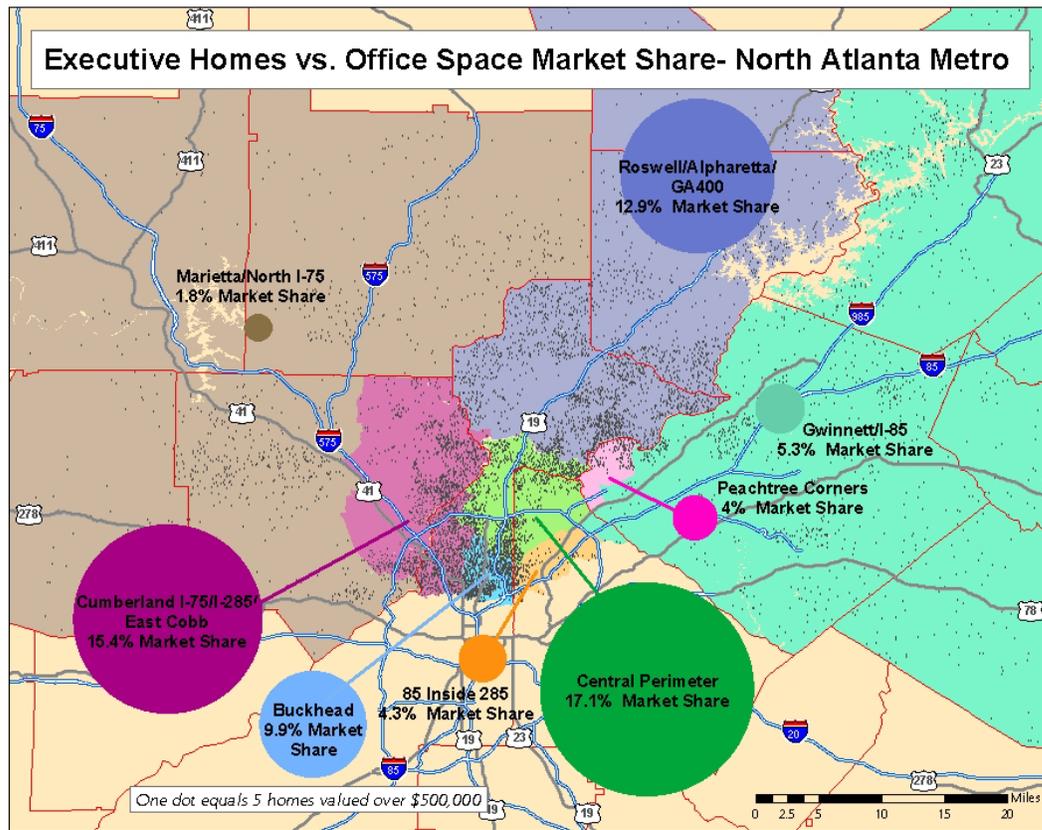
- The majority of recent activity in the Northeast Atlanta submarket (which encompasses northern DeKalb, Gwinnett, Barrow, Hall, Walton, and Jackson counties) has occurred in areas outside of Gwinnett County. In 2007, of the 6.3 million square feet of industrial space either delivered or under construction in the Northeast Atlanta submarket, only 1.7 million square feet, or 27%, was located in Gwinnett County. This share of new activity is significantly below the existing share that Gwinnett County holds, which is 53% of the industrial space in the Northeast Atlanta submarket.⁸
- Industrial development in Gwinnett County is challenged by increasing competition both locally and from a regional perspective, as other southeastern cities, such as Nashville, expand as industrial hubs. However, the significance of I-85 as a regional transportation route and the volume of quality industrial inventory, residential products, and the expansion of office cores in the county should continue to attract facilities and tenants to the market. As is to be expected new development and sales/leasing success in one land use is mutually beneficial to others.

Outside of Peachtree Corners and some mid-rise office surround Gwinnett Place mall, flex space or service centers were the only viable options for prospective office tenants until the latter part of the 1990s. However, since that time the supply has increased in order to accommodate an emerging demand.

As executive housing has continued to emerge along the Chattahoochee River in Gwinnett County (in particular the Sugarloaf area), and as office growth has continued to decentralize, increasing office growth has occurred along I-85 in Gwinnett County, particularly around Gwinnett Place Mall outward to Sugarloaf Parkway.

⁸ Source: CoStar 4th Quarter 2007 Industrial Guide

Figure 5: Locations of Office Concentrations Relative to Executive Housing



Source: Housing data from Claritas, Inc; Office data from Dorey's 4th Quarter 2007 Office Guide

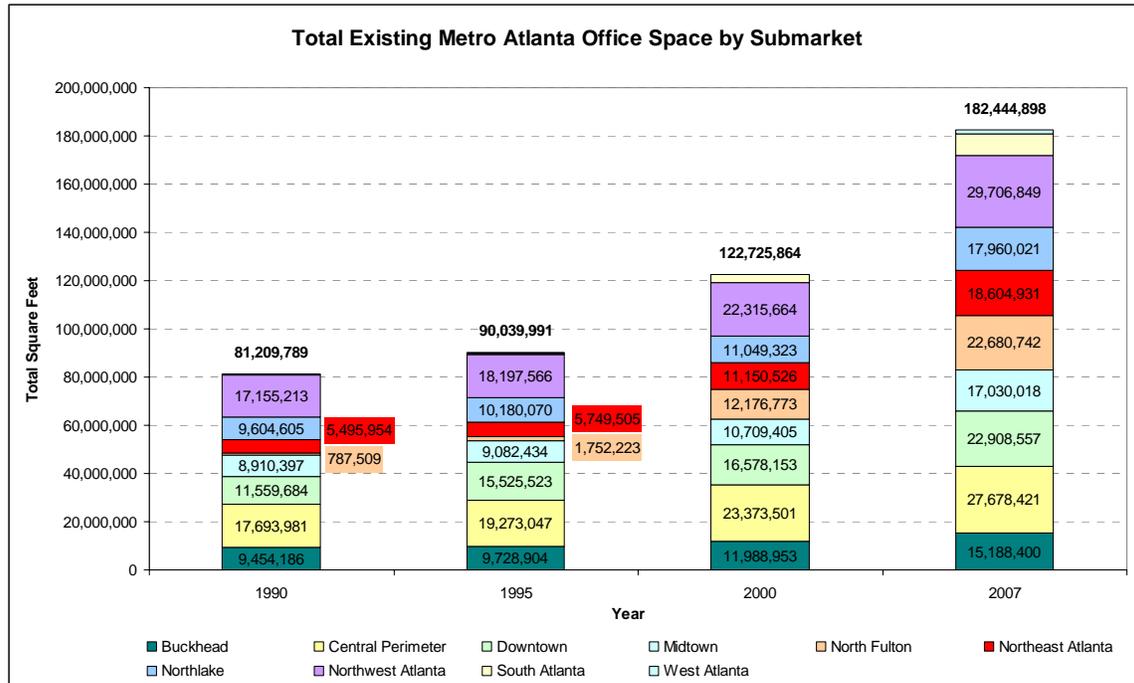
In accordance with this trend, and stimulated by the county's rapid residential growth, supporting development such as the Mall of Georgia, and the increasing ability to telecommute in order to avoid traffic and congestion increases, the Gwinnett office market experienced more substantial growth in the early part of this decade.

The Northeast Atlanta market has only delivered roughly 600,000 square feet of office space between 2004 and 2007. Gwinnett has suffered from high vacancy rates, which has stalled new development until recently. Currently there is nearly 500,000 square feet of office space under construction and an additional 300,000 square feet planned.⁹ Although vacancies are still high overall, they are approaching normal levels in areas furthest south on I-85, particularly in the Peachtree Corners area. The Northeast Atlanta market currently constitutes 10% of the overall metro Atlanta market for office space with a vacancy rate of 19.1% (compared to the metro Atlanta average of 16.3%).¹⁰ It appears that despite high vacancies, developers are banking on continued job and population growth in Gwinnett to fill new office space.

⁹ Source: Dorey's 4th Quarter 2007 Office Guide

¹⁰ Source: CoStar 4th Quarter 2007 Office Guide

Figure 6:



Source: CoStar 4th Quarter 2007 Office Guide

The most prominent submarket in Gwinnett County has historically been Peachtree Corners, near Peachtree Industrial and Jimmy Carter Boulevard. This area, characterized by single-story and mid-rise space surrounded by business parks and residential subdivisions, offered the only real option for companies seeking to establish operations in the Northeastern sector of the metro area. However, as more space has emerged along I-85, the market in Peachtree Corners has tightened. There has been only 100,000 square feet of space delivered since 2001 and since early 2005 vacancies have steadily dropped in the Peachtree Corners area, dropping to 17.8% in the fourth quarter of 2007.¹¹

Enabled by its solid labor base, close proximity to I-85 and GA Highway 316, and considerable supply of executive housing, Sugarloaf has emerged as the new corporate center of business in the county. The majority of recent development activity in the Gwinnett/I-85 submarket has occurred in this area and it serves as the primary supplier of new Class A space. This area has further benefited by the near build-out conditions in the Peachtree Corners area.

One trend noteworthy, yet challenging to quantify at this preliminary level, is the strong growth in Gwinnett, and the Atlanta region, in smaller office firms increasingly locating in suburban areas. As noted before, technology is allowing small firms to locate away from major employment cores, typically closer to where the firm owner or manager resides. This trend has led to a proliferation of office condominiums and small office buildings in many areas of Gwinnett, including in some town centers; a trend that will likely continue to gain momentum in the coming years.

¹¹ Source: CoStar 4th Quarter 2007 Office Guide

2. Gwinnett is Rapidly Diversifying

Racial and Ethnic Make-up is Changing

Gwinnett has experienced dramatic growth in Hispanic and non-white households over the past decade. The massive growth of Hispanic households in the suburbs is not unique to Gwinnett County or the Atlanta metropolitan area. A July 2002 study by the Pew Hispanic Center and Brookings Institute analyzed 2000 Census data for the United States largest metropolitan areas and found that "Hispanics flocked to the suburbs during the 1990s." According to the study, fifty-four percent of all Hispanics in the U.S. live in the suburbs opposed to an urban setting. In 1990, the balance of Hispanics in the suburbs verses urban locations was equally balanced. Between 1990 and 2000, however, Hispanic suburban population grew 71%.

What is somewhat unique to Atlanta is the rapid diversification certain areas are experiencing. The Pew study classifies Atlanta as one of 51 "New Latino Destinations", where there is a small Latino base experiencing rapid growth. Atlanta, with the second highest Latino growth rate in the nation between 1980 and 2000, is described as an "emerging immigrant gateway" experiencing "hypergrowth" of the Latino population. During this time period, Latinos went from 1% of population in 1980 to 7% of population in 2000, representing a 995% growth rate.

This greater diversity is being experienced in Gwinnett as the county is becoming an increasingly multiracial and ethnic county. To this:¹²

- The white share of the county's population dropped from 91% to 73% in the 1990s;
- Over the same decade the African-American population increased 330% to 78,000 in 2000;
- The Hispanic/Latino population grew 670% to 64,000 residents from 1990-2000.;
- The Asian and Pacific Islander population also grew from 10,000 to 40,000.

Since the 2000 Census, it appears that the county has diversified even further, as has the entire southeastern US. According to a 2005 study by the Pew Hispanic Center:¹³

"The Hispanic population is growing faster in much of the South than anywhere else in the United States. Across a broad swath of the region...sizeable Hispanic populations have emerged suddenly in communities where Latinos were a sparse presence just a decade or two ago."

According to the 2006 American Community Survey from the US Census Bureau, the influx of Hispanics and other minorities to Gwinnett County since 2000 has been significant. The white share of the population was estimated to be at 60% in 2006, down from 73% in 2000. In that same time period, the African-American population doubled to account for 20% of the population and those of Hispanic or Latino ethnicity also doubled, now representing 17% of the population.

¹² Figures from US Census Bureau

¹³ Pew Hispanic Center, The New Latino South, July 2005

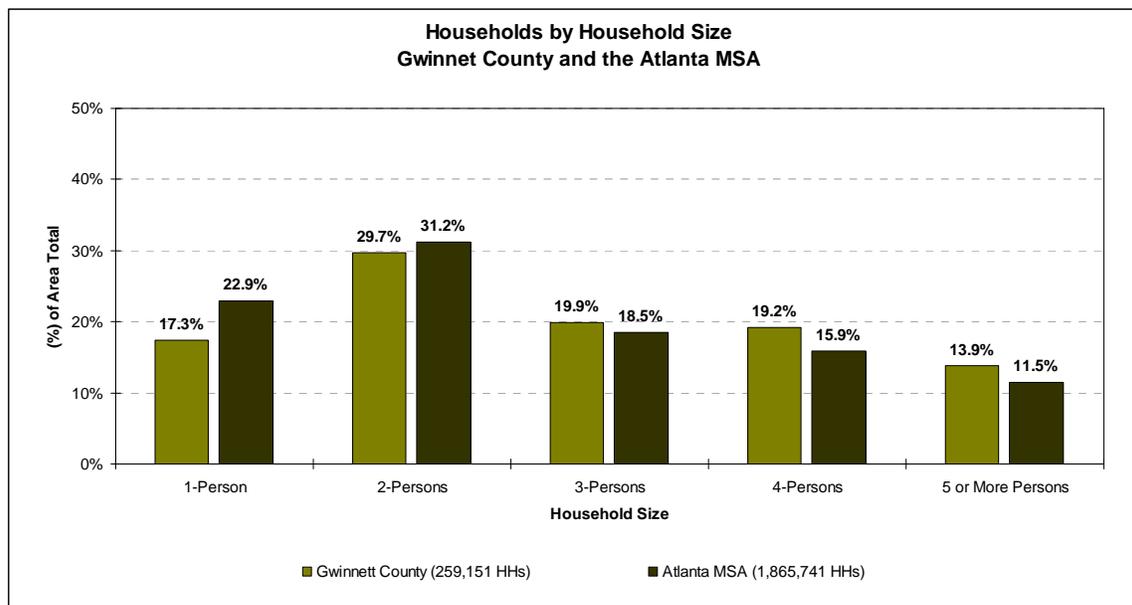
Greater Diversity in Household Types Attracted

Historically, during the time of Gwinnett's most robust growth, Gwinnett was driven by growth in family households seeking a suburban lifestyle – larger home, larger lot, quality schools, access to quality retail and services, etc. This time period of Gwinnett's rapid growth coincided with the suburbanization of the Baby Boomers, which likely accelerated the rate of growth that Gwinnett experienced.

Nationally, now that the Baby Boomers are transitioning to becoming empty nesters and their children (of whom there are more than their Baby Boomer parents) are going to and graduating from college, we are seeing significant growth in one- and two-person households. This trend is being further fueled by the large-scale growth of singles and childless couples, including those not planning for children and those delaying parenting until later in life.

As the graph on the following page indicates, this trend is evident in Gwinnett County as well as the greater Atlanta MSA.

Figure 7: 2007 Households by Household Size, Gwinnett County & Atlanta MSA



Source: Claritas, Inc.

Providing for the continuing growth of these 1 & 2-person households, through housing products and lifestyle shifts (increasingly these smaller household types value convenience and lifestyle), will be an increasing challenge for Gwinnett in the coming decade and beyond.

3. Housing Increasingly Serves the Full Spectrum

Gwinnett County has historically led the Atlanta region in housing growth, serving the full spectrum of housing needs, from the more affordable to the most affluent.

- Between 1990 and 2006, Gwinnett County has added 134,272 housing units, approximately 24% of the 554,849 total units built in the 10-county Atlanta region.¹⁴
- The majority of these units have emerged in North Gwinnett followed by East and Central Gwinnett, all three of which are among the eight metro districts to increase housing inventory by more than 10,000 units between 2000 and 2006. North Gwinnett had the largest increase of any district, adding over 20,000 residents.¹⁵
- Much like the rest of the Atlanta region, the housing landscape in Gwinnett County is largely dominated by single-family homes, which comprise more than 78% of the total housing stock. The only two counties where the share of single family homes is below two-thirds are Fulton and DeKalb.¹⁶
- Multifamily units made up only 22% of Gwinnett's inventory in 2006, with the large majority of that stock being garden-style rental apartment communities.¹⁷

Broadening by Price

As noted earlier in this report, two factors are impacting home prices in Gwinnett County:

- The increasing push of suburban expansion and the drive for value market out of the county; and
- The continuing growth of executive housing along the Chattahoochee River and convenient to the Georgia 400 corridor office core, impacting housing along the northern portion of Gwinnett County.

Given these two impacts, single-family home prices have increased steadily in Gwinnett County, with new detached home sales below \$150,000 dropping from roughly 31% of all Gwinnett new home sales in 2000 to nearly 3% of new home sales in 2007.¹⁸

Also evident is the growth of the executive housing market in Gwinnett, where new home sales above \$300,000 have increased in share from 9.6% of new home sales in 2000 to more than 35% in 2007).¹⁹ Given moderate rates of appreciation in Atlanta overall (about 4% annually through 2006²⁰), much of this increase can be attributed to demand for higher-end housing in the county. Over the next several years, land desirable for the development of executive single-family housing will diminish significantly, resulting in higher-end infill housing proximate to the river.

¹⁴ Source: Atlanta Regional Commission

¹⁵ ibid

¹⁶ ibid

¹⁷ ibid

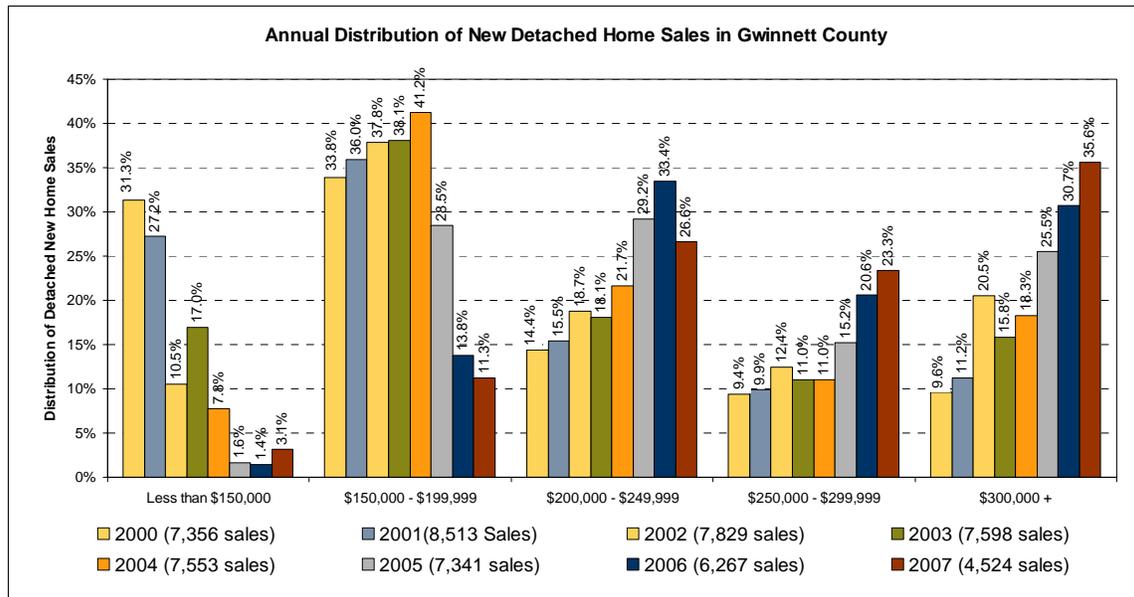
¹⁸ Source: Smart Numbers

¹⁹ Source: Smart Numbers

²⁰ Through November of 2007, the Atlanta metro experienced negative price growth of (1.5%) compared to a national decrease of approximately 7% according to the Case Shiller Home Price History.

Figure 8:

Distribution of New Detached Home Sales by Price, 2000 - 2004



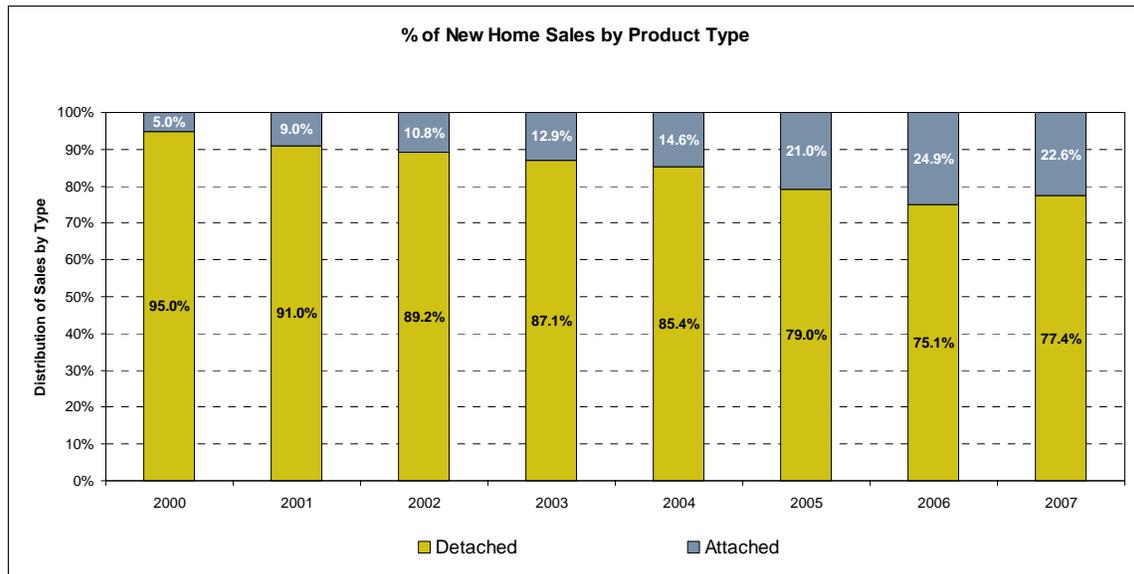
Source: Smart Numbers. 2007 figures annualized from midyear data

Broadening by Product Type

New residential sales in Gwinnett have also become somewhat more diverse in recent years, with townhouses and condominiums accounting for an increasing share of new home construction. While still a relatively small share of the market, attached home sales have increased from 5% of Gwinnett's new home sales in 2000 to a peak of nearly 25% in 2006, before retreating slightly in 2007. While impressive, this increase lags the shifts occurring in the Atlanta region overall, where the 20-county MSA saw attached product account for about 28% of new homes in 2006 (up from around 2% in 1997).²¹

²¹ Source: Smart Numbers

Figure 9: Shift in New Attached and Detached Sales in Gwinnett County, 2000 - 2004



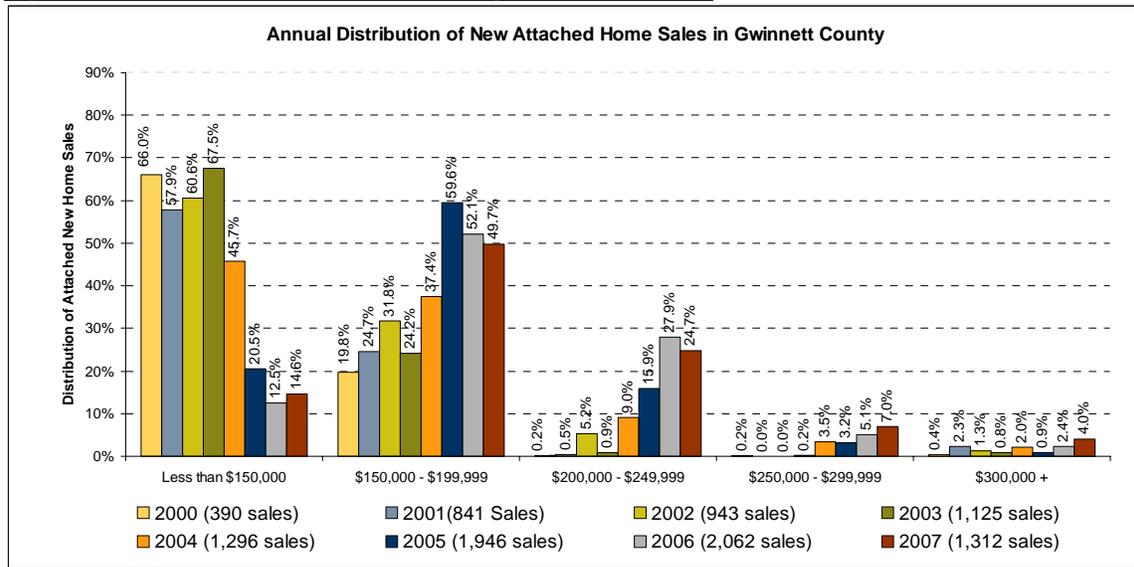
Source: Smart Numbers

This shift can be attributed to several major factors, including:

- Increasing commuting distances and longer drives for value for single-family homes;
- Shifting demographics, including the growth in Baby Boomers and childless households; and
- Increasing home prices in many areas of metro Atlanta, including parts of Gwinnett County.

To date, much of what has been developed in Gwinnett County has functioned as a price alternative product to more expensive single-family homes, as can be seen in the strong sales below \$150,000 in Gwinnett County. That said, opportunities are growing for lifestyle products, such as townhouses and condominiums in strategic locations, such as town centers, proximate to the river or parks, or in closer-in locations. Over the next five to ten years and beyond, attached product should account for a growing portion of new residential construction in Gwinnett County.

Figure 10: *New Attached Home Sales by Price, 2000 - 2004*



Source: Smart Numbers

It is important to note that recent events are pointing to a significant slowdown in the housing market nationally, including Gwinnett County. Detached home sales reached their peak in Gwinnett County in 2001, while it appears that attached product sales peaked in 2006. Although these may be temporary troughs in the growth cycle, there are several recent developments in the housing market, such as subprime lending and tightening of overall capital markets, which are having a significant impact on the housing market in Gwinnett County. The positive news is that supply (new construction) is responding to constricted demand and permitting was down by 48% in 2007 compared to 2006.

4. Gwinnett as a Major Retail Destination

Gwinnett County has emerged as a major retail destination serving not only northeast Atlanta, but much of northeast Georgia. The I-85 corridor is home to three major, regional malls, including:²²

1. *Gwinnett Place Mall*. With 1.2 million square feet plus significant retail in surrounding “big box” centers, Gwinnett Place Mall was the original regional mall for the county. Built in 1984, it is now experiencing significant competition from other regional retail cores and it in the process of trying to reposition the itself in the market;
2. *Discover Mills*. 1.1 million square feet, built in 2001 to offer more value, outlet shopping; and
3. *Mall of Georgia*. Built in 1999 with 1.7 million square feet of space, plus significant additional space in surrounding centers, Mall of Georgia is among the largest retail nodes in the Southeast and serves much of northeast Georgia.

²² Mall data from Dorey's 4th Quarter 2007 Retail Guide

There is increasing concern that the market cannot support three regional malls within this short distance and that at least one of these malls, possibly Gwinnett Place, may lose over time.

Another significant question revolves around the amount of retail space in portions of Gwinnett County relative to the population being served. Not including free-standing space, Gwinnett features approximately 27 million square feet of retail space, of which roughly 10% sits vacant today.²³ Again, not including free-standing, owner-occupied space, Gwinnett County provides roughly 35 square feet of multi-tenant space per person, well above the U.S. average of 21 square feet per person and above the Atlanta MSA average of approximately 28 square feet per person.²⁴

Additionally, over the past few years rents and vacancies have performed poorly in certain areas of Gwinnett County. There are three retail submarkets that include Gwinnett County: Peachtree Corners/Norcross, Snellville/Stone Mountain, and Northeast Gwinnett. The table below demonstrates that the aging retail submarkets (Snellville) are struggling while the newer submarkets (particularly Peachtree Corners) are performing better and likely siphoning demand from the older properties.

Average Rents (\$/SF)

	2005	2006	2007
P'tree Corners	\$14.98	\$16.91	\$17.26
Snellville	\$11.52	\$10.91	\$11.39
NE Gwinnett	\$15.02	\$16.59	\$16.48
Metro Atlanta	\$14.34	\$15.63	\$15.37

Vacancy Rates

	2005	2006	2007
P'tree Corners	7.6%	8.2%	14.8%
Snellville	14.8%	17.3%	19.8%
NE Gwinnett	9.8%	9.7%	17.2%
Metro Atlanta	10.5%	11.8%	16.6%

Source: Dorey's 4th Quarter Retail Market Report

The ability of Gwinnett County to support this large amount of retail, and issues of retail abandonment in aging suburban areas (an issue nationally, not just in Gwinnett), should be examined in the context of understanding the future of these aging strip retail corridors and centers and the impact they have on surrounding residential neighborhoods.

5. Struggling with Revitalization

To date, the large majority of new development in Gwinnett County has been greenfield development. Redevelopment is difficult, logistically and financially, and until recently was nearly impossible due to lack of mixed-use zoning. The county is in the process of

²³ Source: Dorey's 4th Quarter 2007 Retail Guide

²⁴ Source: RCLCO analysis of local, regional, and national retail figures

exploring means by which some of the areas that built out 10 – 25 years ago can enjoy reinvestment.

As indicated above, many areas of Gwinnett are suffering from an over-supply of retail and subsequent retail abandonment. Retail expenditures are being spread across too much space, resulting in high vacancies and, in many cases, centers that are suffering from disinvestment. Analysis completed in 2008 by RCLCO demonstrates how this over-supply of retail is negatively impacting the retail market in the sales achieved per square foot which, in turn, negatively impacts the rents properties can garner. While the sales in Gwinnett County are performing better than Georgia as a whole, they are significantly below the US average. Gwinnett sales are likely below the metro Atlanta average as well. In a metro area widely recognized as being over-supplied with retail, Gwinnett County appears to be in an even less desirable situation. Please note that \$230 per square foot is likely optimistic as the secondary retail data sources have eliminated small centers and chronically vacant centers from their statistics.

	U.S.	Georgia	Gwinnett County
Sales per Square Foot	\$253	\$222	\$230

Source: US and Georgia figures from National Research Bureau's 2006 Shopping Center Census. Gwinnett figures compiled from ESRI retail sales data and Dorey's 4th Quarter 2007 Retail Guide

In part due to the market saturation of retail discussed above, many areas within the county are struggling with retail revitalization. Retail abandonment has created the perception, and in some cases the reality, of crime.

Most of the concentrations of disinvestment is in the southwestern portion of the county, areas in which most of the new development occurred 25 years ago and are now suffering from the “shinier, newer” competition further north in the county.

Many of the older apartments have become the primary means to serve affordable housing needs in the county and have attracted significant population of recent immigrants.

Gwinnett County selected three areas of the county to study how revitalization may take place, each representing a different prototype of redevelopment. Community Improvement Districts (CIDs) have been formed in these areas to help spur revitalization.

1. Gwinnett Place Mall – a major retail core that has the opportunity to turn into more integrated metro core with office, retail and residential.
2. Gwinnett Village – a neighborhood that has older single-family homes, lower density apartment stock, and struggling retail.
3. Evermore – a corridor (Highway 78) that is largely over-supplied with retail and lacks integration of uses.

6. Gwinnett Has Had No Center but Has Emerging Multiple Centers

- No city currently serves as “downtown Gwinnett.” Most parts of Gwinnett typify the sprawling, suburban development model with single-family subdivisions and garden-style apartments separate from strip retail and local-serving office.
- Gwinnett Place Mall once served as one of the major activity centers but was primarily for retail and is now suffering due to competition from other regional malls. As the mall area tries to reinvent itself, it has the opportunity to serve as that central hub for the county, but is challenged by traffic congestion and the complexities of infill development and redevelopment.
- Numerous Gwinnett towns are creating small, community-serving centers either through redevelopment of their historic downtowns or the creation of a new town center through mixed-use developments. Some areas already have existing downtowns and are building on those assets. Other Gwinnett County towns are trying to create new downtowns.
 - Existing: Duluth, Suwanee, Norcross, Snellville, and Lawrenceville
 - Planned: Lilburn, Buford/Mall of Georgia, Grayson
 - All are efforts to integrate retail, higher-density housing, local-serving office, and public services (among other uses) to create a focal point for the community.
- Given the magnitude of growth projected for the county, shifting demographics, and market factors such as land values, the types of places that can be built and that are in demand are likely to continue to change in order to accommodate the growth and be responsive to market demands.

Appendix E – Homeownership and Socio-Economic Trends

Homebuying in Gwinnett County: A Demographic Profile, 1997 to 2004

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Homebuying in Gwinnett County: A Demographic Profile, 1997 to 2004

Part I. Homebuying Patterns by Race and Ethnicity, 1997 to 2004

In order to examine the demographic shifts among homebuyers in Gwinnett County, we analyzed Home Mortgage Disclosure Act (HMDA) data from 1997 and 2004.¹ HMDA data are collected by federal bank and mortgage regulators for virtually all mortgage lenders (banks, thrifts, mortgage and finance companies) taking applications for home purchase loans, as well as other types of residential finance products. We examined only those loans originated that were designated as home purchase loans for one-to-four unit residential properties, which are generally considered “single-family” units under HMDA. The HMDA data provide a variety of information on each loan, including the borrower’s income, racial or ethnic category, the size of the loan, whether the home will be owner-occupied, and its census tract location. While the data do not tell us anything about the seller of the property, this is quite a rich dataset on homebuyers. Unlike census data, the data are not sample data and are reported each year.

Unlike traditional census data, these data are flow, and not stock, data. They tell us who is buying houses in a census tract. By comparing the data across years, we are essentially analyzing changes in the inflow of homebuyers. Of course, some fraction of owner-occupied homebuyers are relocating from within the same tract, but the majority of buyers in a tract are certainly expected to be relocating from another census tract, and in the case of Gwinnett County at least, many are likely to be relocating from other counties or other regions.

The HMDA data allow us to look at the demographic composition of homebuyers in different years, and so permits analysis of changes in homebuyer demographics over time. The maps in this section generally do two things. First, they measure and compare across tracts the percentage-point change in racial, ethnic and income composition of homebuyers from 1997 to 2004. Also provided are maps showing the end-of-period (2004) compositions of homebuyers by census tract.

Because changes in the composition of homebuyers in a tract among racial or income groups may be due to simultaneous changes in the numbers of buyers in more than one group, this report also includes figures that plot changes in the number of buyers of a specific racial/ethnic or income group against total homebuyers over the 1997 to 2004 period. This enables one to understand whether a specific group is growing or declining in magnitude in different tracts and the relationship of such change to overall growth in homebuying.

Finally, in addition to the figures characterizing the demographic change in homebuyers, some additional trends are noted, in part because they relate to these trends. First, there has been a significant increase in the amount of debt homebuyers are taking on relative to their incomes.

¹ See the Appendix for a fuller discussion of the HMDA data used in this report.

This is not a trend specific to Gwinnett County, and is related to national trends in home financing, but it appears that this trend is having a particular impact on homebuyer debt burdens in the County and that the levels of burden are geographically clustered.

This report also includes maps describing the proportion of home purchases that are being made with buyers who indicate that they are not owner-occupants in their mortgage applications. Again, this trend is not unique to Gwinnett County, but it is a sizable and potentially important development, that could have significant implications for housing needs and issues in the County.

Purchase of Owner-occupied Homes by Asians

Figure 1 shows the percentage-point change in the proportion of owner-occupied homebuyers who were Asian from 1997 to 2004. Red tracts are those in which the percentage of all owner-occupying buyers who were Asian increased by more than 10 percentage points over this 7-year period. Pink tracts saw more moderate increases—from 3 to just under 10 percentage points—in the proportion of buyers who were Asian. If the change in the proportion of buyers who were Asian was less than +/- 3 percentage points, then these areas (shown as white) are relatively stable in their proportion of buyers who are Asian. Only three tracts saw appreciable losses in the proportion of buyers who were Asian. They are shown in light green (loss in Asian share of between 3 and just under 10 percentage points) and dark green (loss of 10 percentage points or more).

The largest shifts toward Asian homebuying generally occurred north of I-85, from Duluth to Suwanee, with similarly large shifts in western Gwinnett around Lilburn and west of Snellville. More moderate increases, however, occurred throughout most of the rest of the county with the exception of much of the county south of Snellville. Areas around Norcross also generally saw either stable or declining proportions of Asian homebuying, as did the tract which includes Braselton to the northeast.

Figure 2 shows the resulting pattern of Asian homebuying concentration in 2004. The dark red tracts are those where more than 20 percent of homebuyers were Asian in 2004, while the medium red tracts are those where the proportion was in the 10 to just under 20 percent range. The tracts with high proportions of Asian buyers are mostly located in the northern and western parts of the county, though there are tracts around Norcross (along the Fulton and Dekalb borders) with Asian buying at less than 5 percent of all buying. The trends shown in Figure 1 have resulted in Asians not constituting a sizeable portion of homebuyers along the southeastern county border (bordering Walton County primarily).

Because changes in one group's share of homebuyers in a tract is a function of increases or declines in buying by other groups in the same tract, it is helpful to examine whether tracts are generally seeing increases or decreases in the raw number of Asian homebuyers. Moreover it is helpful to compare such changes in overall changes in owner-occupied home purchases, especially in a county that has experienced as much growth as Gwinnett.

Figure 1

Change in the Percent of Home Purchase Loans for Owner-Occupied Homes to Asians, 1997 to 2004

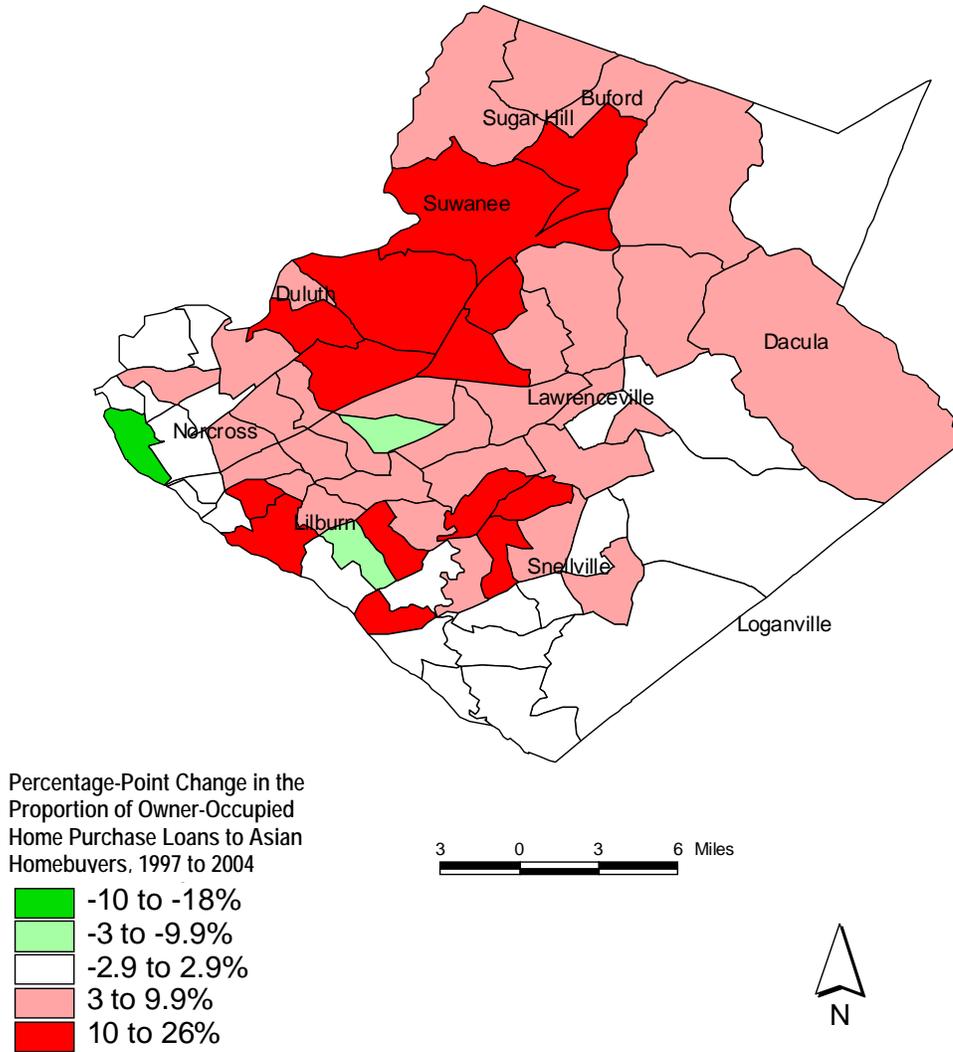


Figure 2

Percent of Home Purchase Loans for Owner-Occupied Homes to Asians, 2004

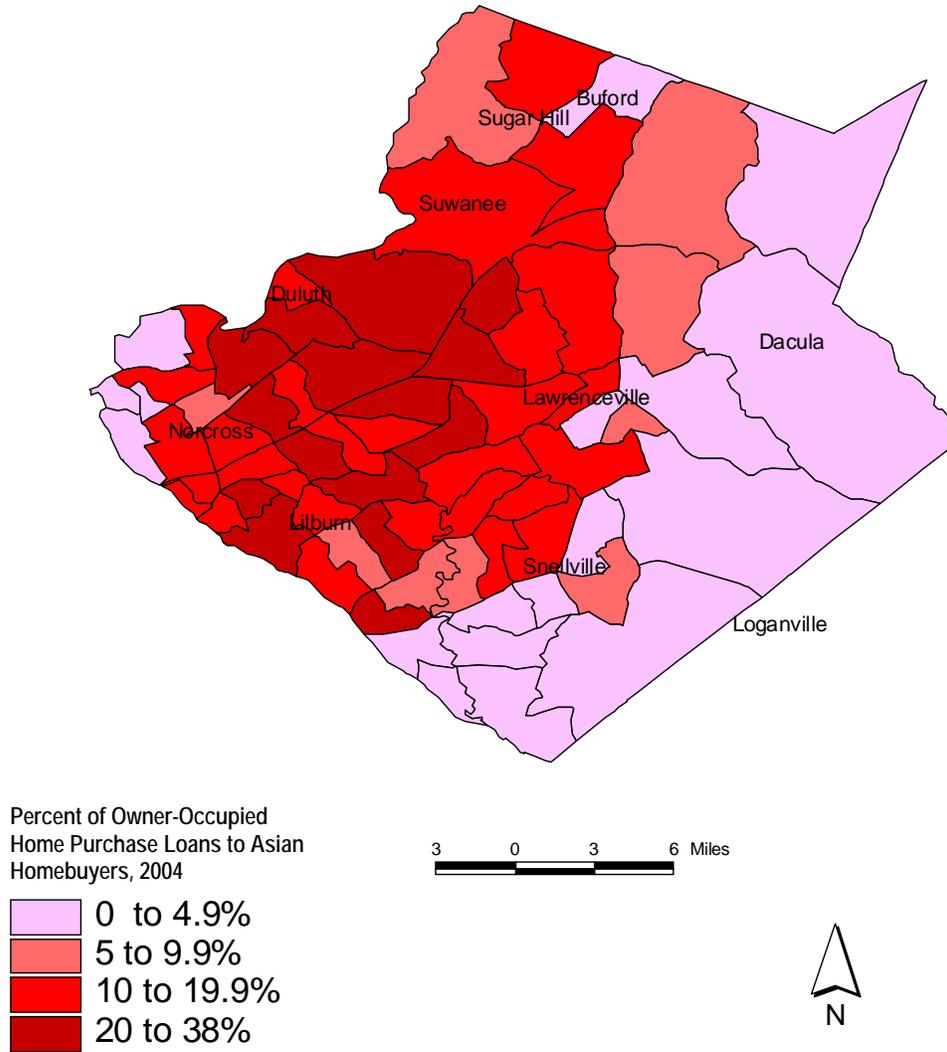


Figure 3.
Percent Change in Asian Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers,
1997 to 2004 Gwinnett County Census Tracts (2000 Boundaries)

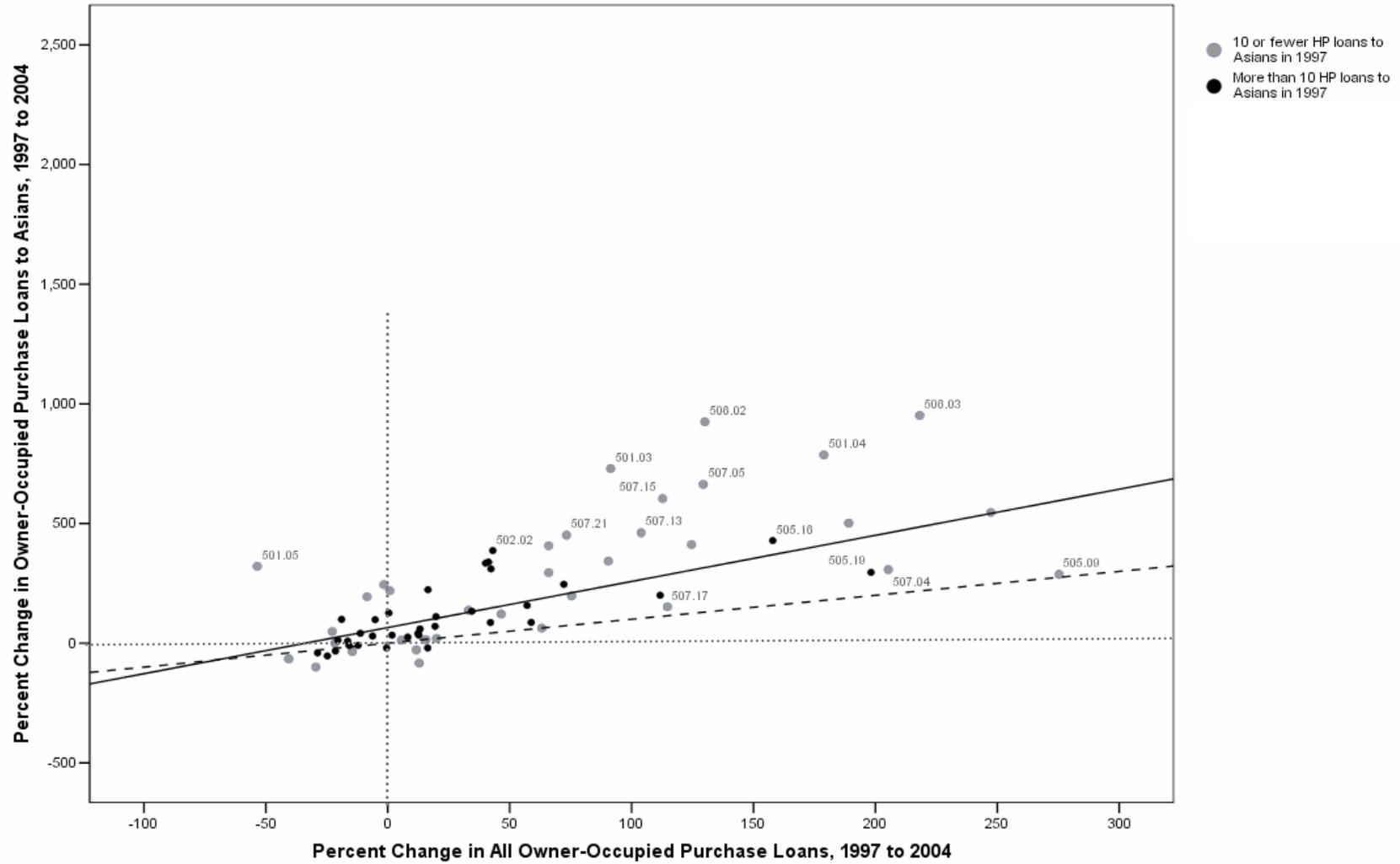


Figure 3 does just this. It shows the percent change in the number of Asian buyers of owner-occupied homes from 1997 to 2004, plotted on the vertical axis, compared to the percent change in all owner-occupied purchases over the same period. If Asian share remained constant, which it did not, then, the plot would fall along the dashed line, which represents a 1:1 slope with a zero intercept. That is, the dashed line represents a pattern in which the increase in the number of Asian buyers would be equivalent to the increase in all owner-occupied buyers. (Note, however, that the axes do not have equivalent unit scales; this is done in order to allow the graphing of some quite large percent increases among some homebuyer groups.)

Figure 3 shows that most tracts in the county saw increases in the raw number of Asian homebuyers. (The horizontal gray dotted line indicates zero change in the number of Asian buyers.) As homebuying increased overall, Asian homebuying also increased, but at an even faster rate. Because tracts with very small numbers of Asian buyers in 1997 are expected to have particularly large *percent* increases in Asian homebuyers, tracts with fewer than 10 Asian buyers in 1997 are indicated in gray rather than black.

Figure 3 also plots a bivariate regression line for percent change in loans to Asians regressed on percent change in all owner-occupied purchase loans. However, this regression was run using only tracts in which there were more than 10 loans to Asians in 1997. Thus it is a fit of the tracts plotted in black only. The difference between the regression line and the dashed 1:1 slope line provides a graphical measure of relative growth in Asian buyers compared to homebuyers generally. Moreover, those tracts which fall substantially above or below the regression line may be thought of as experiencing relatively higher or lower increases in Asian homebuying compared to other tracts in the county.

Purchase of Owner-Occupied Homes by African-Americans

Figure 4 shows the percentage-point change in the proportion of owner-occupied homebuyers who were African-American from 1997 to 2004. Magenta tracts are those in which the proportion of all owner-occupied homebuyers who were African-American increased by more than 25 percentage points. Red tracts are those that saw increases from 10 to just under 25 percentage points. Pink tracts are those that saw increases between 3 and 10 percentage points. White tracts experienced no substantial change (less than plus or minus 3 percentage points) in the proportion of homebuyers who were African American. Green tracts are those that saw a decrease in the proportion of buyers who were African American of at least 3 percentage points. The largest shifts toward increased African-American homebuying occurred in the southern tip of the county and along the southeast border with Rockdale and Walton Counties. Generally, however, African American homebuying is increasing as a share of all buying in many parts of the county. The tracts that saw declines in their share of buyers who were African American are located in and/or around Norcross and Lilburn.

Figure 5 shows the resulting pattern of African-American homebuying in 2004. The highest levels of African-American homebuying (indicated by magenta) were occurring in the southern tip of the county. In these tracts, African Americans accounted for more than 50 percent of homebuyers. Many other parts of the county – including tracts in central and southeastern

Homebuying in Gwinnett: A Demographic Profile, 1997 to 2004

Gwinnett – had shares of homebuyers who were African American that were in the 20 to 49 percent range. In most census tracts in the county, African Americans constituted over 10 percent of homebuyers in 2004.

Figure 6 shows the percent change in the number of African-American buyers of owner-occupied homes from 1997 to 2004, plotted on the vertical axis, compared to the percent change in all owner-occupied purchases over the same period. If African-American share remained constant, which it generally did not, then the plot would fall along the dashed line. That is, the dashed 1:1 slope line represents a pattern in which the percent increase in African-American buyers would equal the percent increase in all buyers.

Figure 6 shows that most tracts saw increases in the number of African-American homebuyers. (Again, the horizontal gray dotted line indicates zero change in the number of African-American buyers.) Only a few tracts saw a decline in the number of African-American buyers, and most of these experienced an overall decline in homebuyers. Because tracts with very small numbers of African-American buyers are expected to have particularly large percent increases in African-American buyers, tracts with fewer than 10 African-American buyers in 1997 are indicated in gray rather than black.

Figure 6 also includes a bivariate regression line for percent change in loans to African Americans regressed on percent change in all owner-occupied purchase loans. (This regression was run using only tracts in which there were more than 10 loans to African-Americans in 1997. Thus, it is a fit of the tracts plotted in black only.) The difference between the regression line and the dashed 1:1 slope line provides a graphical measure of the relative growth in African-American homebuyers compared to all homebuyers in the tract. Those tracts which fall substantially above or below the regression line may be thought of as experiencing relatively higher or lower increases in African-American homebuying compared to other tracts in the county.

Note that, in this case, the regression line essentially runs through the origin (where both rates of change are equal to 0 percent). This means that in low growth areas, the rates of increase in black buyers are generally expected to be relatively low. But the large slope of the regression line suggests that it is the high growth areas where many of the large increases in black buying have occurred.

Among the tracts with the very largest increases in homebuyers, however, there seems to be a significant split as it concerns African American buyers. In some high-growth tracts, such as 505.00, 506.02 and 507.04 (indicated by the red dashed oval), the growth in black buyers far exceeds the growth rate for buyers overall. In some other high-growth tracts (e.g., 501.14, 505.16, 505.19, indicated by the green dashed oval), rate of growth in African American homebuying is essentially the same as the growth in homebuying overall. This suggests that in the fastest growing tracts, significant segregation of Black versus nonBlack homebuyers is occurring.

Figure 4

Change in the Percent of Home Purchase Loans for Owner-Occupied Homes to African-Americans, 1997 to 2004

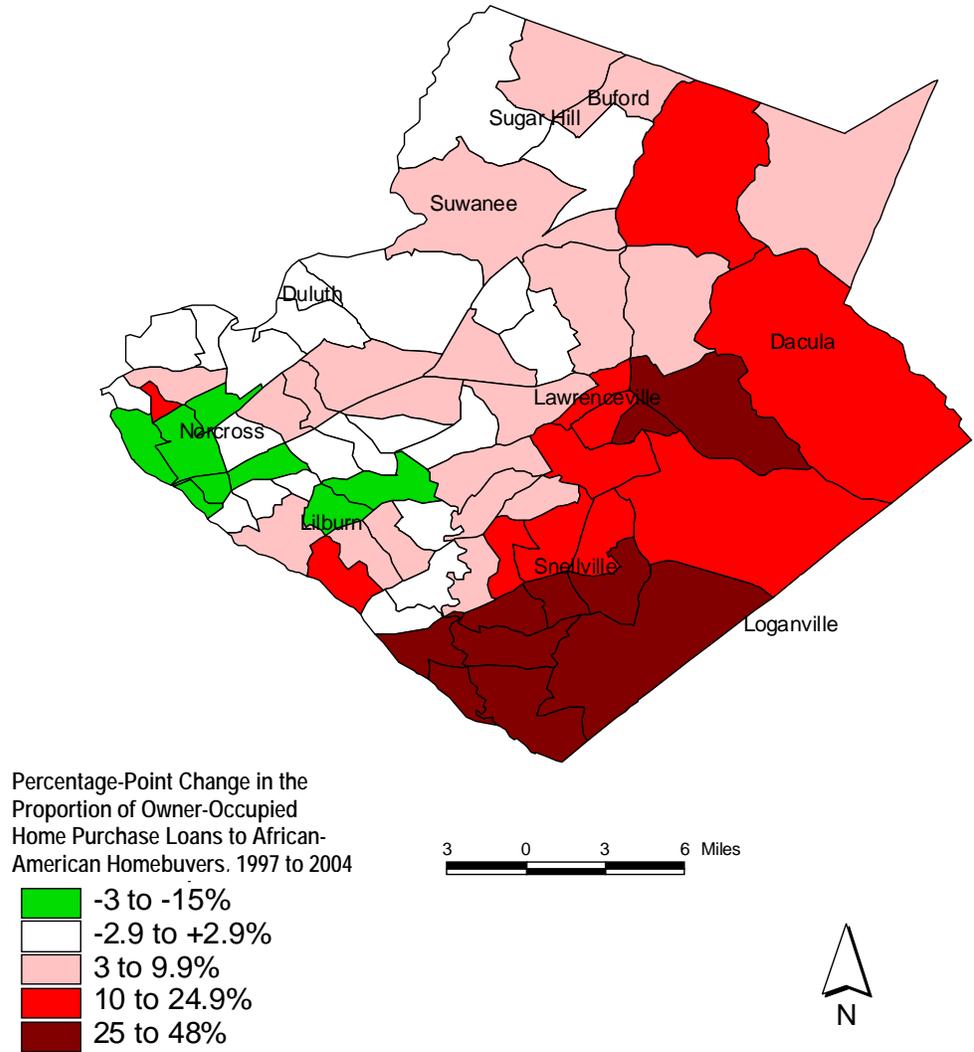


Figure 5
Percent of Home Purchase Loans for
Owner-Occupied Homes to African-Americans, 2004

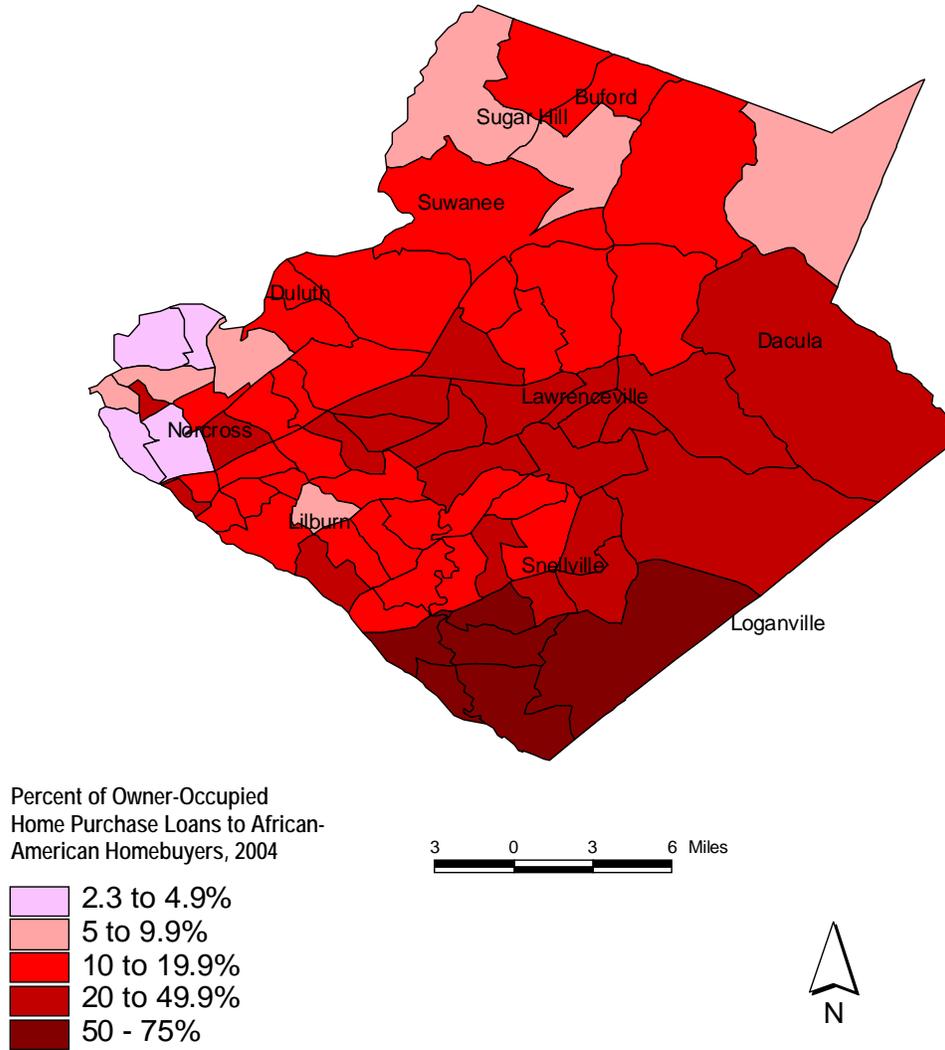
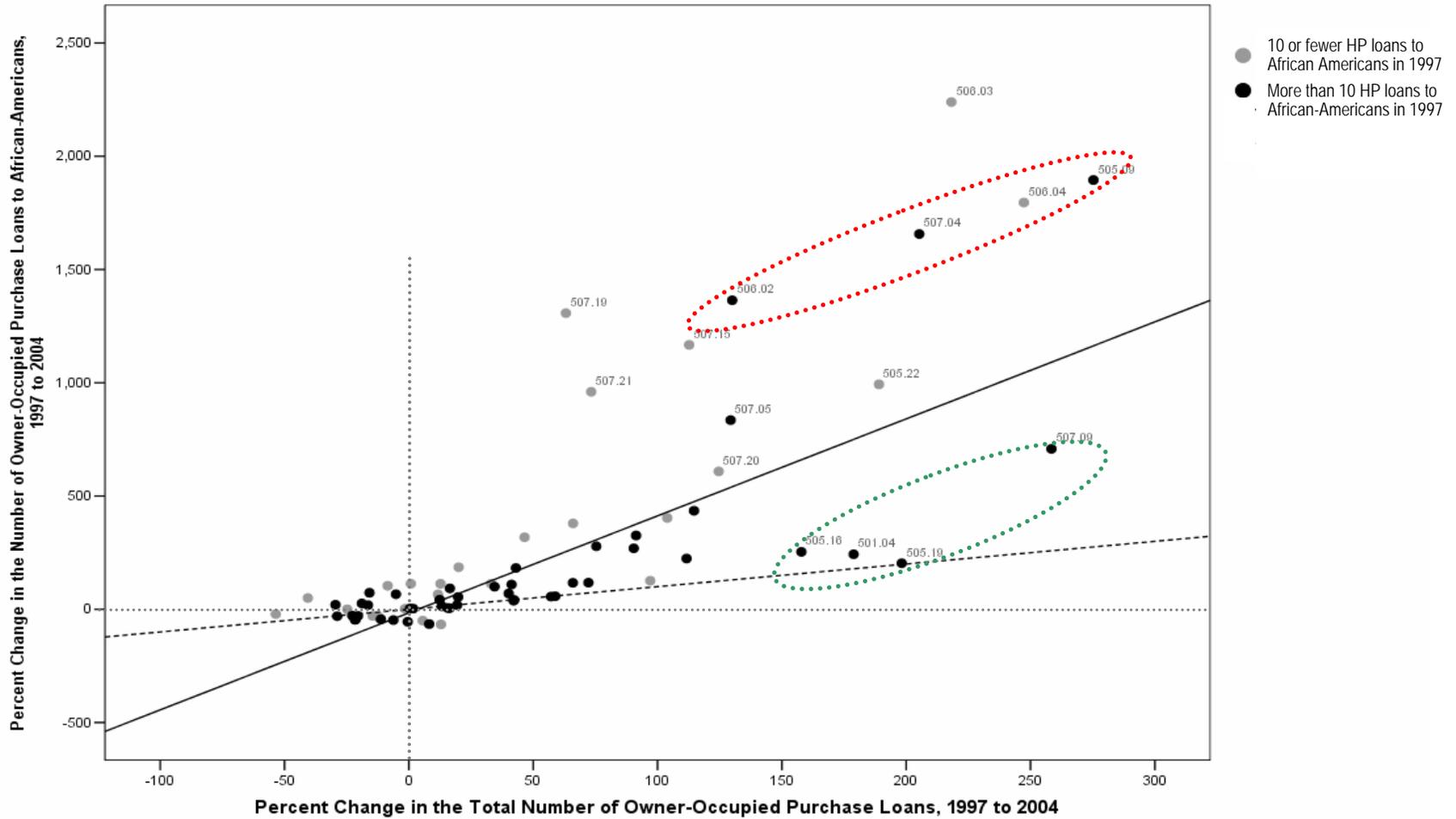


Figure 6

Percent Change in African-American Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



Purchase of Owner-Occupied Homes by Hispanics

Figure 7 shows the percentage-point change in the proportion of owner-occupied homebuyers who were Hispanic from 1997 to 2004. Magenta tracts are those in which the proportion of all owner-occupied homebuyers who were Hispanic increased by more than 25 percentage points. Red tracts are those that saw increases from 10 to just under 25 percentage points. Pink tracts are those that saw increases between 3 and 10 percentage points. White tracts experienced no substantial change (less than plus or minus 3 percentage points) in the proportion of homebuyers who were Hispanic.

The largest shifts toward increased Hispanic homebuying occurred in the east-central part of the county, north of Lilburn and west of Lawrenceville. Generally, however, African American homebuying increased as a share of all buying throughout most of the county. Only 12 of 71 tracts saw less than a 3 percentage point increase in Hispanic home buying.

Figure 8 shows the resulting pattern of Hispanic homebuying in 2004. The highest levels of Hispanic homebuying (indicated by magenta—over 50 percent Hispanic buyers—and dark red—20 to 49 percent Hispanic buyers) were occurring in the eastern and central-eastern parts of the county, as well as in a tract in Buford. In most tracts in the county (57 of 71), the proportion of buyers who were Hispanic in 2004 exceeded five percent. And in more than half of the tracts (37), Hispanic buyers constituted more than 10 percent of all buyers.

Figure 9 shows the percent change in the number of Hispanic buyers of owner-occupied homes from 1997 to 2004, plotted on the vertical axis, compared to the percent change in all owner-occupied purchases over the same period. (Again, the dashed 1:1 slope line represents a pattern in which the percent increase in Hispanic buyers would equal the percent increase in all buyers.)

Figure 9 indicates that most tracts experienced increases in the number of Hispanic homebuyers. (The horizontal dotted line indicates zero change in the number of Hispanic buyers.) Only a few tracts saw a decline in the number of Hispanic buyers, and these generally experienced a decline in total homebuyers. Because tracts with very small numbers of Hispanic buyers are expected to have particularly large percent increases in Hispanic buyers, tracts with fewer than 10 Hispanic buyers in 1997 are indicated in gray rather than black. Figure 9 also includes a bivariate regression line for percent change in loans to Hispanic buyers regressed on percent change in total homebuyers. (Based on tracts indicated by black dots only.) Again, tracts above this line experienced particularly large increases in Hispanic homebuying relative to other tracts in the county.

Figure 7

Change in the Percent of Home Purchase Loans for Owner-Occupied Homes to Hispanics, 1997 to 2004

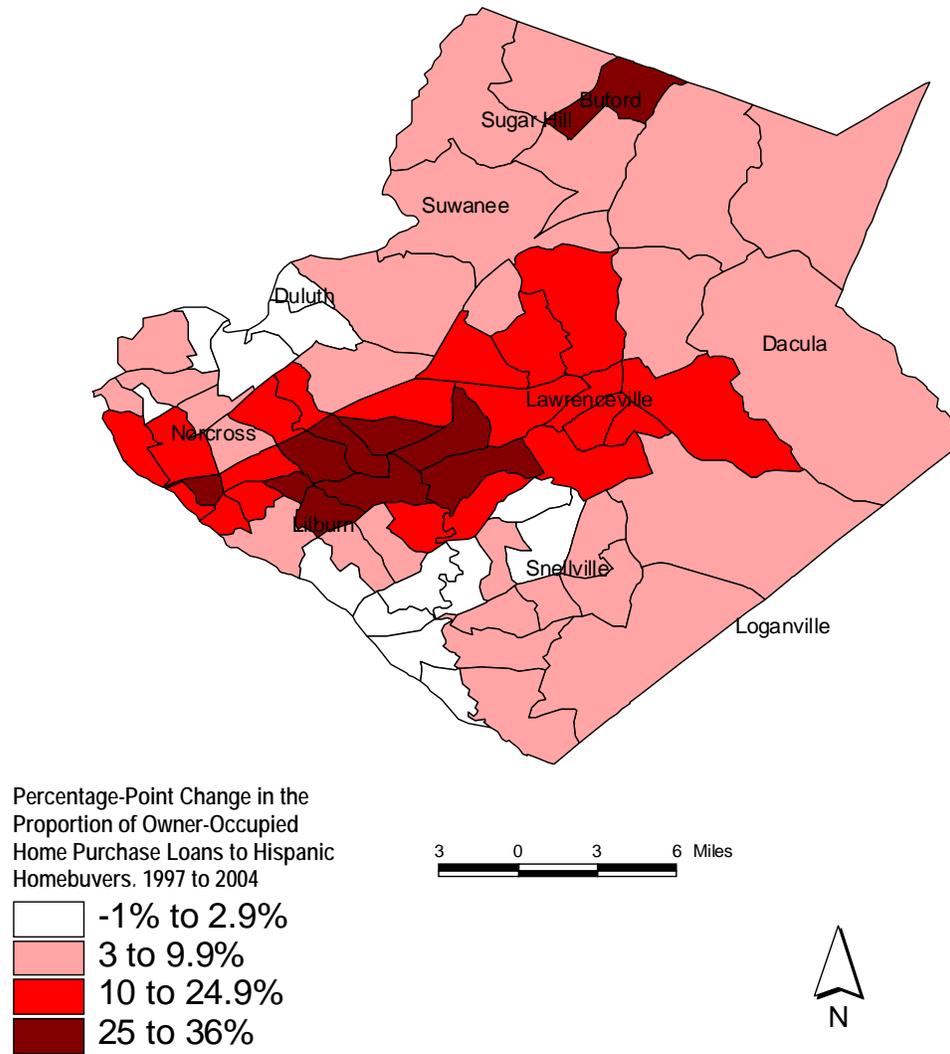


Figure 8

Percent of Home Purchase Loans for Owner-Occupied Homes to Hispanics, 2004

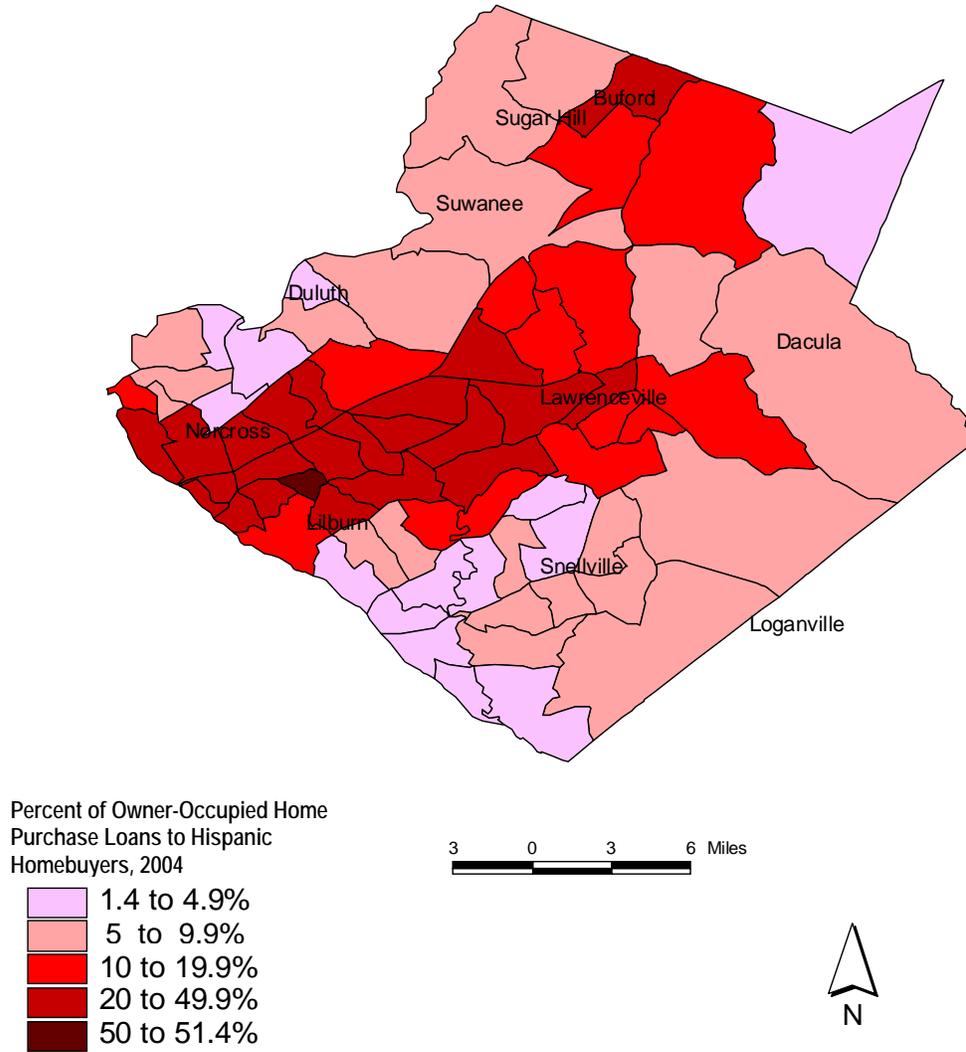
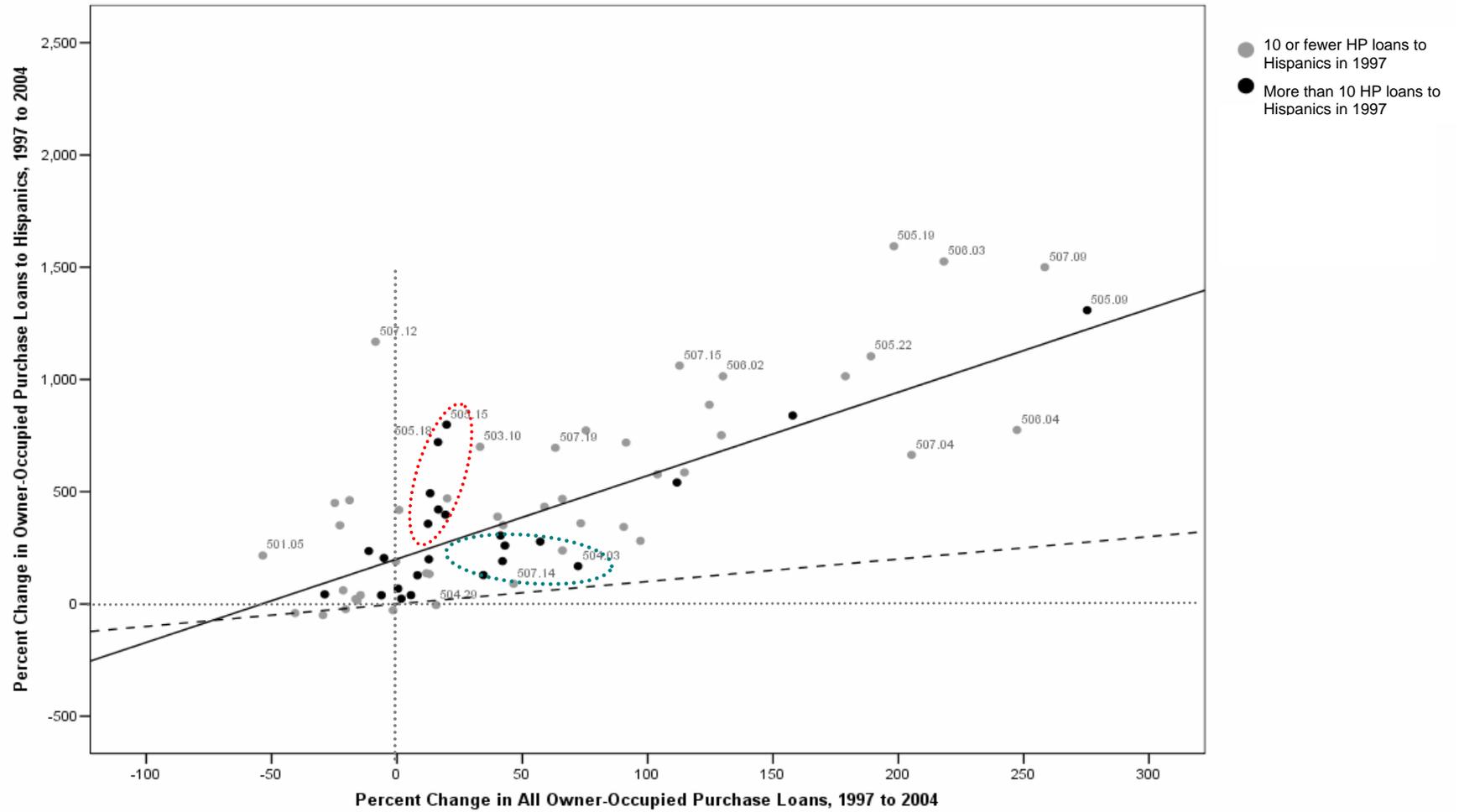


Figure 9

Percent Change in Hispanic Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



Homebuying in Gwinnett: A Demographic Profile, 1997 to 2004

There is a noticeable spike (indicated by the dashed red oval) of slower-growth tracts that did not experience very large increases in total owner-occupied homebuying (under 25 percent), yet experienced very large increases in Hispanic homebuying (on the order of 300 to 800 percent). Examples include tracts 505.15 and 505.18. At the same time, many tracts experiencing somewhat stronger growth (30 to 80 percent) in total homebuying, experienced less extreme rates of growth (generally under 300 percent) in Hispanic buying. Some of these are indicated by the dashed green oval. This bifurcation of trends in Hispanic homebuying suggests a significant trend towards particularly high levels of segregation between Hispanic versus nonHispanic buyers.

This pattern contrasts somewhat with the case of African-American homebuyers, in which the most apparent signals of segregation in African-American vs. nonAfrican-American buying patterns occur in tracts with the highest levels of overall home purchase growth.

Identifying Tracts with Diverse Home Buying in 1997 and 2004

Figure 10 and 11 identify census tracts, based on 1997 and 2004 homebuying patterns respectively, as falling into one of five categories:

- Predominantly white buyers (white): More than 75 percent of buyers are nonHispanic white
- Majority white buyers (yellow): From 50 to 75 percent of buyers are nonHispanic white
- Majority African-American buyers (blue): More than 50 percent of buyers are African-American
- Majority Hispanic buyers (brown): More than 50 percent of buyers are Hispanic (only 1 tract)
- Diverse (red): No racial or ethnic group constitutes more than 50 percent of homebuyers

Comparing Figures 10 and 11 indicates that most tracts in the county have become much more diverse in their homebuying demographics over the 1997 to 2004 period. In 1997, most of the tracts in the northern, eastern and southern parts of the county had homebuying patterns that consisted of predominantly white buyers. Tracts with moderate diversity (50 to 75 percent white buyers) were clustered in western and southwestern Gwinnett, with a set of only eight tracts that had diverse homebuying patterns by the definition above.

By 2004, most of the tracts in the county had become much more diverse in the composition of homebuyers. In fact, Figure 11 shows that there are only five tracts in which nonHispanic Whites constituted more than 75 percent of homebuyers in 2004. The most diverse tracts – those in which no racial or ethnic group accounted for more than 50 percent of homebuyers – generally lie in the west-central to central part of the county running from Norcross to Lawrenceville. One tract in the Buford area and three tracts around Snellville are also classified as diverse under this definition.

Figure 10

Diversity of Homebuyers by Tract, 1997

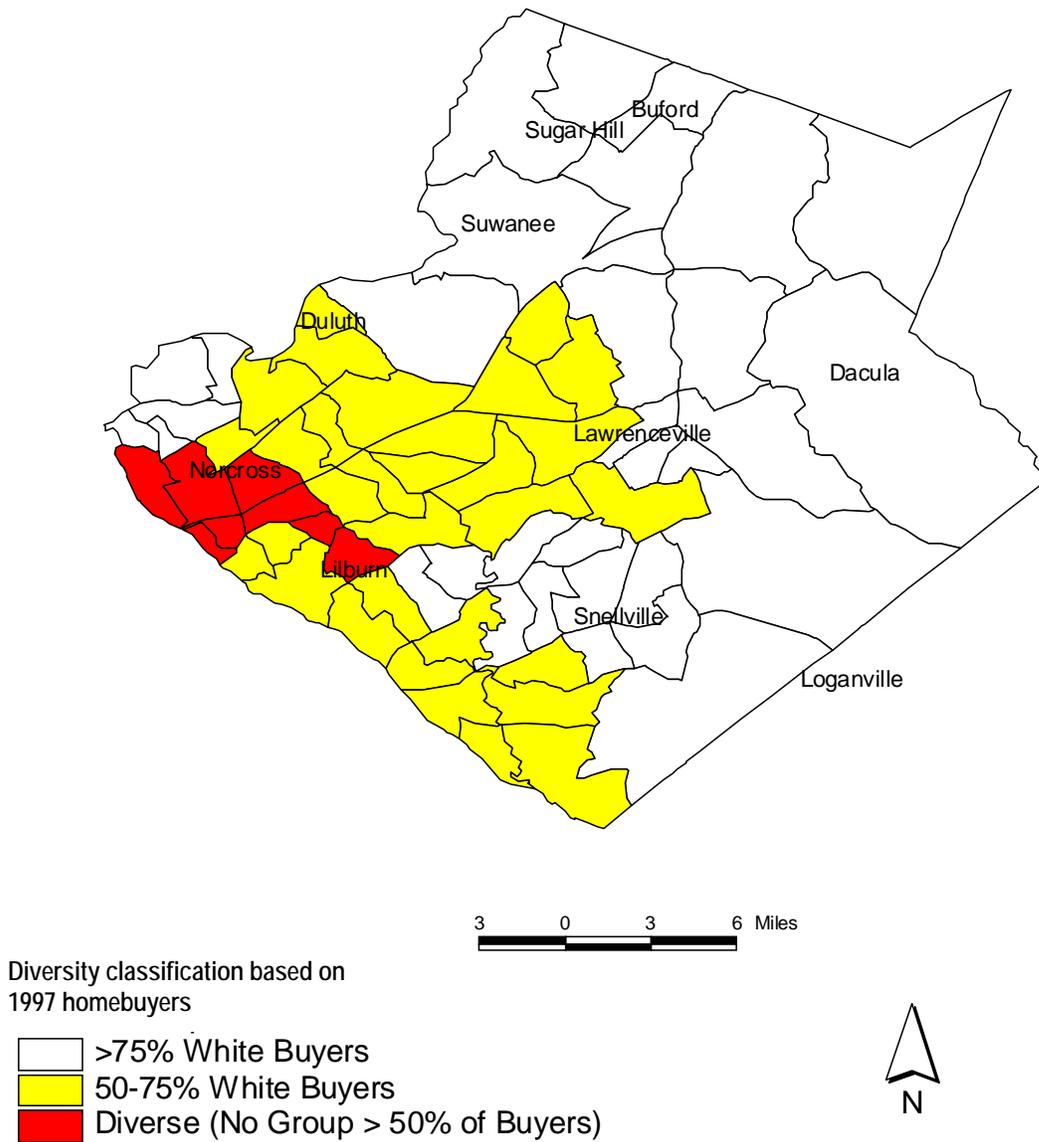
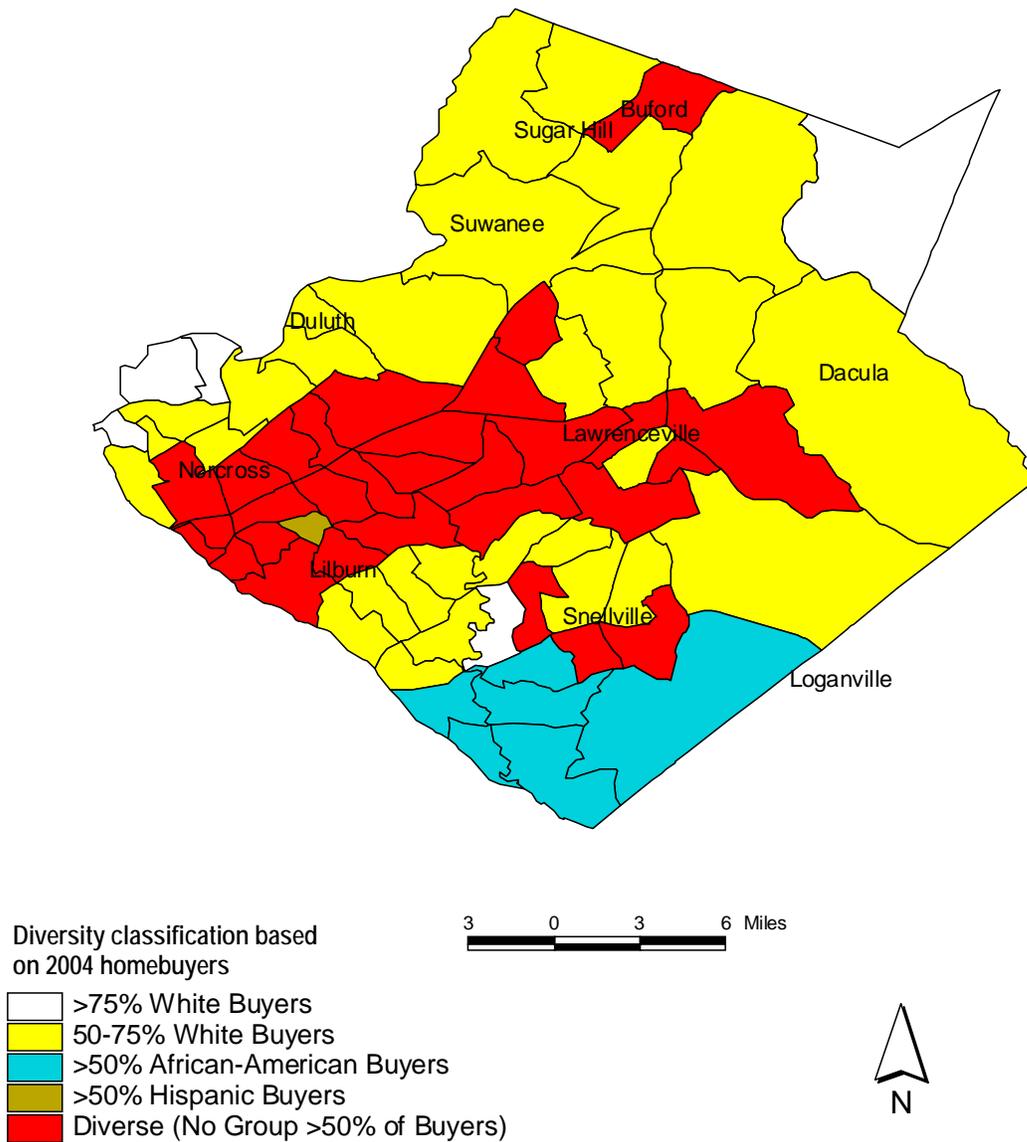


Figure 11

Diversity of Homebuyers by Tract, 2004



Part II. Homebuying Patterns by Income

Purchase of Owner-occupied Homes by Low-Income Households

Figure 12 is a map of the percentage-point change in the proportion of homebuyers who with “low” incomes between 1997 and 2004 in Gwinnett census tracts. Low income is defined here as those with borrowers with family incomes below 50 percent the MSA median income for the same year, as defined by the U.S. Department of Housing and Urban Development. Red tracts saw the proportion of buyers with low incomes increase by more than 10 percentage points over the 1997-2004 period. These tracts include ones in Buford, east of Lawrenceville, and several around Norcross and Lilburn. Pink tracts saw somewhat more moderate increases in low-income homebuying, by 3 to just under 10 percentage points. Many of these tracts were in the southern and central parts of the county.

Although most tracts either saw significant increases in low-income buying or saw essentially no change, a few tracts saw significant declines in the percent of buyers who had low incomes. Interestingly these tracts were located adjacent to some of the tracts experiencing substantial increases in low-income buying.

Figure 13 shows the percent of owner-occupied buyers in 2004 that had low incomes. Red tracts—those with more than 20 percent of buyers having low incomes—include ones in Buford and around Norcross. Tracts with low-income buying in the 10 to 20 percent range are mostly located in western, central and southern parts of the county. The tracts with very low levels of low-income buying (less than 5 percent) include ones north of Norcross, and ones near Suwanee/Duluth, and near Lilburn and Snellville.

Because changes in one income group’s share of homebuyers in a tract is a function of increases or declines in buying by other groups in the same tract, it is helpful to examine whether tracts are generally seeing increases or decreases in the raw number of low-income homebuyers. Moreover it is helpful to compare such changes to overall changes in owner-occupied purchases, especially in a county that has experienced as much growth as Gwinnett.

Figure 14 shows the percent change in the number of low-income buyers from 1997 to 2004, plotted on the vertical axis, compared to the percent change in all owner-occupied purchases over the same period. If low-income share had remained constant, which it did not, then the plot would fall along the dashed line, which represents a 1:1 slope. That is, it represents a pattern in which the rate of increase in the number of low-income buyers would be equivalent to the rate of increase in all owner-occupied buyers.

Figure 14 shows that most tracts in the county saw increases in the number of low-income homebuyers. (The horizontal dotted line indicates zero change in the number of low-income buyers.) As homebuying increased overall, low-income homebuying also increased, but at an even faster rate. Because tracts with very small numbers of low-income buyers in 1997 are expected to have particularly large *percent* increases in low-income homebuyers, tracts with fewer than 10 low-income buyers in 1997 are indicated in gray rather than black.

Figure 12

Change in Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Low Incomes, 1997 to 2004

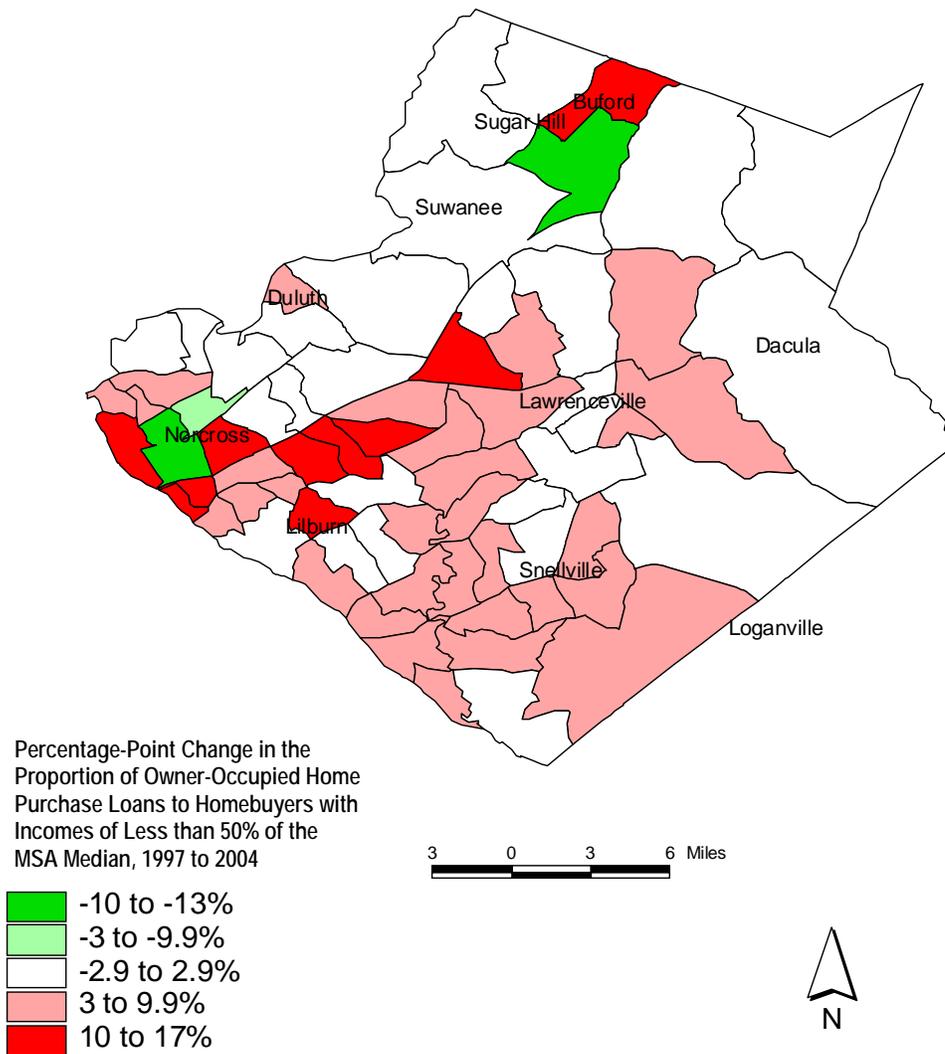


Figure 13

Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Low Incomes, 2004

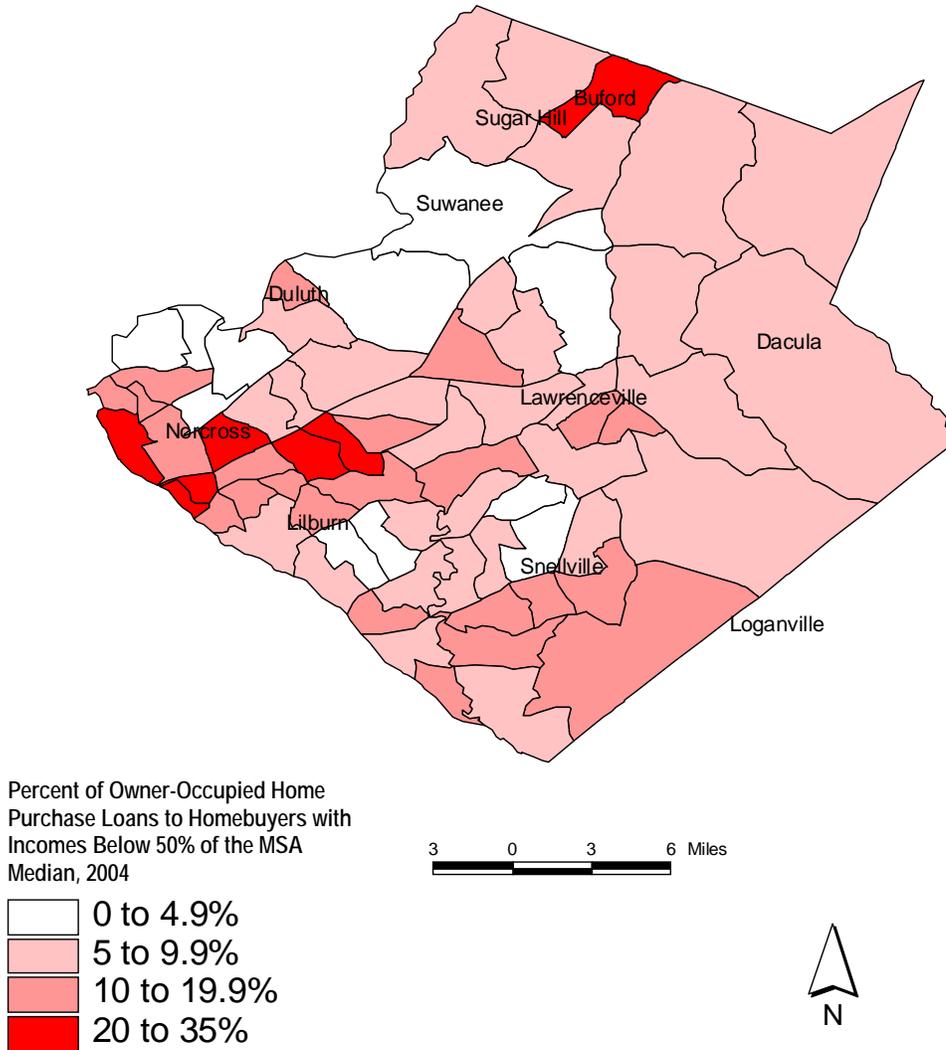
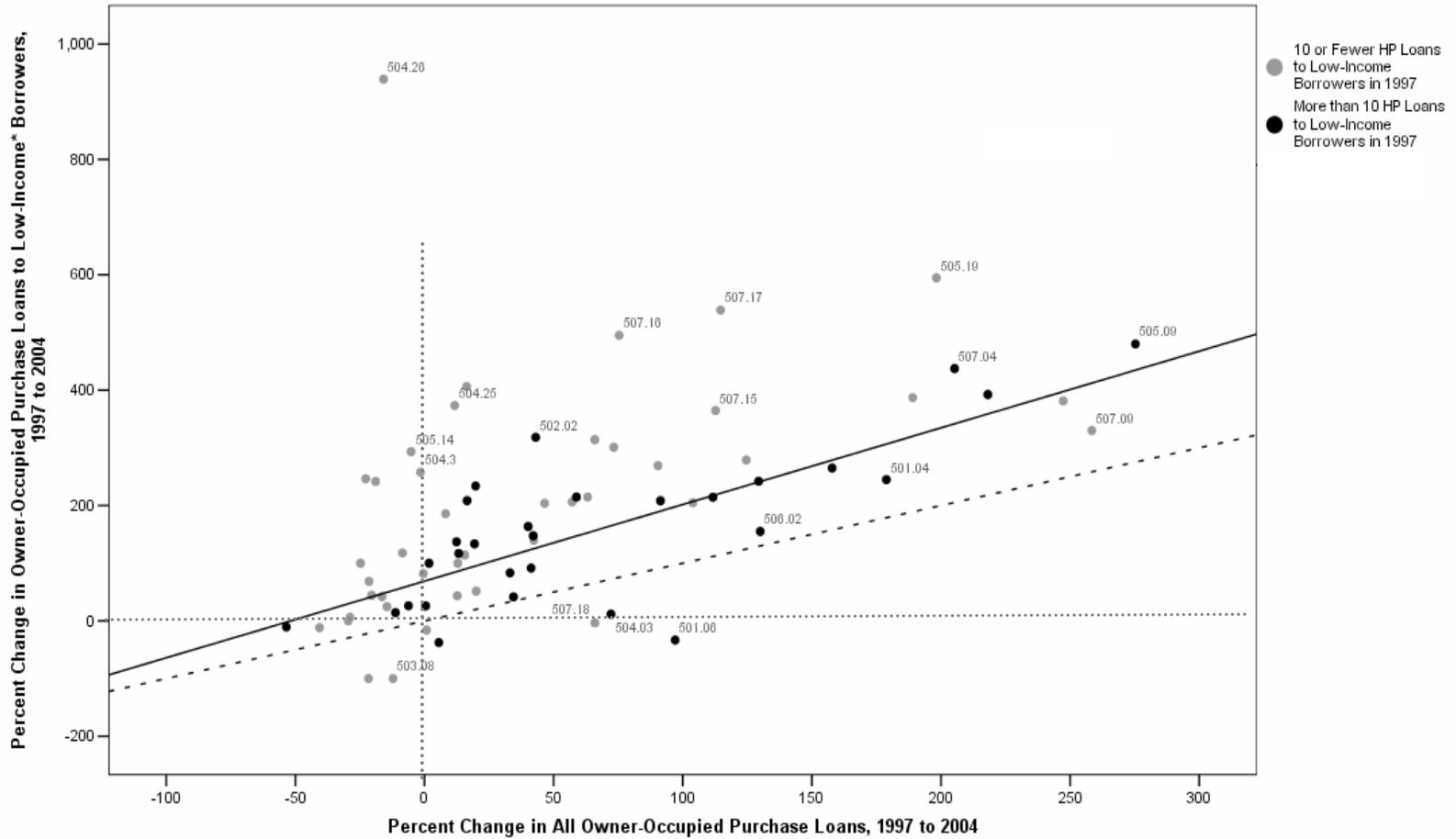


Figure 14

Percent Change in Low-Income Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



*Low-income means borrowers with incomes below 50% of the metropolitan median income (HUD defined).

Figure 14 also plots a bivariate regression line for percent change in loans to low-income buyers regressed on percent change in all owner-occupied purchase loans. (The regression was run using only tracts in which there were more than 10 loans to low income borrowers in 1997. Thus, it is a fit of the tracts plotted in black only.) The difference between the regression line and the dashed 1:1 slope line provides a graphical measure of relative growth in low-income buyers compared to homebuyers generally. Moreover, those tracts which fall substantially above or below the regression line have experienced relatively higher or lower increases in low-income homebuying compared to other tracts in the county.

The regression line in Figure 14 is almost parallel to the 1:1 slope line. This suggests that the difference between rates of growth for low-income buyers and for other buyers in a tract is positive and relatively consistent as the rate of overall homebuyer growth increases. This means that, unlike in the case of African-American homebuyers, in which growth in African-American buyers tended to be much larger in tracts with high growth rates, growth in low-income buyers is occurring in all sorts of tracks – from slower growth to higher-growth areas.

Purchase of Owner-occupied Homes by Moderate-Income Households

While many tracts experienced increases in the proportion and number of homebuyers with low incomes, low-income homebuyer continue to constitute a relatively modest share of all homebuyers in Gwinnett County and for the region as a whole. However, moderate income homebuyers—those with incomes between 50 and 80 percent of the MSA median income—constitute quite a substantial and growing share of homebuyers in Gwinnett and in the MSA. Moreover, it is in this income segment where much of the growth in homebuying has occurred in many Gwinnett neighborhoods and throughout the region.

Figure 15 shows that many tracts experienced substantial increases in the proportion of buyers who are moderate-income. From 1997 to 2004, 11 tracts experienced more than a 20 percentage-point increase in the share of buyers who had moderate incomes. These tracts are shown in magenta. Another 34 tracts (red) saw gains in moderate-income share of between 10 and just under 20 percentage points. And 20 experienced more modest gains—between 3 and just under 10 percentage points (pink). Only two tracts experienced a decline of three percentage points or more in the proportion of buyers who were moderate-income (green) and only four others fell into the “stable” category (white). The tracts with the greatest percentage-point increases in the share of moderate-income buyers lie in the central part of the county, north and west of Lawrenceville, as well as some tracts near Lilburn and Snellville.

Figure 16 plots the share of owner-occupied homes purchased by moderate-income households at the end of the 1997 to 2004 period. It shows that, by 2004, moderate-income homebuyers constituted at least 50 percent of the homebuyers in 18 census tracts (deep magenta). In another 20 tracts (dark red), moderate income buyers accounted for between 40 and just under 50 percent of homebuyers. In only 5 tracts did moderate-income buyers constitute less than 20 percent of homebuyers. Tracts with higher levels of moderate-income home buying are concentrated in western and southern parts of the county, but moderate-income buyers have become a larger share of buyers in most tracts throughout the county.

Figure 15

Change in Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Moderate Incomes, 1997 to 2004

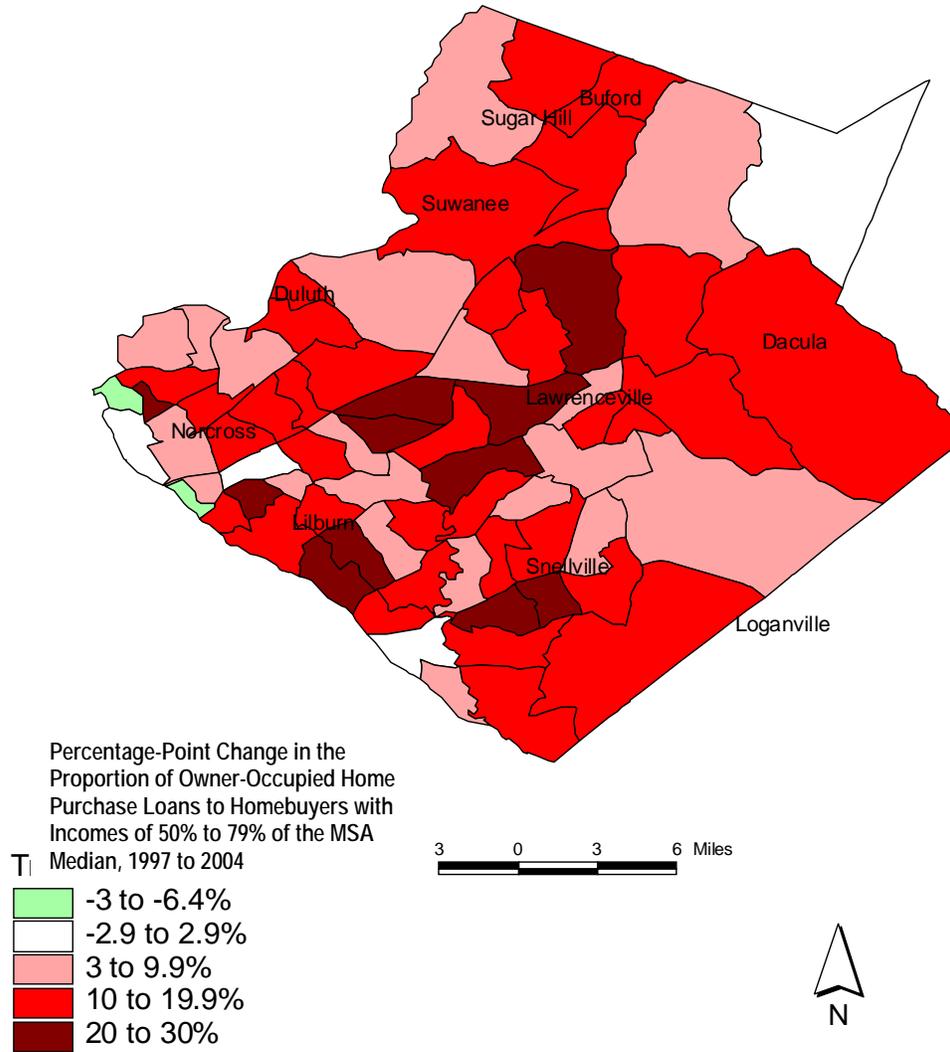


Figure 16

Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Moderate Incomes, 2004

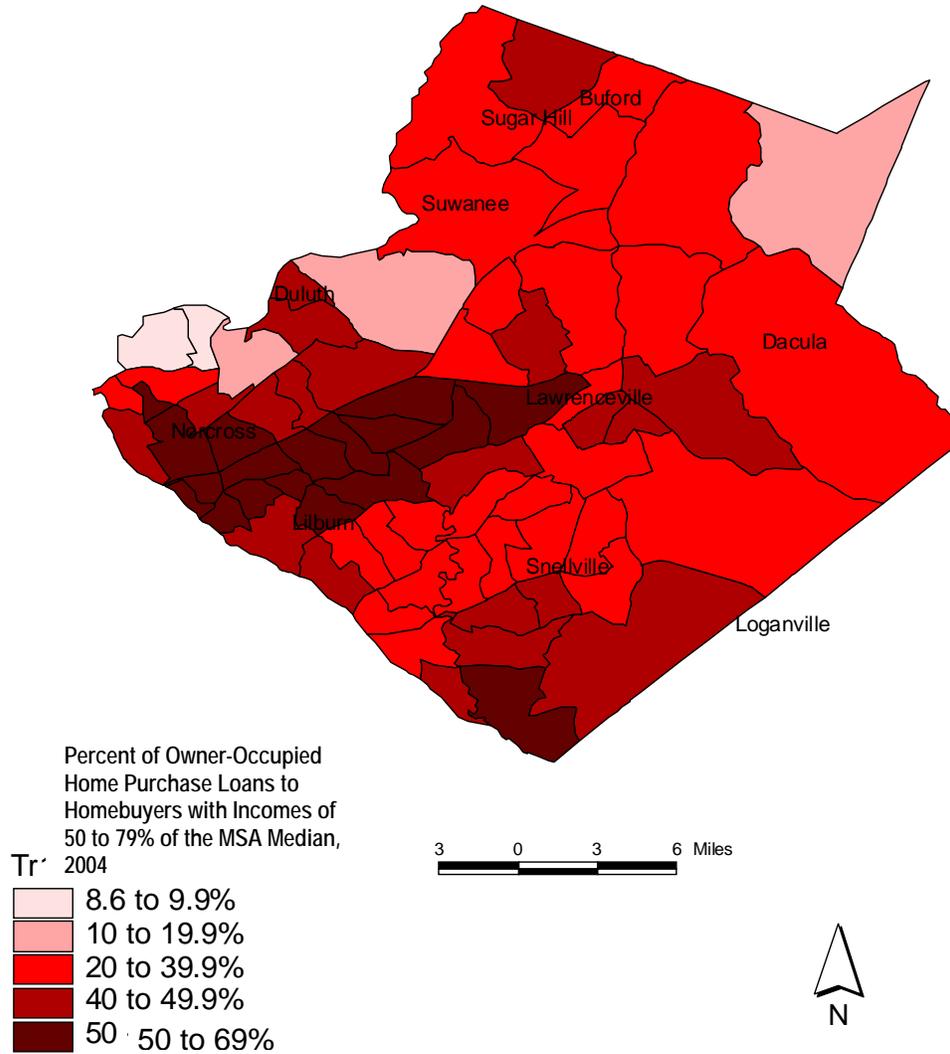
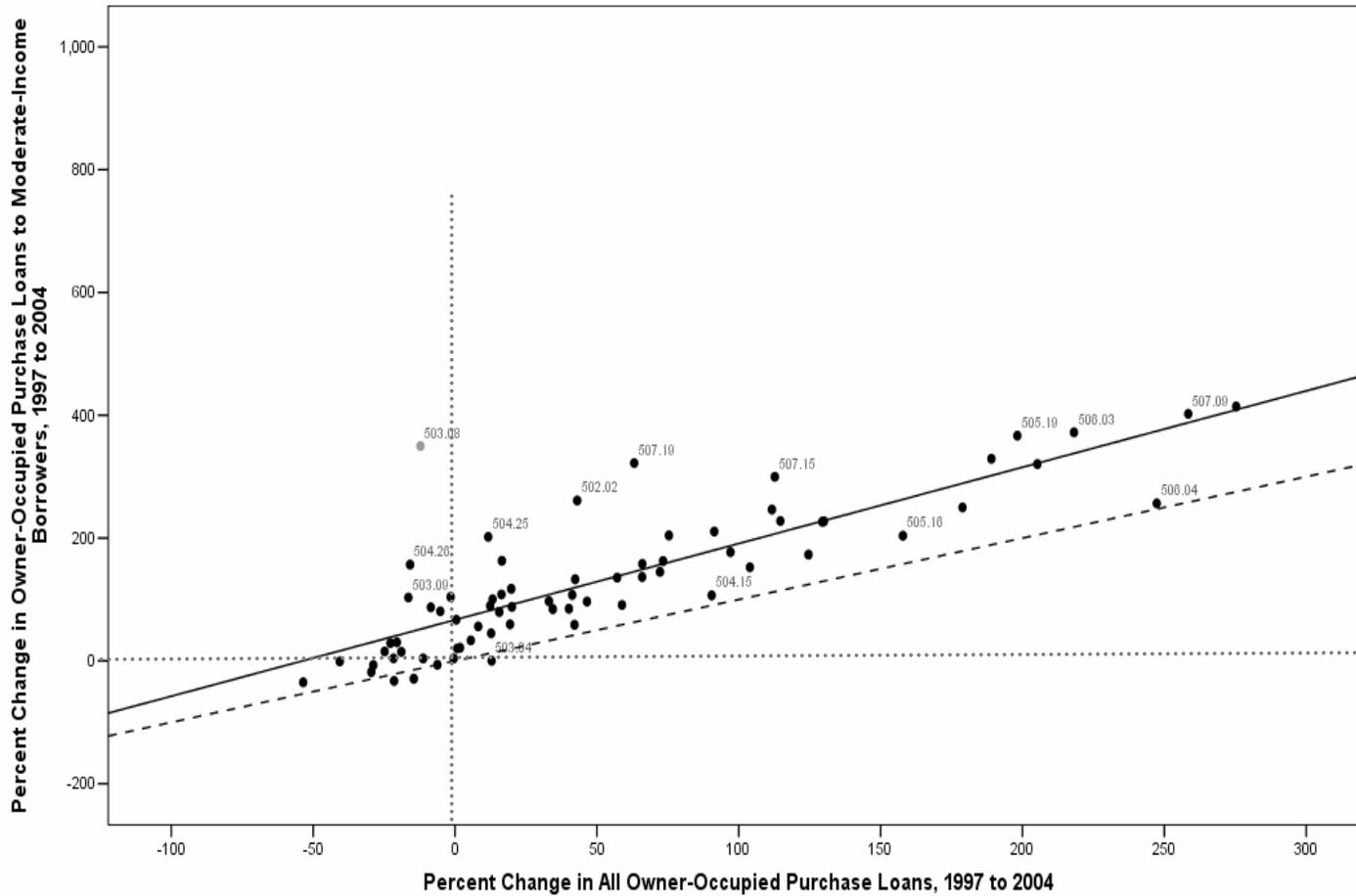


Figure 17

Percent Change in Moderate-Income Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



*Moderate-income means borrowers with incomes from 50 to 79% of the metropolitan median income (HUD defined).

Figure 17 shows the percent change in the number of moderate-income buyers of owner-occupied homes from 1997 to 2004, plotted on the vertical axis, compared to the percent change in all owner-occupied purchases over the same period. (Again, the dashed 1:1 slope line represents a pattern in which the percent increase in moderate-income buyers would be equal to the percent increase in all buyers.)

Figure 17 indicates that all but a few slow-growth tracts experienced increases in the number of moderate-income homebuyers. (The horizontal dotted line indicates zero change in the number of moderate-income buyers.) Figure 17 also includes a bivariate regression line for percent change in loans to moderate-income buyers regressed on percent change in total homebuyers. Tracts above this line experienced particularly large increases in moderate-income homebuying relative to other tracts in the county, given their overall growth in homebuyers.

Figure 17 suggests that while the number of moderate-income buyers did increase at a faster rate than overall homebuyers in most tracts, this difference was generally constant across slower- vs. faster-growth tracts.

Purchase of Owner-occupied Homes by Middle-Income Households

Unlike the case for low- and moderate-income homebuyers, in most Gwinnett tracts, the proportion of buyers who are middle- or upper-income decreased over the 1997 to 2004 period. In many tracts, these declines are of significant magnitude. Figures 18 through 20 describe the trends for middle-income buyers—those with family incomes from 80 to 120 percent of the MSA median.

Figure 18 shows that, in 26 of the 71 tracts, the proportion of buyers who were middle-income declined by more 10 percentage-points or more from 1997 to 2004. In another 16 tracts, declines were in the range of 3 to just under 10 percentage-points. There were 9 tracts in which the share of buyers with middle incomes increased moderately (from 3 to just under 9 percentage points). In the remaining tracts, the middle-income share was essentially stable (less than plus or minus 3 percentage points).

Figure 19 shows that, despite significant changes, in most tracts in Gwinnett County, middle-income homebuyers still constituted a large share of homebuyers as of 2004. Moreover, tracts with relatively high middle-income shares (above 30 percent) are dispersed across many parts of the county, and not heavily concentrated in just one or two geographic sectors.

Figure 20 provides an analysis of changes in the number of middle-income buyers, rather than of their share of all buyers. It shows that, while, in many tracts, the declining middle-income share is wholly or partly due to the increasing numbers of low- and moderate-income buyers, in many tracts, the number of middle-income buyers actually did decline over the 1997 to 2004 period. (These tracts are the ones falling below the dotted gray horizontal line.)

Figure 18

Change in Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Middle Incomes, 1997 to 2004

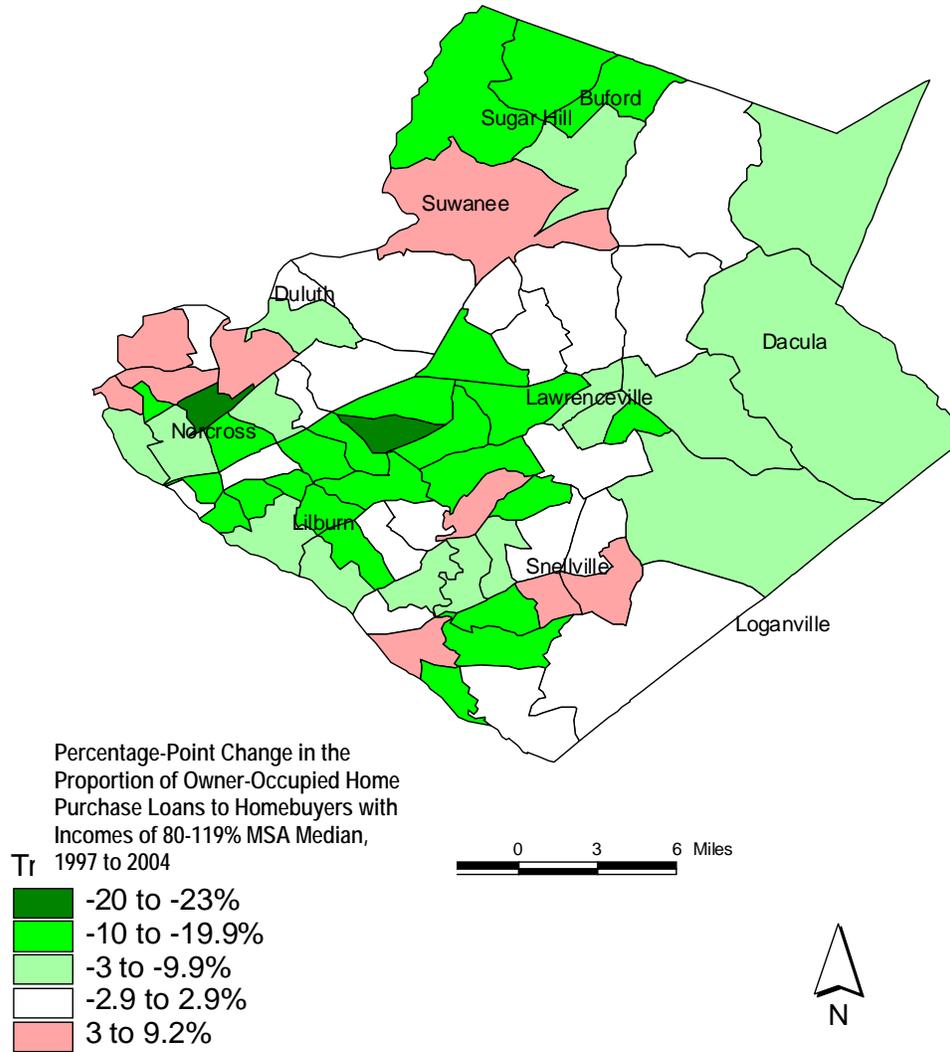


Figure 19

Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Middle Incomes, 2004

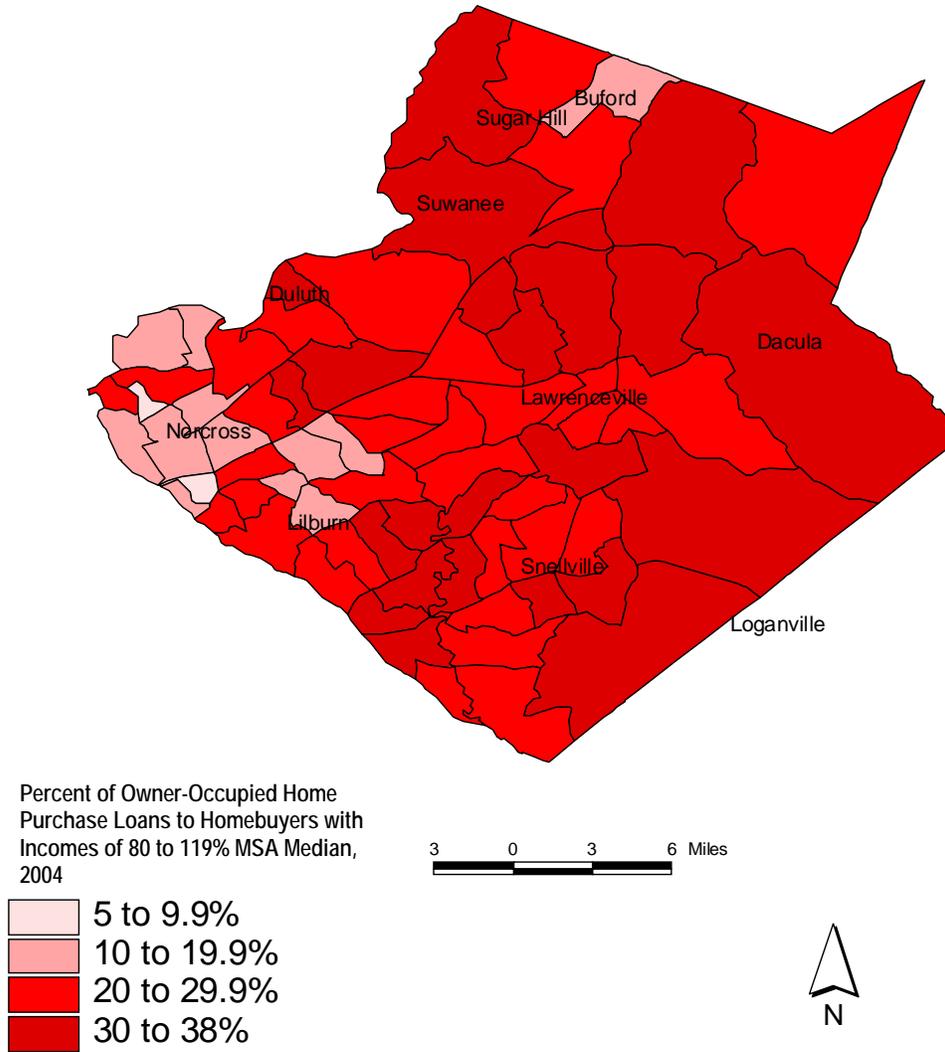
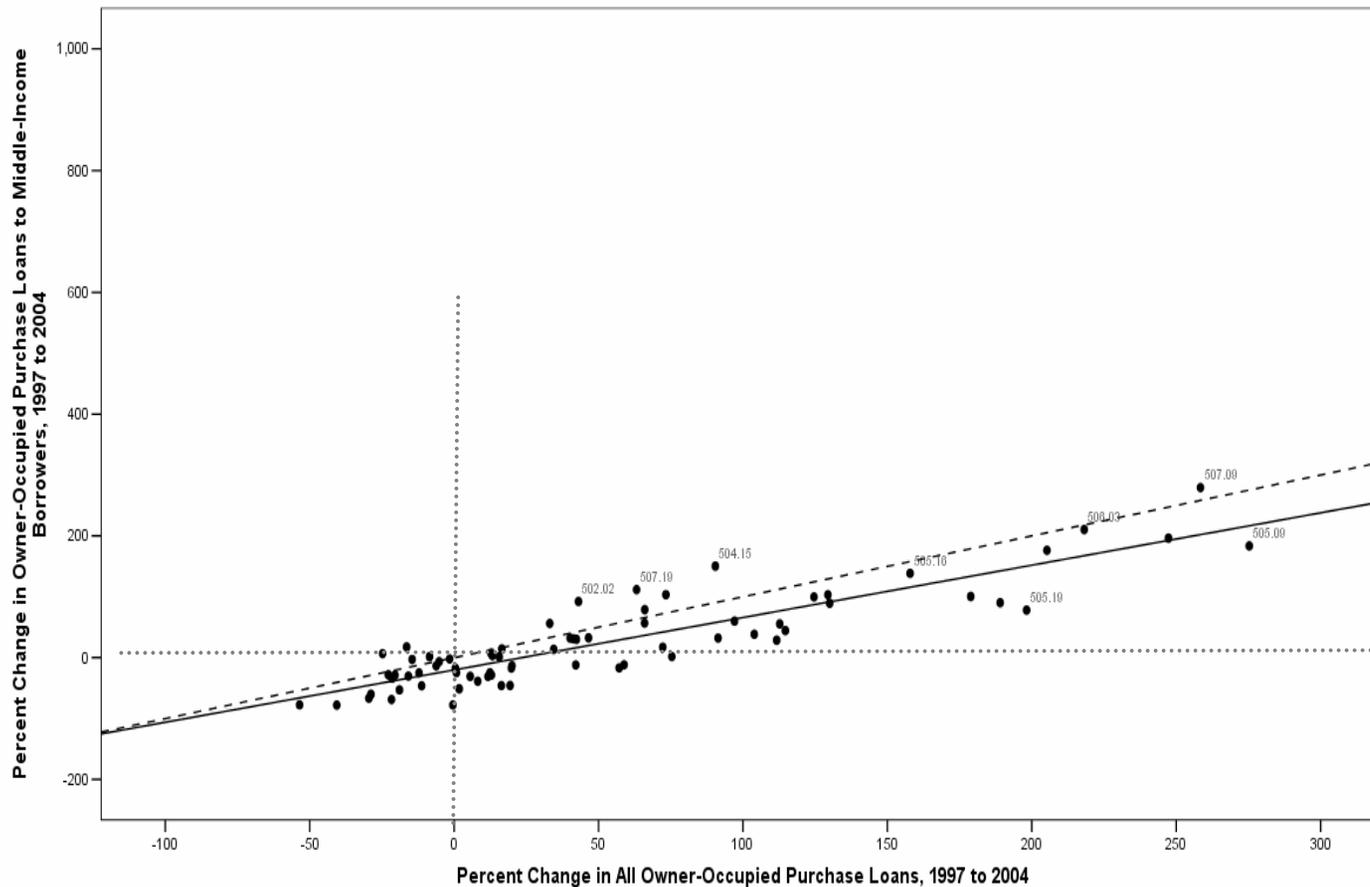


Figure 20

Percent Change in Middle-Income Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



*Middle-income means borrowers with incomes from 80 to 119% of the metropolitan median income (HUD defined).

Figure 20 indicates a pattern in which, as overall homebuyer growth from 1997 to 2004 exceeded approximately 25 percent, there was some positive growth in the number of middle-income buyers. However, when growth was below this figure, or negative, then the number of middle-income buyers frequently declined. This is not to imply a causal relationship; these numbers are descriptive only. Basically, because low- and moderate-income homebuying is increasing generally, the middle-income share of homebuyers is declining in most tracts in Gwinnett (and in many tracts in metropolitan Atlanta for that matter). Therefore, if the total number of homebuyers did not increase very much, the number of middle-income buyers was likely to be smaller in 2004 than in 1997.

Purchase of Owner-occupied Homes by Upper-Income Households

Figure 21 describes the changes in the share of homebuyers who are upper-income (incomes above 120 percent of the MSA median). As was the case with middle-income buyers, most tracts in the county experienced a decline in the proportion of buyers with upper incomes. Of the 71 tracts in the county, 36 saw the share of buyers who had upper incomes decline by at least 10 percentage points. Of these 36, 10 saw declines of 20 percentage points or more. Only six tracts experienced stability (change of than plus or minus three percentage points) in their share of buyers who had upper incomes. Seven tracts did see nontrivial increases in upper-income homebuyer shares, with two of these experiencing increases of more than 10 percentage points.

Figure 22 indicates that there are a significant number of tracts in which upper-income homebuyers constituted less than 10 percent of homebuyers in 2004. Many of these are concentrated in the west-central part of the county. At the opposite end of the income spectrum, there are some tracts in which upper-income buyers constituted more than half of all buyers in 2004. All but one of these lie north of I-85 in the western/northwestern part of the county.

Figure 23 shows that in many tracts, the number of upper-income buyers declined from 1997 to 2004. However, if a tract experienced a growth in overall homebuying of approximately 80 percent or more, this was sufficient to compensate for the declining share of upper-income buying and yield a net increase in upper-income buyers. However, even for the faster growing tracks—with some exceptions—the increase in upper-income buyers lagged the increases in total buyers. Moreover, this lag was, on average, somewhat greater in the faster growing tracts. This is indicated by the smaller slope of the regression line versus the dashed, 1:1 slope line. In some tracts (e.g., 507.04) growth in upper-income buyers was modest despite very large (over 200 percent) growth in total buyers.

Figure 21

Change in Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Upper Incomes, 1997 to 2004

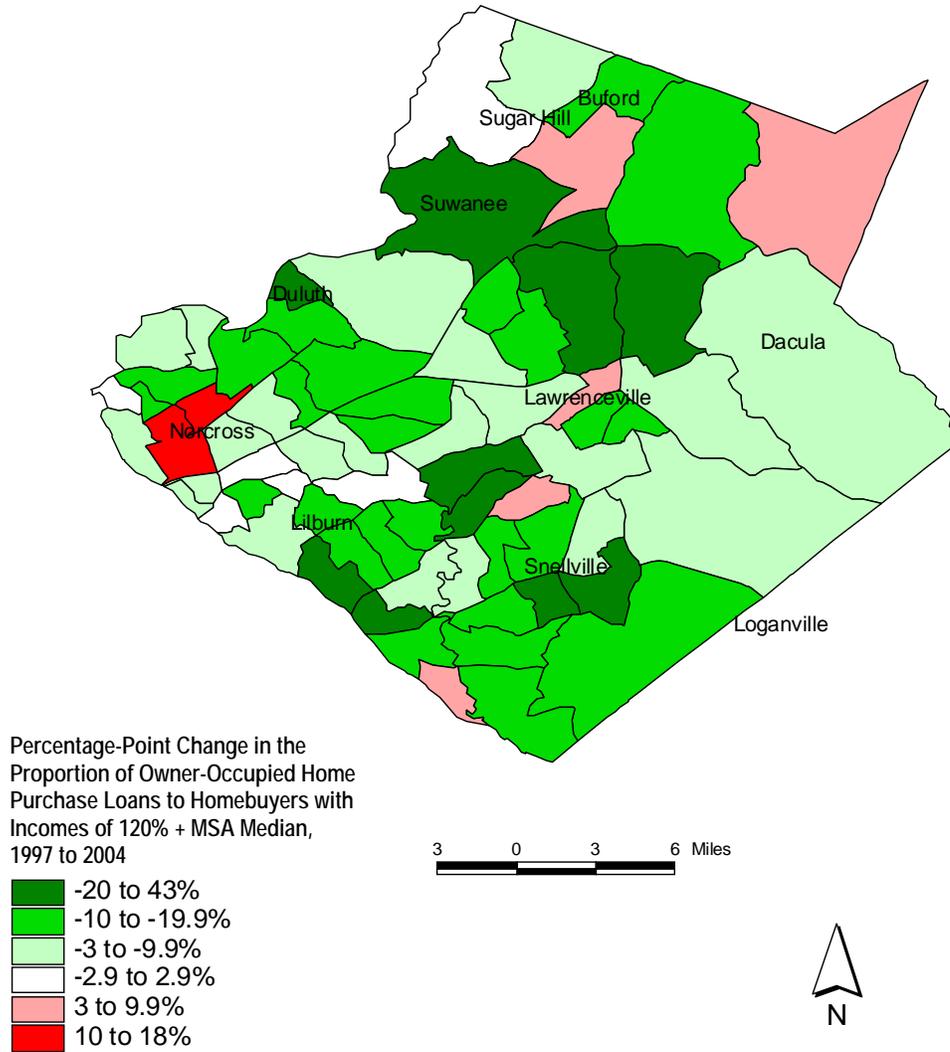


Figure 22

Percent of Home Purchase Loans for Owner-Occupied Homes to Buyers with Upper Incomes, 2004

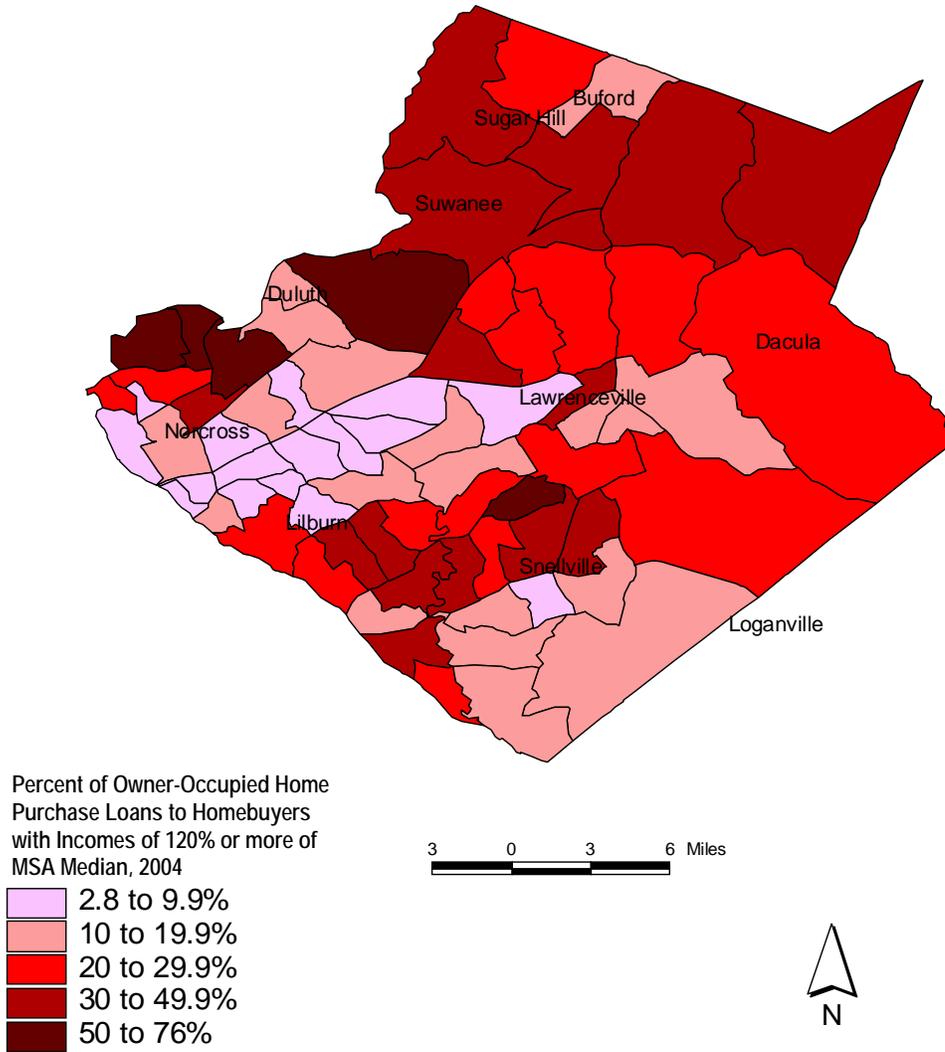
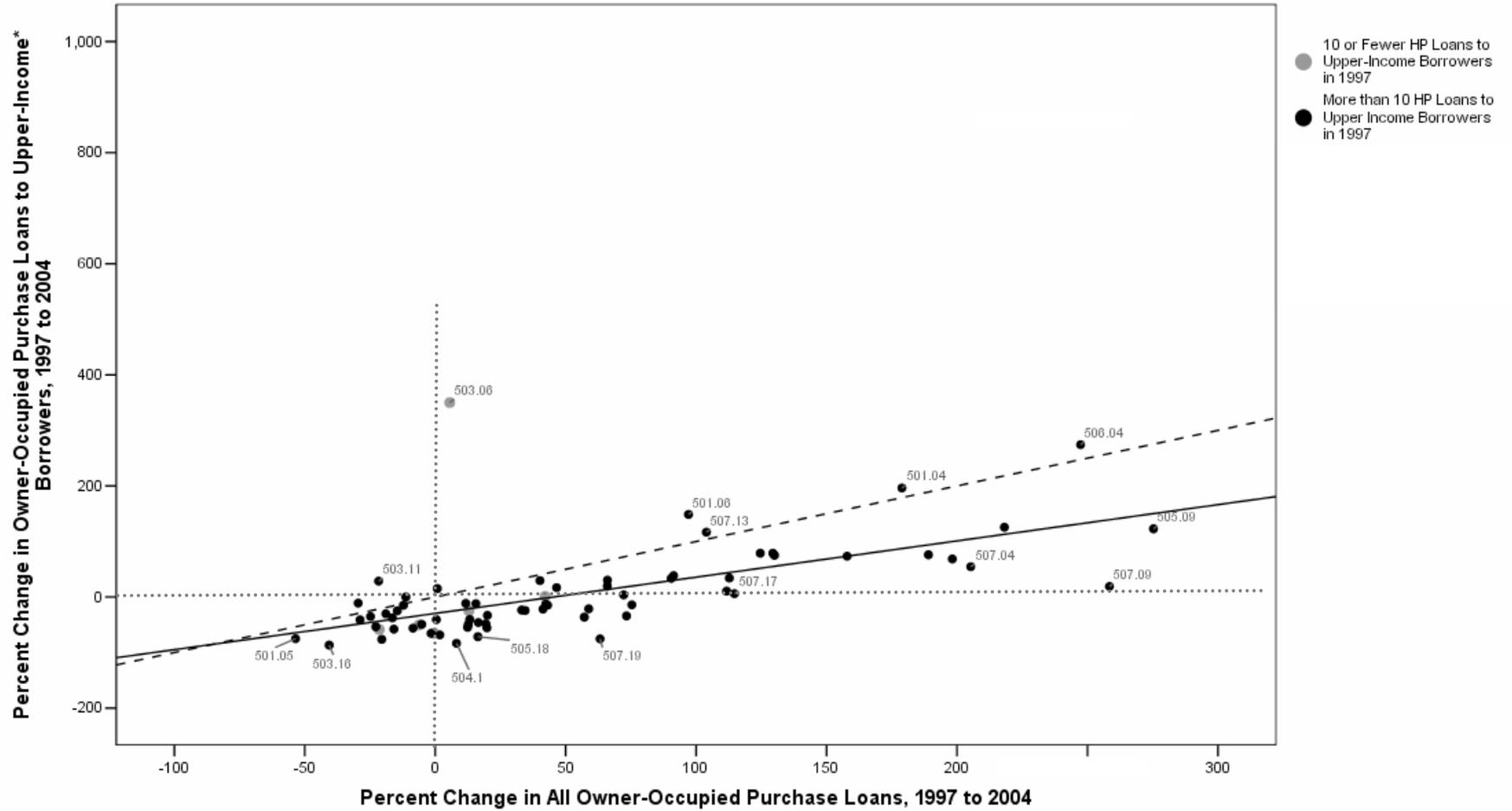


Figure 23

Percent Change in Upper-Income Owner-Occupied Home Buyers vs. All Owner-Occupied Buyers, 1997 to 2004
Gwinnett County Census Tracts (2000 Boundaries)



*Upper-income means borrowers with incomes of 120% or more of the metropolitan median income (HUD defined).

Important Related Trends in the Single Family Market

Financing

In the last five years or so, there has been substantial, nationwide growth in what are called nontraditional or “exotic” mortgage products, which are marketed to both prime and subprime borrowers. Before 2000-2001, many of these products either did not exist or were marketed quite selectively to high-worth, often self-employed homebuyers. Included among exotic products are interest-only loans, payment-option loans, negative amortization loans, no-documentation or “stated-income” loans, and what are called “hybrid” adjustable rate mortgages (ARMs). The proliferation of these products has been attributed to a number of factors, including rising housing prices, the growth of non-agency securitization, and the growth of specialized mortgage lenders, including subprime lenders.

Many if not most exotic mortgages involve adjustable interest rates, especially those made in the 2003 to 2005 period, when exotic mortgages became so popular. Traditionally, as rates for fixed-rate loans fall, the short-term savings that ARMs can provide decline, and the share of mortgages that have fixed-rates increase. However, from 2001 to 2003 interest rates generally fell, but the share of loans that were ARMS increased. Then, although rates remained relatively flat, ARMs increased dramatically in 2004, so that ARM share reached 71 percent of jumbo loans and 31 percent of nonjumbo loans.²

The increase in exotic mortgages has been viewed by some as driven by rising property values, as home buyers use such loans to lower the initial debt service of increasingly expensive properties. At the same time, the ability of buyers to “stretch” further via such products can also fuel demand for higher cost homes and thus be as much a cause as an effect of higher home prices. Many lenders have promoted such products as a means for buyers to afford larger homes. As long as property values are expected to rise, some lenders will be willing to take on added repayment risks associated with more highly leveraged borrowers, because they are confident that properties, at least in most cases, will appreciate sufficiently to cover losses.

However, because many exotic mortgage products involve some version of adjustable interest rates, the risks that borrowers face due to changing interest rates can be quite substantial. Industry analysts have estimated that as much as \$1 trillion in ARMs are subject to resetting interest rates in 2007, up from \$400 billion in 2006 and \$100 billion in 2005.³ Moreover, in many cases, these ARM loans involved “teaser” interest rates that are set at a below-market level in order to entice borrowers. This means that, when rates on these loans reset, they will go up much more than simply the increase in market interest rates, but will increase by the difference

² Jumbo mortgages are those whose amounts exceed the limits of the government-sponsored secondary markets (Fannie Mae and Freddie Mac) to purchase them. These figures are from a survey by the Federal Housing Finance Board. Since subprime lenders, which make more ARM loans, are underrepresented in this survey, the total ARM share is likely substantially higher than these figures suggest.

³ Frantantoni, Michael. 2005. *Housing and Mortgage Markets: An Analysis*. Washington, DC: Mortgage Bankers Association, September 6. <http://www.mortgagebankers.org/files/News/InternalResource/29899_HousingandMortgageMarkets-AnAnalysis.pdf> (retrieved on June 30, 2006).

Homebuying in Gwinnett: A Demographic Profile, 1997 to 2004

between the teaser and market rates at the time of origination, plus any increase in rates since the origination date. In some cases, this may mean that loan rates will go from something as low as 3 or 4 percent to 7 or 8 percent or more, effectively doubling the loan payment in some cases.

The rise of exotic products and the proliferation of ARMs and ARMS with teaser rates have increased the levels of debt that many households take on in purchasing a home. One way of measuring this at a neighborhood level is to measure the ratio of the median home purchase loan size to the median income of homebuyers in the neighborhood.

Figure 23 plots this ratio for 2004 for census tracts throughout the 10 county Atlanta region. It shows that many tracts within Gwinnett County have relatively high loan-to-income ratios for homes bought in 2004. The highest category (magenta) includes tracts with a ratio from 2.51 to 4.02. Traditional underwriting generally held that borrowers should not borrow more than 3 to 3.5 times their income for a home loan. Yet the ratio mapped is the ratio of the *median* loan size to the *median* borrower income, suggesting that many homebuyers are exceeding this ratio.

Figure 24 illustrates the increase in the loan-to-income ratio for homebuyers from the 1997 to 2004 period for the Atlanta region. It shows that most tracts in Gwinnett experienced relatively large increases in the loan-to-income ratio over the 1997 to 2004 period.

Related to this issue is Table 1, which indicates that Gwinnett County has experienced large increases in foreclosures from 2005 to 2006. Anecdotal evidence suggests that ARMS are accounting for a substantial portion of this increase. (A later report will focus on foreclosure trends within Gwinnett County).

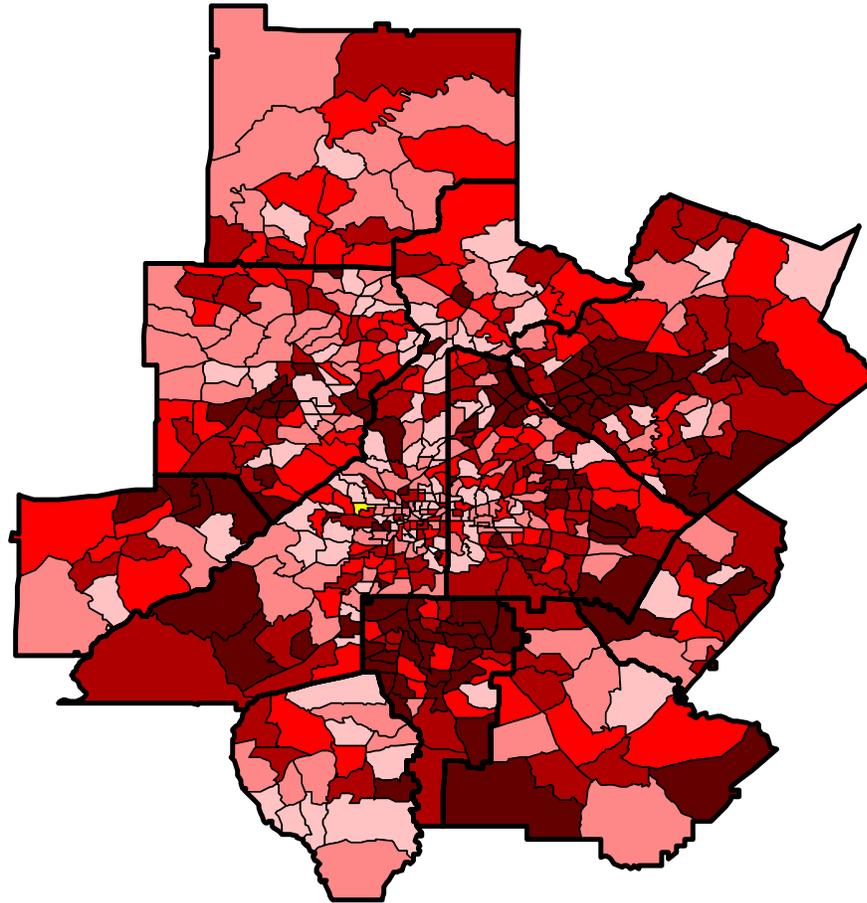
Investor/Rental Single Family Purchases

Figures 25 and 26 indicate another trend that is occurring in the single-family market in Gwinnett, as well as in some other parts of the region. Home purchase loans made to nonowner-occupants has risen significantly in recent years, especially since 2000. Figure 25 shows that a majority of tracts in the county experienced at least a 5 percentage-point increase in the proportion of houses purchased by nonowner-occupants. In 14 tracts the increase was over 10 percentage points. These loans could have been taken out by basically three types of home buyers. First, buyers could be investor/speculators looking to purchase homes and resell them in a short period of time. These buyers may or may not plan to make significant improvements to the properties. Second, buyers may be planning to buy the homes as rental properties. Finally, buyers may be buying the homes as second homes, but not principal residences.⁴

⁴ Nonowner-occupant purchases may also be more likely to represent transactions in which some mortgage fraud has occurred, so that the property is flipped in order to obtain a large mortgage with an inflated purchase price.

Figure 23

**Ratio of Median Loan Amount to Median Borrower
Income, Home Purchase Loans, 2004**



20 0 20 Miles

Ratio of Median Purchase
Loan to Median Borrower
Income, 2004

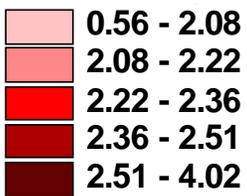
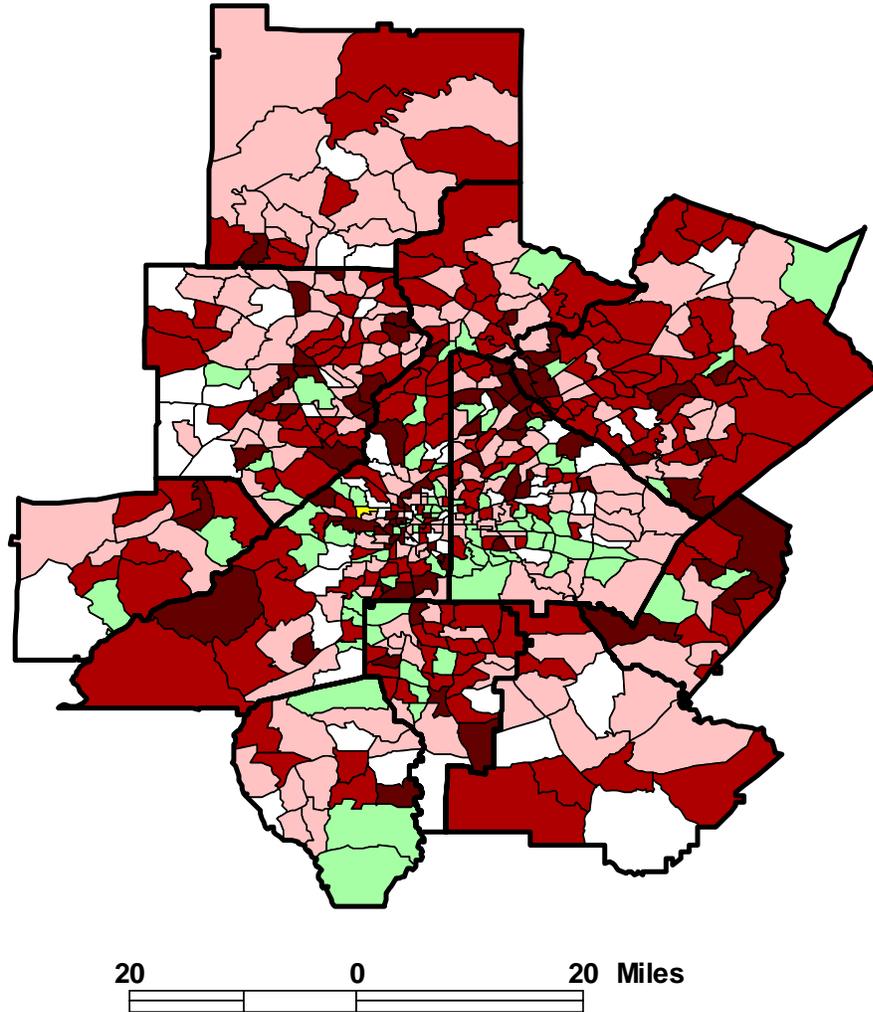


Figure 24

**Change in Ratio of Median Loan Amount to
Median Borrower Income, Home Purchase Loans,
2000 to 2004**



Change in Ratio of Median
Purchase Loan to Median
Borrower Income, 2000 - 2004



Table 1.

Change in the Number of Foreclosures Started in the 13-County Area, 2000-2006

	Jan-Aug 2005 to Jan-Aug 2006	Jan-Aug 2000 to Jan-Aug 2006
FULTON	33%	207%
DEKALB	11%	137%
COBB	15%	161%
GWINNETT	17%	258%
CLAYTON	17%	183%
CHEROKEE	17%	207%
DOUGLAS	14%	180%
FAYETTE	19%	116%
HENRY	26%	315%
ROCKDALE	30%	166%
FORSYTH	-6%	220%
BARTOW	-3%	88%
HALL	12%	149%
TOTAL	19%	184%

Data source: Atlanta Foreclosure Report; EquityDepot.net

Figure 25

Change in the Percent of 1-4 Unit Purchase Loans to Investors/Lessors, 1997 to 2004

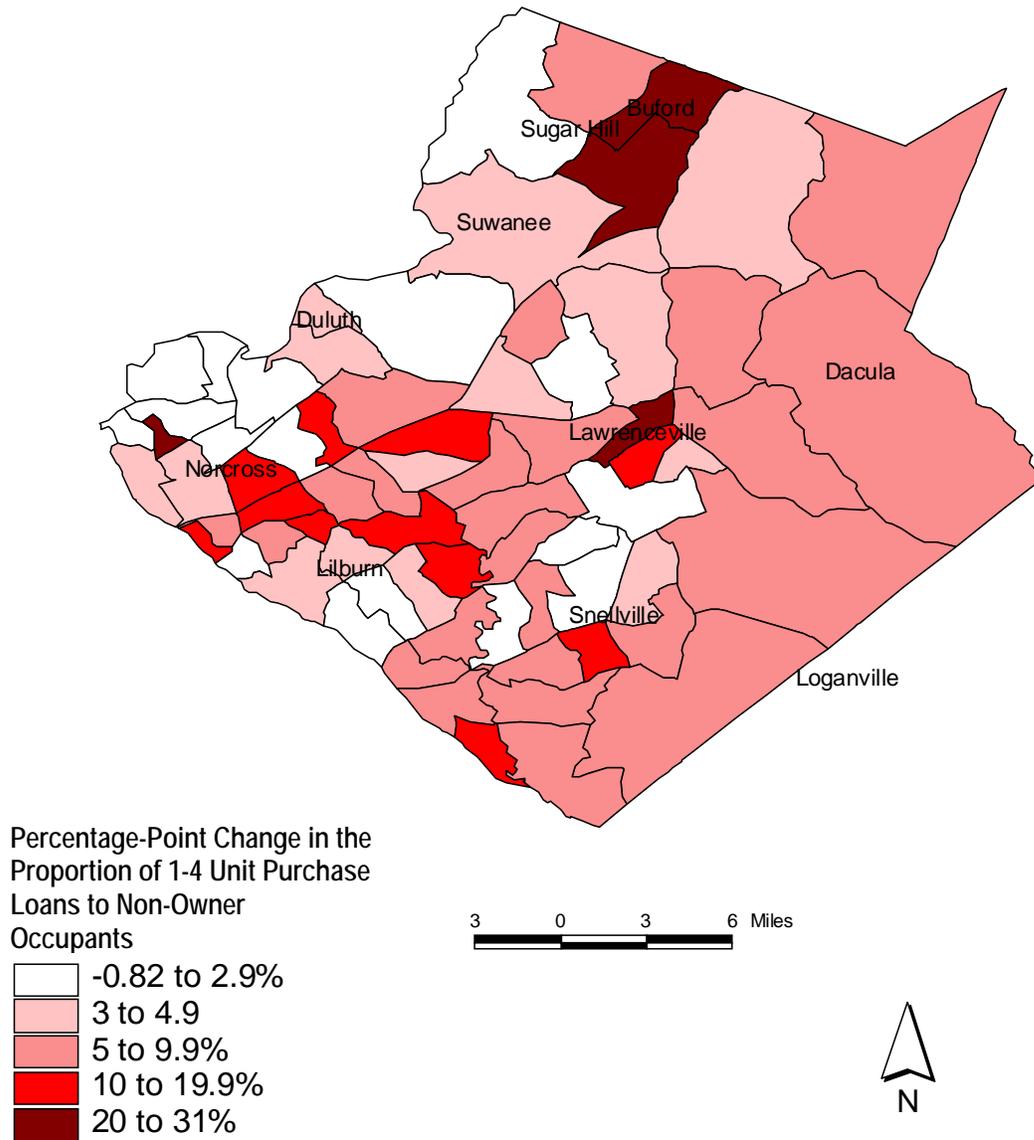
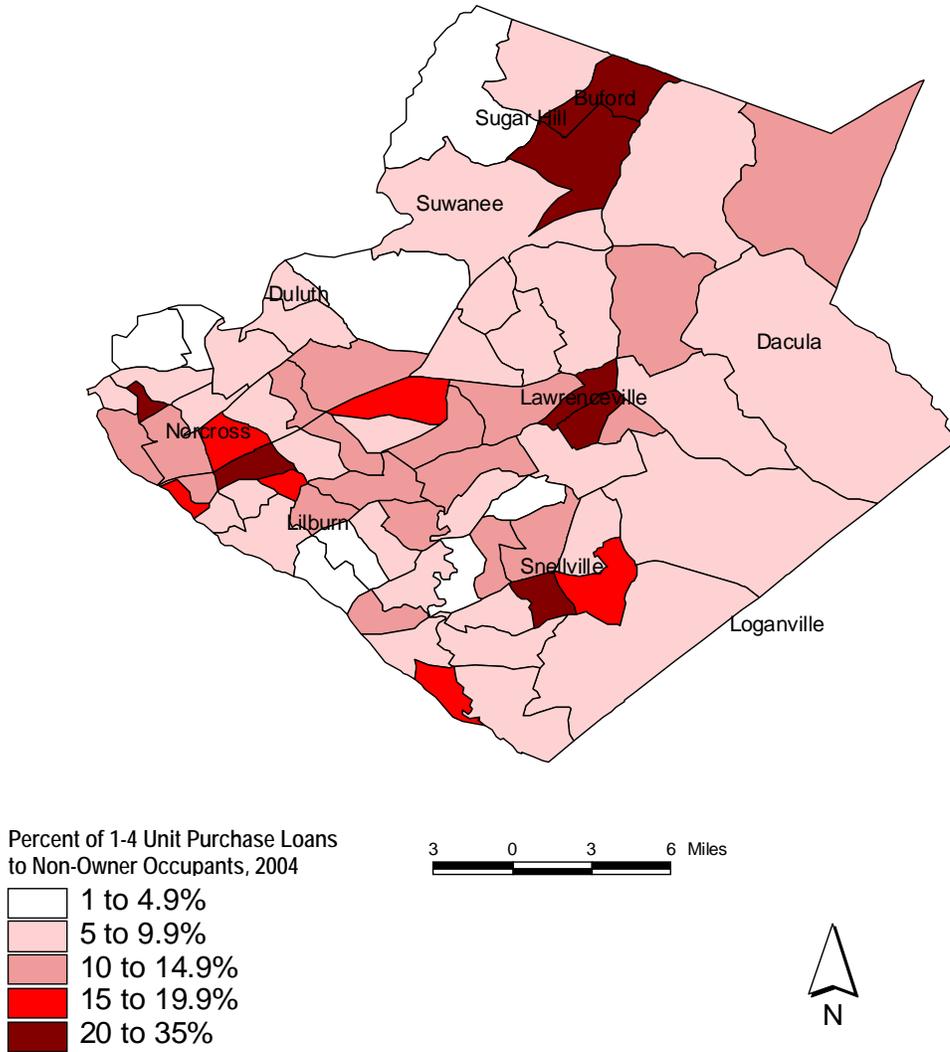


Figure 26

Percent of 1-4 Unit Purchase Loans to Investors/Lessors, 2004



Appendix

Home Mortgage Disclosure Act Data and Reporting of Racial and Ethnic Data

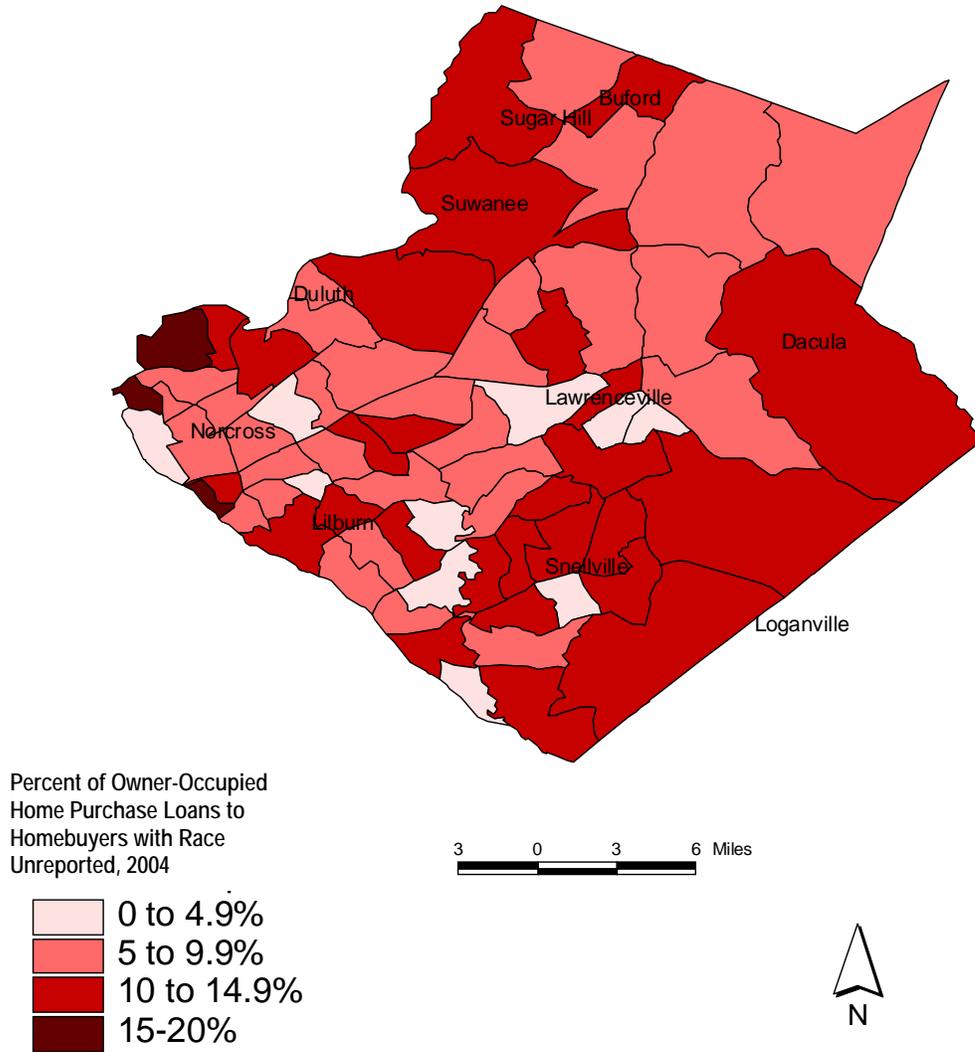
We obtained the Home Mortgage Disclosure Act (HMDA) data used here from the Urban Institute, which in turn had compiled a large set of HMDA variables (over 1,000) for census tracts for years dating back to 1997 for use in the Fannie Mae Foundation's website www.dataplace.org. The Urban Institute allocated data in years before 2003 to 2000 tracts (the earlier years' data were originally reported by 1990 tract boundaries). They did this using the same algorithms as in the now widely used National Urban Change Database, developed by Geolytics, Inc., which reallocates 1970 through 1990 census data according to 2000 tract boundaries.

Figure A-1 indicates the proportions of owner-occupied home purchase loans in 2004 in Gwinnett County in which race of the borrower was not reported. In most tracts, this figure varies between 5 and 15 percent. The variation is due to a number of factors, including the particular composition of lenders active in different communities. Lenders are generally obligated to attempt to obtain the race of the loan applicant, but they cannot compel such information. If the application is taken in person, they are to indicate apparent race or ethnicity from their observation. Lenders taking internet or telephone applications are expected to have higher levels of unreported race and ethnicity information as a result. Also, subprime lenders – those specializing in lending to people with imperfect credit—have historically had higher levels of unreported race loans. Subprime lenders disproportionately lend to minorities and minority neighborhoods, and so this may also account for some of the spatial variation in incomplete racial data.

All proportions in this study were calculated with a denominator that included only loans with reported racial/ethnic data. Thus, to the extent that minorities may be disproportionately represented among borrowers with unreported racial/ethnic data, these proportions may be biased downward somewhat. If this is the case, then the geographical disparities shown in the proportion of buyers who are Hispanic, African-American, or Asian, may be underestimated.

Figure 1-A

Percent of Home Purchase Loans for Owner-Occupied Homes Where Race is Unreported, 2004



Foreclosure Trends in Gwinnett County, Georgia, 2000 – 2006

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May 3, 2007

Introduction

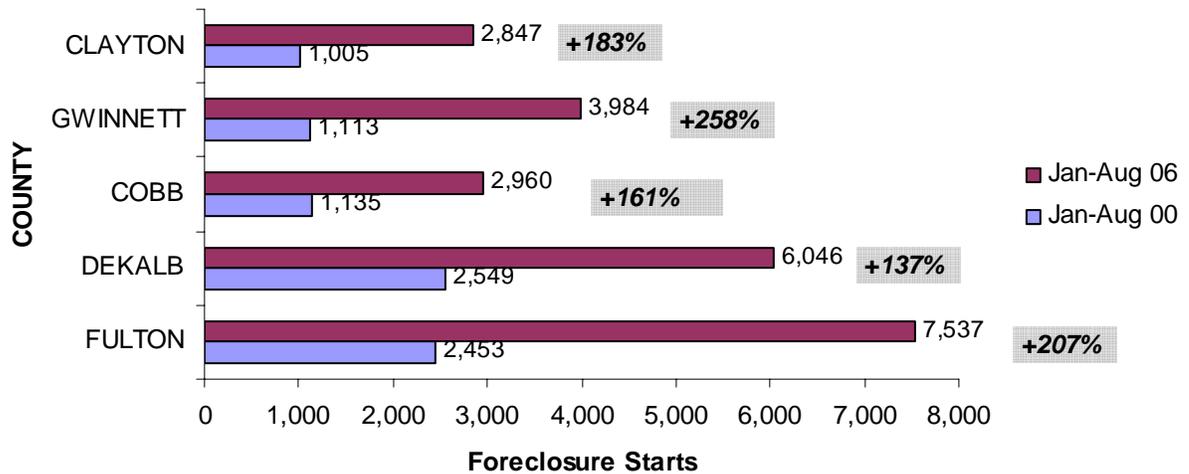
In recent years, mortgage foreclosures of single-family homes have increased at a rapid pace in many major U.S. metropolitan areas. The Atlanta region and Gwinnett County have been no exception to this unfortunate trend. The growth in foreclosures has been due both to an overall change in the types and structures of mortgages being made, especially a large increase in subprime mortgages since 2000, but also due to the deteriorating performance of these higher risk loans. Moreover, unlike some earlier trends in foreclosures, local economic conditions (e.g., changes in unemployment or wages) appear to have played little to no role in these increases.

Besides the substantial growth in subprime lending, two other changes in lending markets have played a role. First, from 2001 to 2005, there was a large increase in the prevalence of alternative, or “exotic” mortgages to borrowers with good credit – which include low or no-documentation loans, interest-only loans, payment-option loans, and piggy-back 80/20’s (where a 20 percent junior mortgage is made in conjunction with an 80 percent senior mortgage). Finally, there was a substantial increase in zero-downpayment mortgages nationally.¹ The increase of these products has increased the overall risk in the mortgage market and, because most of these products involve adjustable rate loans, shifted much of that risk to the homebuyers from the lenders. As interest rates fluctuate, these changes are passed on to the borrower, some of whom are not prepared to deal with higher house payments.

The proportion of outstanding subprime loans that are seriously delinquent have risen from under 10 percent in 2000 to over 13 percent in 2006. The rate of subprime foreclosure starts has almost doubled over this period. But the overall number of foreclosures has increased by much higher than the simple increases in the rates of delinquency and foreclosure rates, because the growth of the subprime lending market has driven up the overall number of higher risk loans on which these rates are calculated. Subprime foreclosures now account for approximately 60% of all foreclosures.

¹ Immergluck, Dan. From the Subprime to the Exotic: Expanded Mortgage Market Risk and Implications for Metropolitan Areas and Neighborhoods, *Journal of the American Planning Association*, forthcoming, 2007.

**Figure 1. Growth in Foreclosures in the Five Core Atlanta Metro Counties, 2000-2006
(first 8 months 2000 to first 8 months 2006 comparison)**



Source: Atlanta Foreclosure Report; EquityDepot.net, 2006

Figure 1 shows that, in the core five-county Atlanta market, the number of foreclosure starts increased from just over 8,200 to more than 23,000 from the first eight months of 2000 to the first eight months of 2006, an increase of over 180 percent. All five counties saw increases in foreclosures of more than 135 percent between 2000 and 2006, but the rate of increase in Gwinnett was the highest at 258%.

Foreclosures, Housing Needs and Neighborhood Stability

Foreclosures can entail significant costs and hardships for those most directly affected. They often involve losing not only accumulated home equity and the costs associated with acquiring the home, but also access to stable, decent housing. Moreover, foreclosures can damage credit ratings, hurting the owners' prospects not only in credit markets but also in labor and insurance markets, and in their ability to find quality rental housing.

The costs of foreclosures are also born by the communities in which they occur. Neighborhoods see values and confidence decline. Cities, counties and school districts then lose tax revenue due to lower values. Even after controlling for other neighborhood characteristics, higher foreclosure levels negatively affect the values of

nearby properties.² For every foreclosure within one-eighth of a mile of a single-family home, property values are expected to decline by approximately 1 percent. And when foreclosures catalyze property vacancy abandonment, these properties can become blighted and havens for crime, begetting a spiral of severe neighborhood decline. Moreover, higher foreclosure levels can contribute to higher levels of violent crime.³

Foreclosures also entail out of pocket costs to local government. William Apgar and Mark Duda found that the direct costs of foreclosure processes and ancillary services (e.g., securing dangerous vacant property, etc.) to city government in Chicago – not counting those due to falling property values -- involve more than a dozen agencies and two dozen specific municipal activities, generating governmental costs that in some cases exceeded \$30,000 per property.⁴

Increases in Foreclosures within the County

To examine changes in foreclosure levels within the county, we obtained address-level foreclosure data from the Equity Depot, Inc. (formerly Atlanta Foreclosure Report) for 2000 through July of 2006. Because residential foreclosures were not distinguishable from commercial and industrial foreclosures until the 2001 data, we compared foreclosures for January to July of 2001 to those in January to July of 2006. In total, foreclosure starts went from 1,065 to 3,386 in the county over this period.

Figures 2 and 3 show the locations of foreclosures started in the January-July 2001 and 2006 periods, respectively. (Census tract totals are presented in Appendix A.) The medium gray shaded census tracts are those which had 1999 median incomes that were below 80 percent of Atlanta MSA median family income. The light gray tracts are those with median incomes that were between 80 and 100 percent of Atlanta MSA median family income.

Comparing Figures 2 and 3 illustrates the strong growth in foreclosures throughout most parts of the county. Table 1 provides summary statistics on the growth

² Immergluck, D. and Smith, G. (2006). The external costs of foreclosure: The impact of single-family mortgage foreclosures on property values, *Housing Policy Debate* 17: 57-79.

³ Immergluck, D and Smith, G.(2006). The impact of single-family mortgage foreclosures on neighborhood crime. *Housing Studies* 21:851.

⁴ Apgar, W. and Duda, M. (2005). *Collateral damage: The municipal impact of today's mortgage foreclosure boom*. Washington, DC: Homeownership Preservation Foundation. May 11. Retrieved December 12, 2006 from <http://www.nw.org/Network/neighborworksprogs/foreclosuresolutions/documents/Apgar-DudaStudyFinal.pdf>.

Figure 2. Residential mortgage foreclosure starts from January to July, 2001

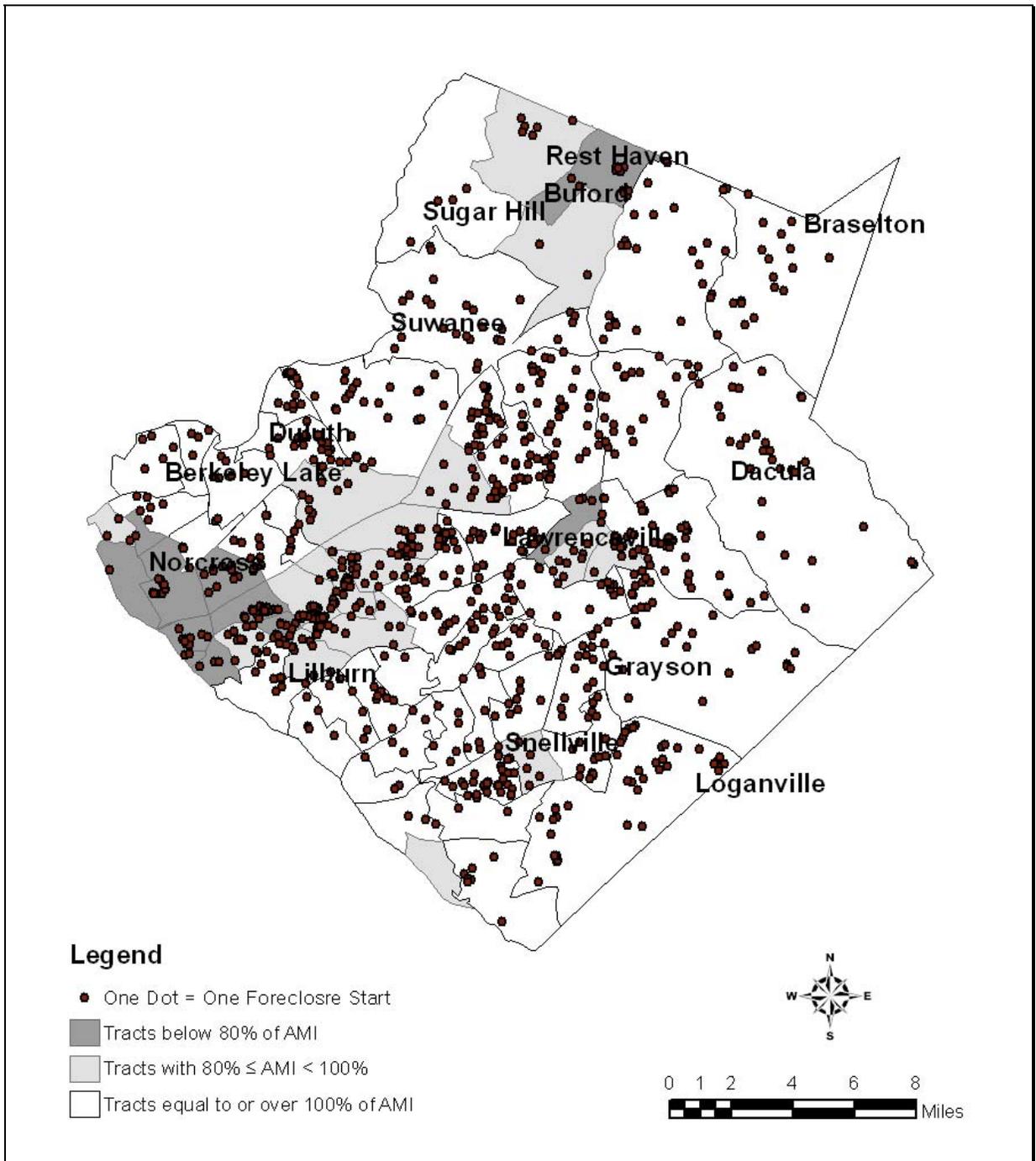


Figure 3. Residential mortgage foreclosure starts from January to July, 2006

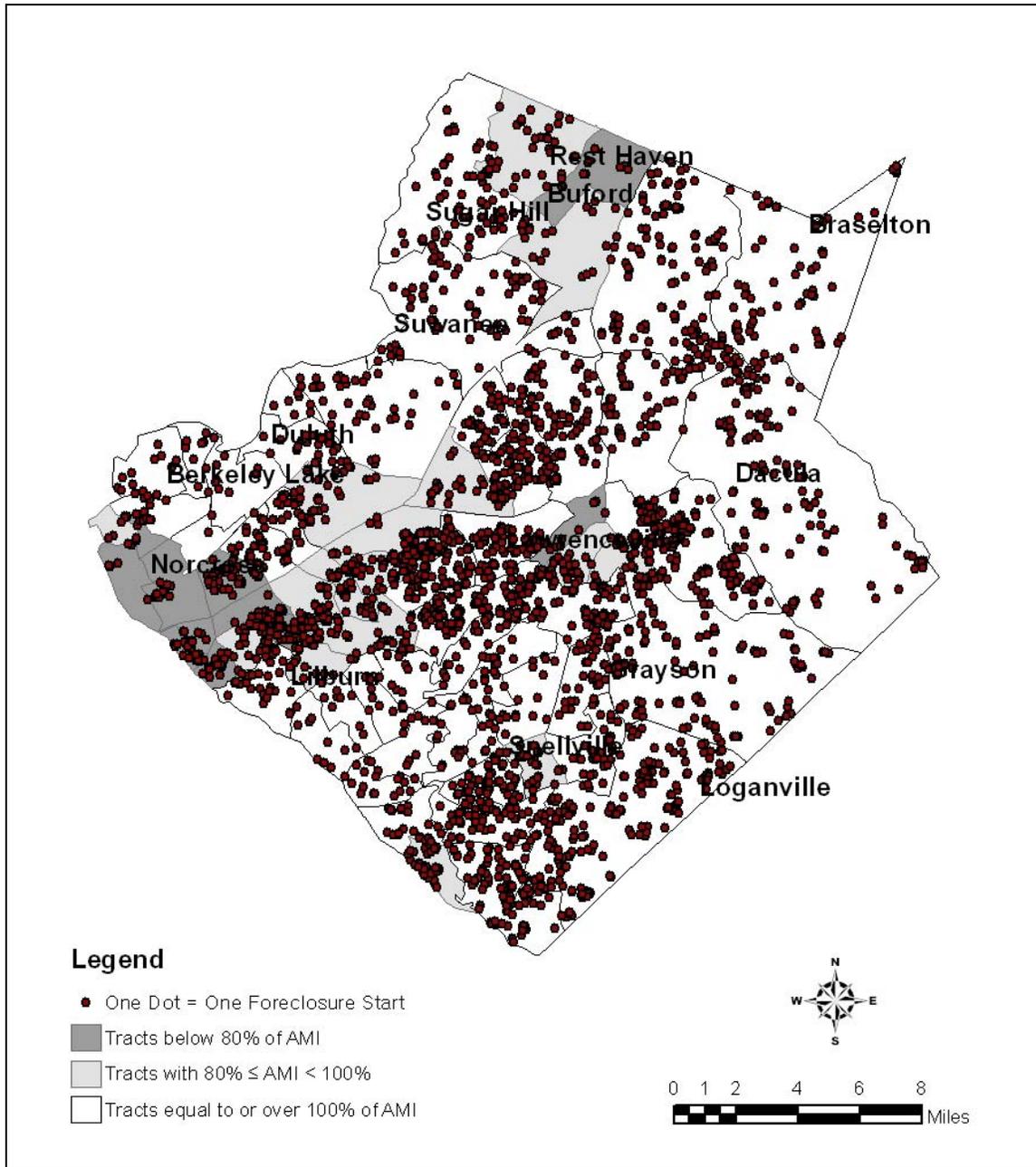


Table 1. Increases in Annualized Foreclosures Across Census Tracts, 2001-2006

<i>Increase in Number of Annualized Foreclosures, 2001 - 2006</i>	<i>Number of Tracts</i>	<i>Cumulative %</i>
Decline	2	2.82%
0	1	4.23%
1-10	16	26.76%
11-25	9	39.44%
26-50	18	64.79%
51-75	6	73.24%
76-100	6	81.69%
101-200	10	95.77%
201+	3	100.00%

Table 2. Increases in Annualized Foreclosures Across Census Tracts, 2001-2006

<i>Percent Increase in Number of Annualized Foreclosures, 2001 - 2006</i>	<i>Number of Tracts</i>	<i>Cumulative %</i>
Decline	2	2.82%
0%	1	4.23%
1-50%	9	16.90%
51-100%	11	32.39%
101-200%	17	56.34%
201-500%	22	87.32%
500-1,000%	4	92.96%
1,000% +	5	100.00%

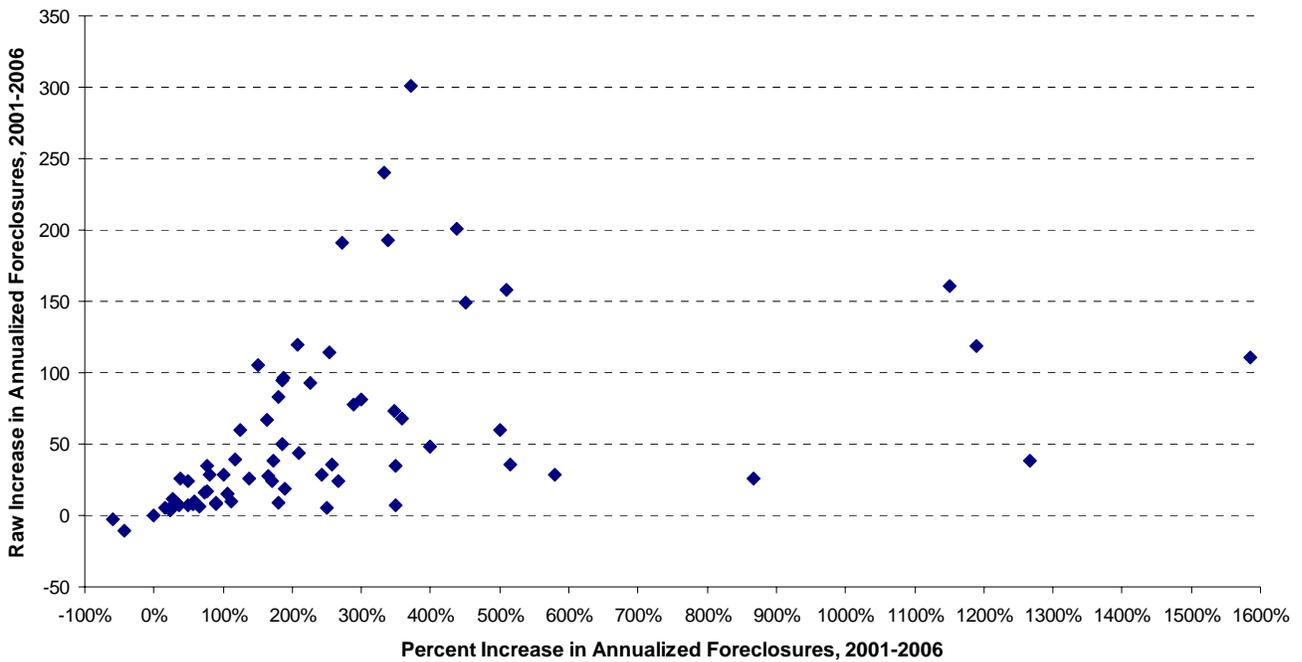
in the number of foreclosures for the 71 Gwinnett census tracts. It shows that in 73 percent (52) of tracts the increase in annualized foreclosures was more than 10; in 35 percent (25) of tracts, the increase was more than 50; and in 18 percent (13) of tracts, the increase was more than 100.

Table 2 provides a similar breakdown of tracts, but this time by percent change in foreclosures. It shows that 83 percent (59) of tracts experienced more than a 50 percent increase in foreclosures over the 2001 to 2006 period. More than 68 percent (48) experienced more than a 100 percent increase in foreclosures, and 44 percent (31) experience more than a 200 percent increase in foreclosures. Thus, the increases in foreclosures, while extremely high in some tracts, was widespread and affected most neighborhoods throughout the county.

To check whether the large percentage growth in foreclosures that has occurred in many neighborhoods might simply be due only to very small initial levels of foreclosures and so not reflect substantial raw increases, we plotted the raw increase in annualized foreclosures against the percentage growth. Figure 4 illustrates that, in general, the tracts with high percentage growth also have high levels of raw increases in foreclosures.

Of course, the raw levels of foreclosures in a census tract or changes in these levels are partly dependent on the number of mortgageable properties in a tract and, more specifically, the number of loans actually taken out in the tract in recent years. (For prime loans, foreclosures tend to occur within the first five-to-six years of origination; for subprime loans this period is considerably shorter, typically 18-36 months.) Therefore, from federal Home Mortgage Disclosure Act data, we calculated the total number of home purchase, refinance and home improvement loans that were originated from the second to fourth years preceding the foreclosure period. For the 2001 period, we summed the number of loans originated in 1997, 1998 and 1999. For the 2006 period, we summed the number of loans originated in 2002, 2003 and 2004. The sum of these loans for each tract

**Figure 4. Raw Increases in Annualized Foreclosures Versus Percent Increases
Gwinnett County Census Tracts, 2001-2006**



formed the denominator of a tract-level foreclosure index. For the numerator, we simply annualized the seven-month foreclosure totals and multiplied the ratio by 100 so that we end up with an annualized foreclosure index in terms of foreclosures per 100 loans. The details of these calculations are indicated in Appendix A.

This analysis suggests that the rate of foreclosures in the county, as measured by foreclosures normalized by preceding loan activity, is increasing substantially, particularly in some parts of the county. Of course, this is partly due to the fact that a larger portion of loans are higher-risk loans, including subprime loans.

Table 3 shows that the mean index for 2001 was 2.28 while the mean for 2006 was 3.79, an increase of 66 percent. The relative variation (coefficient of variation) among the values of the foreclosure index was roughly similar across the two years, equaling 0.60 in 2001 and 0.57 in 2006. Table 3 also indicates the distribution of the foreclosure index values across 7 ranges. While only 7 percent (5) of tracts had an index of 5.0 or more in 2001, 26 percent (18) of tracts had indexes of at least 5.0 by 2006.

Table 3. Summary Statistics and Distribution of Foreclosure Index for 2001 and 2006 Gwinnett County Census Tracts

<i>Foreclosure Index Range (per 100 preceding loans)</i>	<i>2001</i>		<i>2006</i>	
	<i>Number of Tracts, 2001</i>	<i>Cumulative Percentage</i>	<i>Number of Tracts, 2006</i>	<i>Cumulative Percentage</i>
0	1	1.43%	0	0.00%
0.99	9	12.86%	1	1.43%
1.99	26	50.00%	14	21.43%
2.99	18	75.71%	14	40.00%
3.99	8	87.14%	15	61.43%
4.99	4	92.86%	9	74.29%
5.00 or greater	5	100.00%	18	100.00%
Mean	2.28		3.79	
Median	1.96		3.24	
Standard Deviation	1.37		2.16	
Coefficient of Variation (Std. Dev/Mean)	0.60		0.57	

**Figure 5. 2006 Foreclosure Index vs. 2001 Foreclosure Index
Gwinnett County Census Tracts**

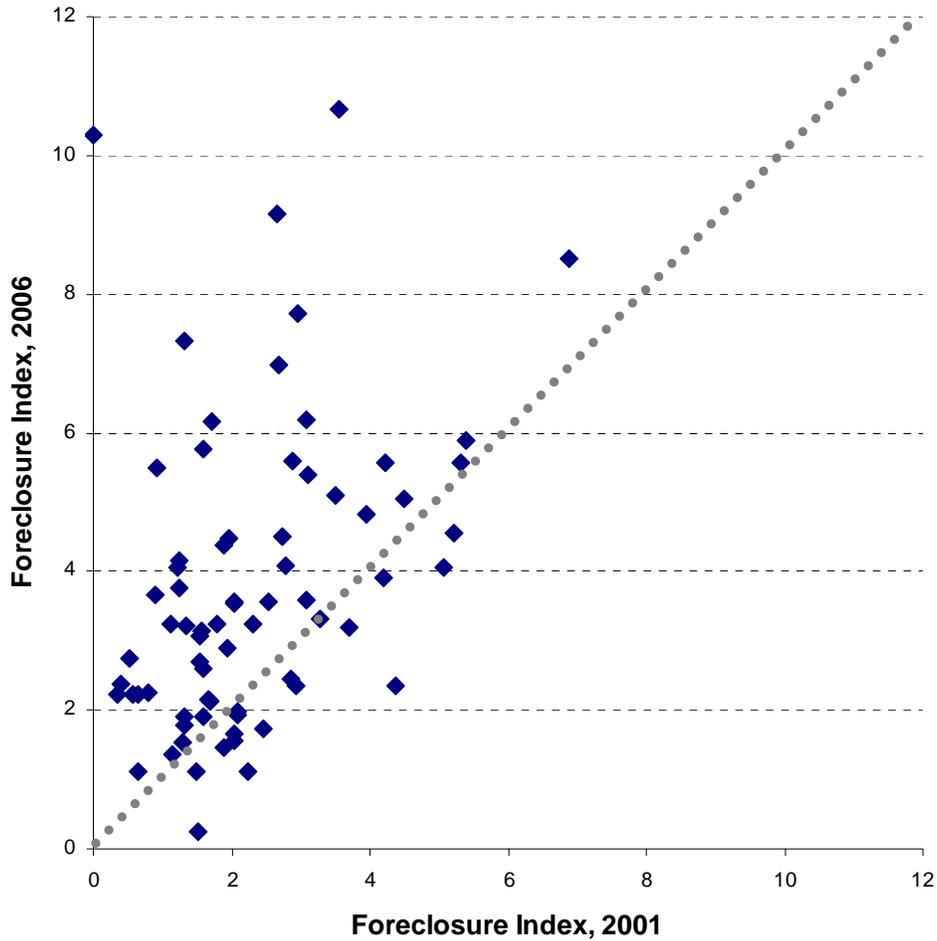


Figure 5 plots the foreclosure index for 2006 versus the foreclosure index for 2001. The dotted 45-degree line serves as a reference line, indicating where a tract would fall if its foreclosure index were identical in 2001 and 2006. Tracts to the northeast of the line are those which experience increases in the index. The figure indicates that many tracts saw large increases in their foreclosure index values.

Table 4 indicates that all but 23 percent (16) of the tracts experienced an increase in the value of the foreclosure index. In 49 percent (35) of the tracts, the index increased

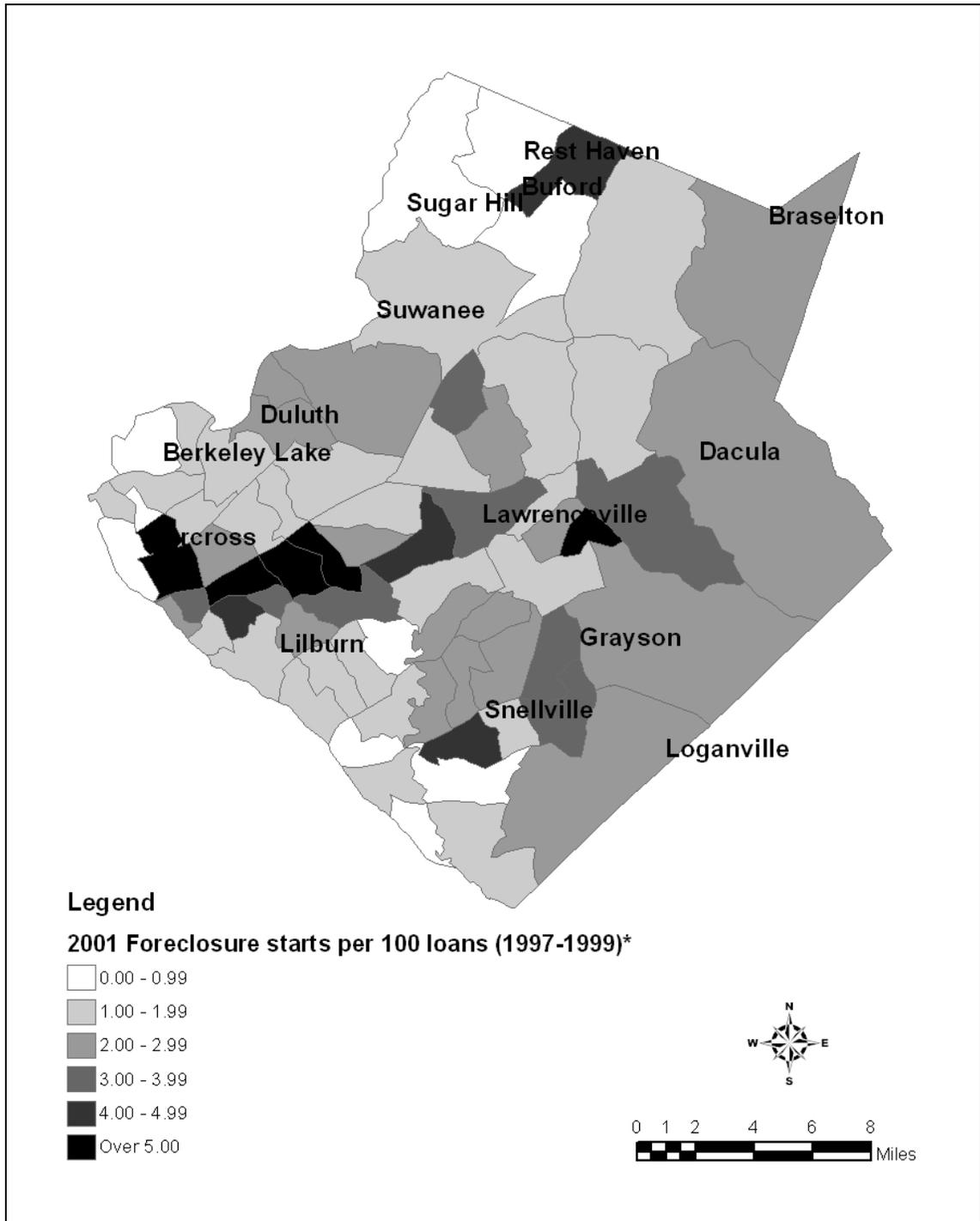
**Table 4. Percent Change in Foreclosure Index, 2001 to 2006
Gwinnett County Census Tracts**

<i>Percent Change in Foreclosure Index</i>	<i>Number of Tracts</i>	<i>Cumulative %</i>
<0%	16	22.54%
0-50%	20	50.70%
51-100%	10	64.79%
101-200%	9	77.46%
201-300%	9	90.14%
301% +	7	100.00%

by more than 50 percent, and in 35 percent (25) of the tracts, the increase was more than 100 percent.

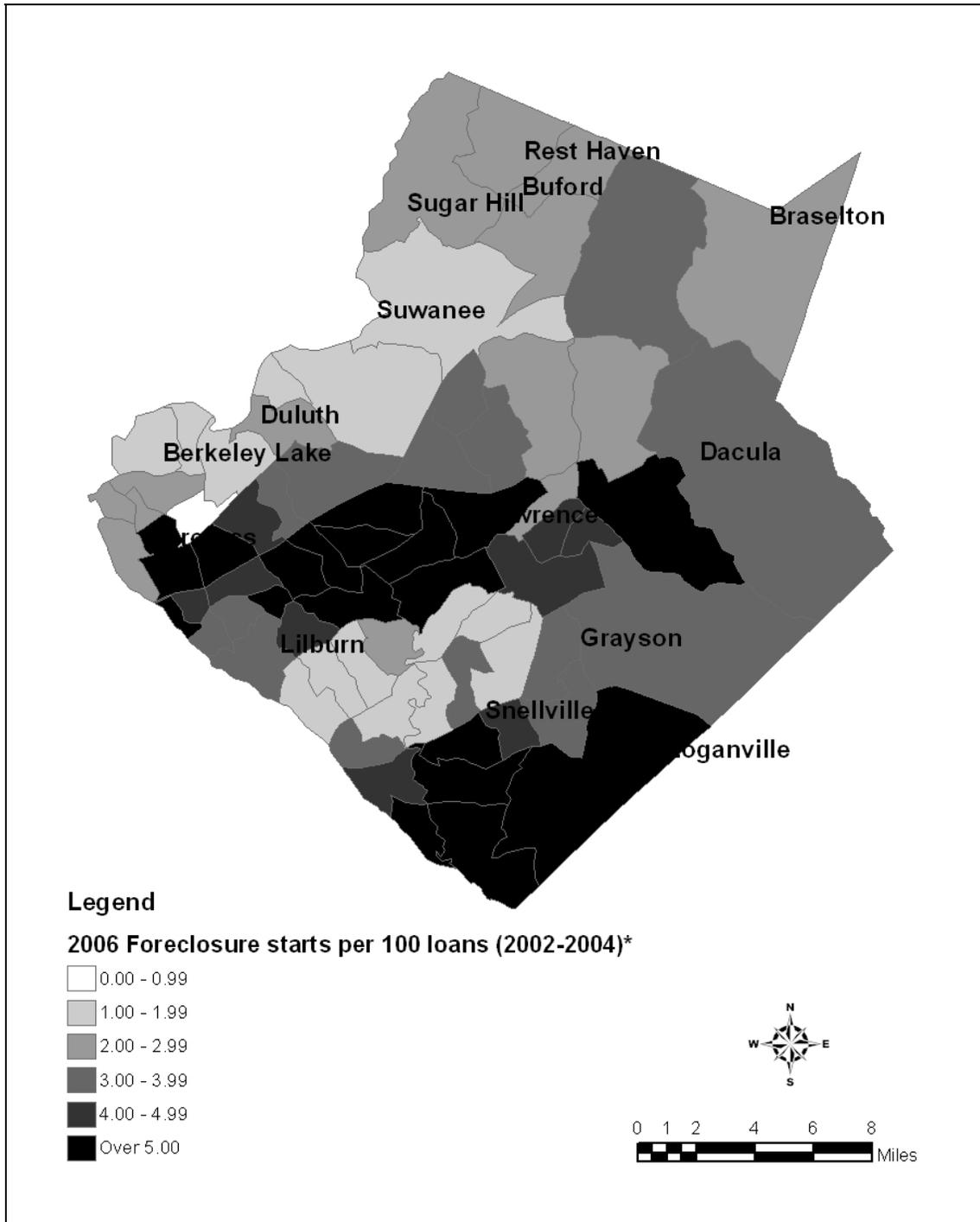
Figures 6 and 7 map the foreclosure index for the 71 census tracts for 2001 and 2006, respectively. Consistent with the analysis above, the figures confirm that most tracts saw significant increases in foreclosure index values. Moreover, the tracts with the highest foreclosure index levels in 2006 were located in the central and southern parts of the county. However, compared to foreclosures in 2001, many parts of the county had relatively high foreclosure index levels, well above a level of 3 per 100 loans.

**Figure 6. 2001 Foreclosure Index:
Estimated 2001 Foreclosure starts per 100 loans (1997-1999)**



* Estimated foreclosures based on annualizing January–July, 2001 data. Denominator is the number of home loans made from 1997 through 1999.

**Figure 7. 2006 Foreclosure Index:
Estimated 2006 foreclosure starts per 100 loans (2002-2004)**



* Estimated foreclosures based on annualizing January–July, 2006 data. Denominator is the number of home loans made from 2002 through 2004.

Appendix A. Number of Foreclosures, Number of Foreclosures Annualized, and Foreclosure Index

Tract	No. of Foreclosures (Jan-Jul, 2001)	No. of Foreclosures (Jan-Jul, 2006)	No. of Foreclosures (Annualized, 2001)	No. of Foreclosures (Annualized, 2006)	Foreclosure Index (No. per 100 loans) 2001	Foreclosure Index (No. per 100 loans) 2006
050103	7	42	12	72	0.655	2.226
050104	4	69	7	118	0.400	2.383
050105	15	9	26	15	4.366	2.359
050106	2	24	3	41	0.527	2.754
050202	34	104	58	178	1.311	1.904
050204	39	54	67	93	2.048	1.550
050205	7	7	12	12	2.048	1.657
050206	26	33	45	57	2.930	2.350
050207	11	51	19	87	1.129	3.243
050304	1	4	2	7	0.797	2.263
050306	10	16	17	27	5.307	5.575
050307	6	17	10	29	0.634	1.114
050308	5	10	9	17	1.295	1.542
050309	11	15	19	26	1.490	1.117
050310	8	17	14	29	1.677	2.159
050311	3	1	5	2	1.504	0.244
050312	16	61	27	105	2.946	7.717
050313	7	35	12	60	1.242	4.167
050314	7	24	12	41	1.560	3.148
050315	3	8	5	14	1.602	2.592
050316	1	5	2	9	0.568	2.238
050403	12	38	21	65	1.792	3.233
050410	10	26	17	45	2.730	4.511
050411	16	45	27	77	3.117	5.383
050415	4	25	7	43	1.207	4.058

Appendix A. Number of Foreclosures, Number of Foreclosures Annualized, and Foreclosure Index

Tract	No. of Foreclosures (Jan-Jul, 2001)	No. of Foreclosures (Jan-Jul, 2006)	No. of Foreclosures (Annualized, 2001)	No. of Foreclosures (Annualized, 2006)	Foreclosure Index (No. per 100 loans) 2001	Foreclosure Index (No. per 100 loans) 2006
050416	0	42	0	72	0.000	10.300
050417	8	13	14	22	3.941	4.813
050418	6	26	10	45	2.665	9.152
050419	13	22	22	38	4.197	3.900
050420	5	19	9	33	1.246	3.765
050421	18	21	31	36	5.212	4.551
050422	12	55	21	94	3.541	10.666
050423	21	38	36	65	5.397	5.879
050424	27	47	46	81	6.878	8.508
050425	5	11	9	19	1.307	1.777
050426	6	11	10	19	1.147	1.368
050427	2	17	3	29	0.347	2.235
050428	8	12	14	21	1.897	1.456
050429	8	17	14	29	1.589	1.909
050430	3	20	5	34	0.894	3.667
050507	26	93	45	159	3.076	6.184
050509	42	182	72	312	3.507	5.089
050510	28	42	48	72	3.707	3.204
050511	13	35	22	60	1.347	3.214
050512	30	86	51	147	2.039	3.545
050513	41	102	70	175	1.936	2.886
050514	24	63	41	108	1.541	2.697
050515	18	110	31	189	1.602	5.772
050516	19	106	33	182	1.963	4.470
050517	16	63	27	108	1.704	6.157
050518	24	78	41	134	2.675	6.979
050519	30	85	51	146	4.496	5.053

Appendix A. Number of Foreclosures, Number of Foreclosures Annualized, and Foreclosure Index

Tract	No. of Foreclosures (Jan-Jul, 2001)	No. of Foreclosures (Jan-Jul, 2006)	No. of Foreclosures (Annualized, 2001)	No. of Foreclosures (Annualized, 2006)	Foreclosure Index (No. per 100 loans) 2001	Foreclosure Index (No. per 100 loans) 2006
050520	5	9	9	15	1.681	2.128
050521	11	26	19	45	2.785	4.082
050522	13	23	22	39	5.076	4.048
050602	33	146	57	250	2.047	3.552
050603	27	144	46	247	1.546	3.061
050604	27	75	46	129	2.852	2.458
050704	47	223	81	382	2.875	5.583
050705	41	152	70	261	2.543	3.568
050709	8	102	14	175	1.329	7.335
050712	16	21	27	36	2.086	1.935
050713	10	12	17	21	2.229	1.125
050714	8	13	14	22	2.084	1.984
050715	8	22	14	38	2.313	3.243
050716	28	63	48	108	4.225	5.556
050717	6	75	10	129	0.920	5.483
050718	15	19	26	33	2.461	1.721
050719	8	29	14	50	1.897	4.372
050720	17	34	29	58	3.289	3.304
050721	19	42	33	72	3.081	3.593

Appendix B. Details on Foreclosure data

Foreclosure data within Gwinnett County were obtained from Equity Depot (www.equitydepot.net), which compiles records of individual foreclosure notices for the Atlanta metropolitan area. Data have the dates that the foreclosure was initiated and street address as well as other information about foreclosure. Foreclosure start dates obtained range from January 2000 to July 2006. Using street address, foreclosure data were geocoded to the streets in Gwinnett County. Geocoding was performed by both ArcGIS using Tiger street files and an Internet-based service using its own street files (<http://www.batchgeocode.com>).

Due to errors in street address, some data could not be geocoded accurately. In addition, some foreclosures appear to be located outside Gwinnett County, possibly due to incorrect addresses, so those data were deleted from the data set. The success rate was better when using the Internet-based service. The street data used in the Internet-based service are more recently updated than the Tiger file used in ArcGIS, so the different success rates are not surprising. This is consistent with the pattern of success rate over time. In ArcGIS geocoding, the older data show better success rates, while in Internet-based service, the newer data show better success rates. The total number of foreclosures, the number of foreclosures geocoded, and the success rates are presented in Table B-1.

Table B-1 Foreclosure Data Geocoding Results

Year	Total number of foreclosures	<u>ArcGIS Result</u>		<u>Internet Service Results</u>	
		Number geocoded	Success rate	Number geocoded	Success rate
2000	1,675	1,316	78.6%	1,546	92.3%
2001	2,306	1,825	79.1%	1,995	86.5%
2002	3,561	2,835	79.6%	3,442	96.7%
2003	4,735	3,580	75.6%	4,645	98.1%
2004	5,130	3,690	71.9%	5,075	98.9%
2005	5,122	3,482	68.0%	5,050	98.6%
2006(pt)	3,449	2,288	66.3%	3,414	99.0%

Appendix F – Land Use Allocation

Gwinnett Land Use Allocation for the Unified Plan – Process and Modeling Approach

Overview

The generalized maps that will guide future land use patterns in the Unified Plan and the rezoning acreages targeted are the result of a rigorous land use allocation and testing process that is summarized in this Appendix.

Using detailed land use data from the County's GIS system, the study team translated the intentions, policies and assumptions of the scenarios into land use types and acreages and tested their ability to be accommodated, in desired locations, given current land uses. Current zoning was not treated as a constraint in these exercises since a new and preferred pattern was being tested and sought. While allocation was directed to vacant land, the possibility of redevelopment was incorporated in the modeling, given the limited amounts of greenfield land and the increased growth projections of the International Gateway scenario.

The approach described here is a mix of mechanical allocation following defined rules (rule based models), informed by expert judgment and reasonability reviews. In other words, maps or tables showing allocations of housing, employment or acreages were subject to commonsense review by staff and the market expertise of RCLCo. Rules of allocation were then tweaked and the models rerun until a plausible pattern emerged. In some cases, as many as 8 iterations at the TAZ level were needed to achieve an acceptable outcome. Some scenario assumptions (e.g. a rural Eastern County) might never be yielded by market-simulating models like those used here and these were simply allocated as givens or Overlays in the modeling process.

The allocation process was approached at three scales: countywide, at the SCA level and at the TAZ level. Countywide totals for future growth differed by scenario and their development has been discussed in Appendix C. A summary of the forecast methodology is also at the end of this report. The SCA allocations are discussed below and this is followed by an explanation of the more complex TAZ level modeling. Finally, the way in which the output from this process was used by other models (transportation, sewer and fiscal) is touched on.

Sub County Area (SCA) level allocations

The plan alternatives were developed and quantified in an extended process spanning more than a year. The first step consisted of developing a "market-driven" forecast that described probable conditions through 2030 in the absence of any major policy changes. This scenario was quantified in terms of economic and demographic variables for Gwinnett County and its eight sub-county-areas (SCAs) using a forecasting methodology described in Appendix C. The model results were then subjected to a multi-stage review process in which the

consultant team and county staff assessed the physical feasibility and probable market acceptance of the new development forecasted for each SCA. The resulting consensus forecast was dubbed the “Middle-of-the-Pack” scenario and held unchanged thereafter.

The other scenarios were initially quantified by pivoting off the Middle-of-the-Pack forecast using the team’s informed judgment to approximate an SCA distribution of population, housing and employment that appeared to be consistent with the scenario’s intent and with assumptions about the land use market’s elasticities. Starting with pre-specified population and employment totals:

- the high-growth International Gateway scenario was fleshed out in several versions involving different assumptions about residential settlement patterns, dwelling types, income distributions and employment levels.
- The Radical Restructuring alternative – resembling Middle-of-the-Pack in overall growth but achieving higher incomes and a better employment base – was quantified in more geographic detail than the Gateway due to its municipal linkages.
- Regional Slowdown became a scaled-down version of the Middle-of-the-Pack with more adverse income trends.

These initial scenario descriptions were subjected to an expert review process resembling that for the market-driven forecast. The new process spanned a much longer period, however, to allow feedback from the study’s land-use, fiscal and transportation models. At length the Radical Restructuring alternative was set aside from further consideration. The planning team determined that this scenario, while feasible in concept, was too dependent upon actions by other parties to be an appropriate planning focus for Gwinnett County. The Regional Slowdown scenario was also discarded since it represented an outcome that was both undesirable and avoidable.

The SCA level allocations yielded in the above process were treated as control totals by SCA for the further allocations of population, housing and employment, as converted to land use acreages, to the TAZ level.

TAZ Allocation Overview

The model used a series of algorithms to allocate land use to each parcel in the county. These parcels were then aggregated to the TAZ (Traffic Area Zone) level. Analyzed individually, the allocations at the parcel level are likely to be inaccurate due to the fact that the attractiveness of each parcel used as an input to allocation was very general and not necessarily parcel specific. For example, given 2 adjacent vacant parcels, it was very hard to justify why one was developed while the other was not. However, this inaccuracy is abstracted out and minimized when all the individual parcel allocations are averaged over the larger TAZ area.

Overview of Allocation Process

Beyond the words, overall numbers and concepts associated with the scenarios, generalized depictions of their spatial patterns were developed. Figures 1 through 3 capture the land use concepts for the three surviving scenarios.

Figure 1: Regional Slowdown Scenario

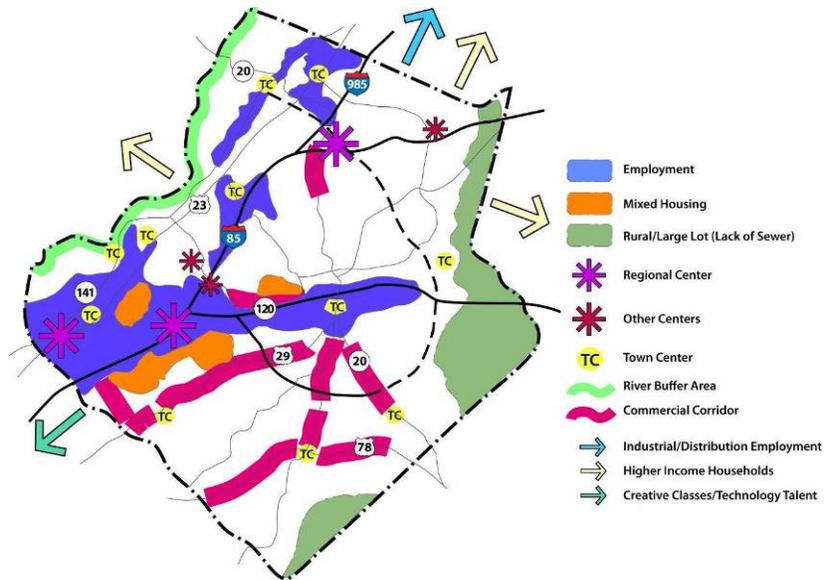


Figure 2: Middle of the Pack Scenario

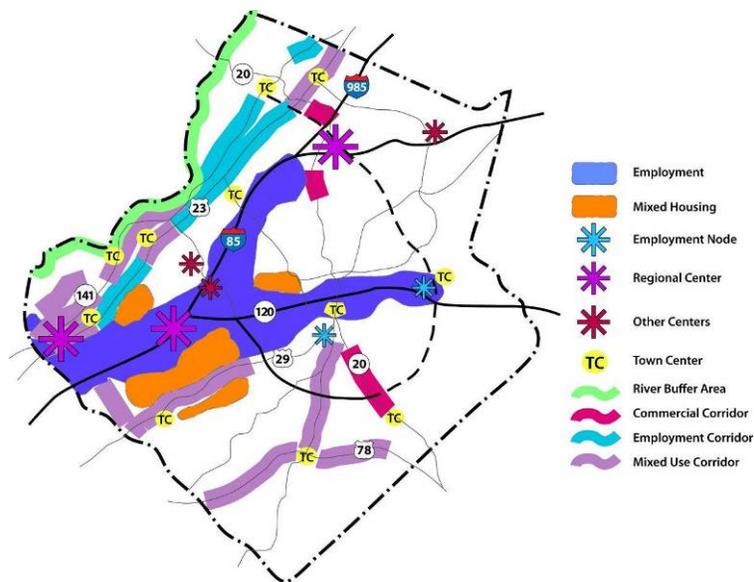
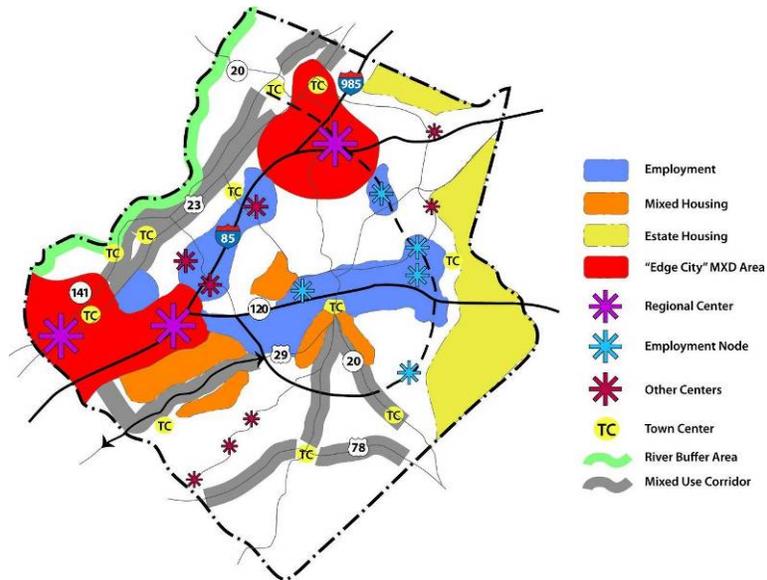


Figure 3: International Gateway Scenario



Moving from the general concepts represented by the above sketches to a more specific and concrete allocation of land uses that could be evaluated against various criteria represented a significant work effort that could only be executed via some modeling or simulation process, given the size and complexity of the County. Because the actual distribution of future land uses is at the heart of the Unified Plan, it is very important that the method used to develop these allocations is clearly explained.

At a high level the following overall process was used to allocation land uses to parcel that were subsequently aggregated up to the TAZ level for further use in the Unified Plan.

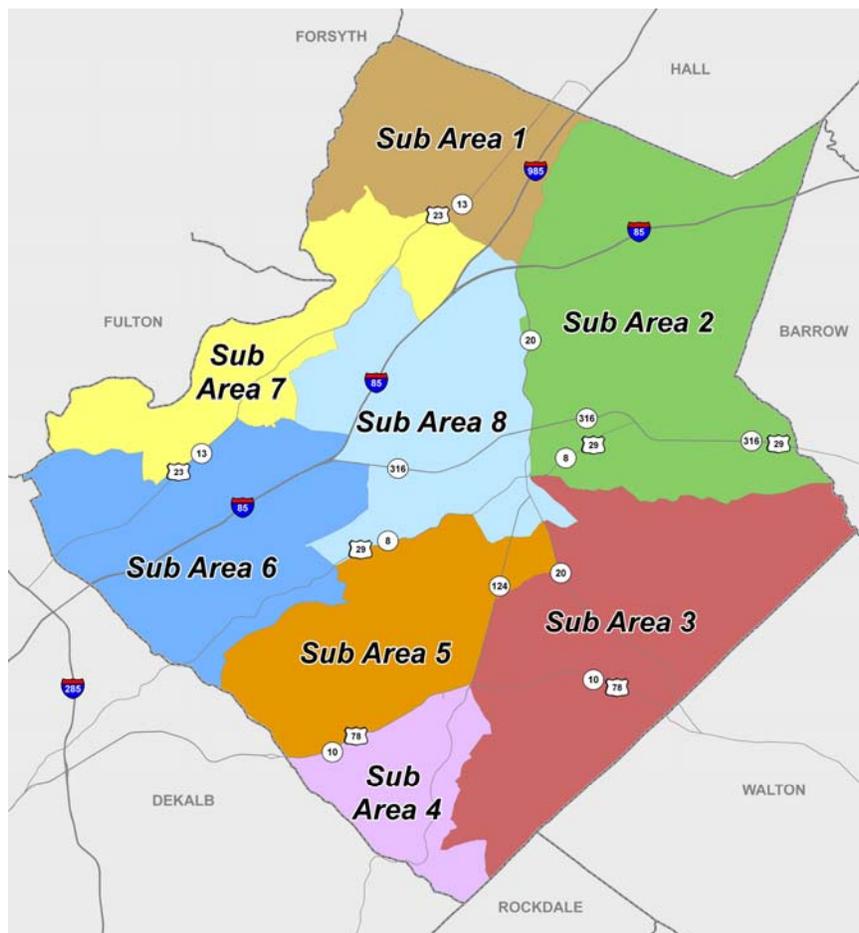
Converting Scenario Concepts into Land Use Allocations

This was a two step process, mixing modeling with expert judgment, starting at a coarser geography of 8 Sub County Areas or SCAs (see Figure 4) and proceeding to a finer grain of Traffic Analysis Zones or TAZs, (see Figure 5), which was in turn based on a parcel level database in the county's GIS system. These processes are described in turn.

Sub County Areas

The various scenarios described in the previous section were initially quantified by drawing upon the Middle-of-the-Pack forecast and a description of buildout conditions under present zoning rather than by reusing the allocation model. Starting with pre-specified population and employment totals, the high-growth International Gateway scenario was fleshed out in several versions involving different assumptions about residential settlement patterns, dwelling types, income distributions and employment levels. The Radical Restructuring alternative – resembling Middle-of-the-Pack in overall growth but achieving higher incomes and a better employment base – was quantified in more geographic detail than the Gateway due to its municipal linkages. Regional Slowdown became a scaled-down version of the Middle-of-the-Pack alternative with more adverse income trends.

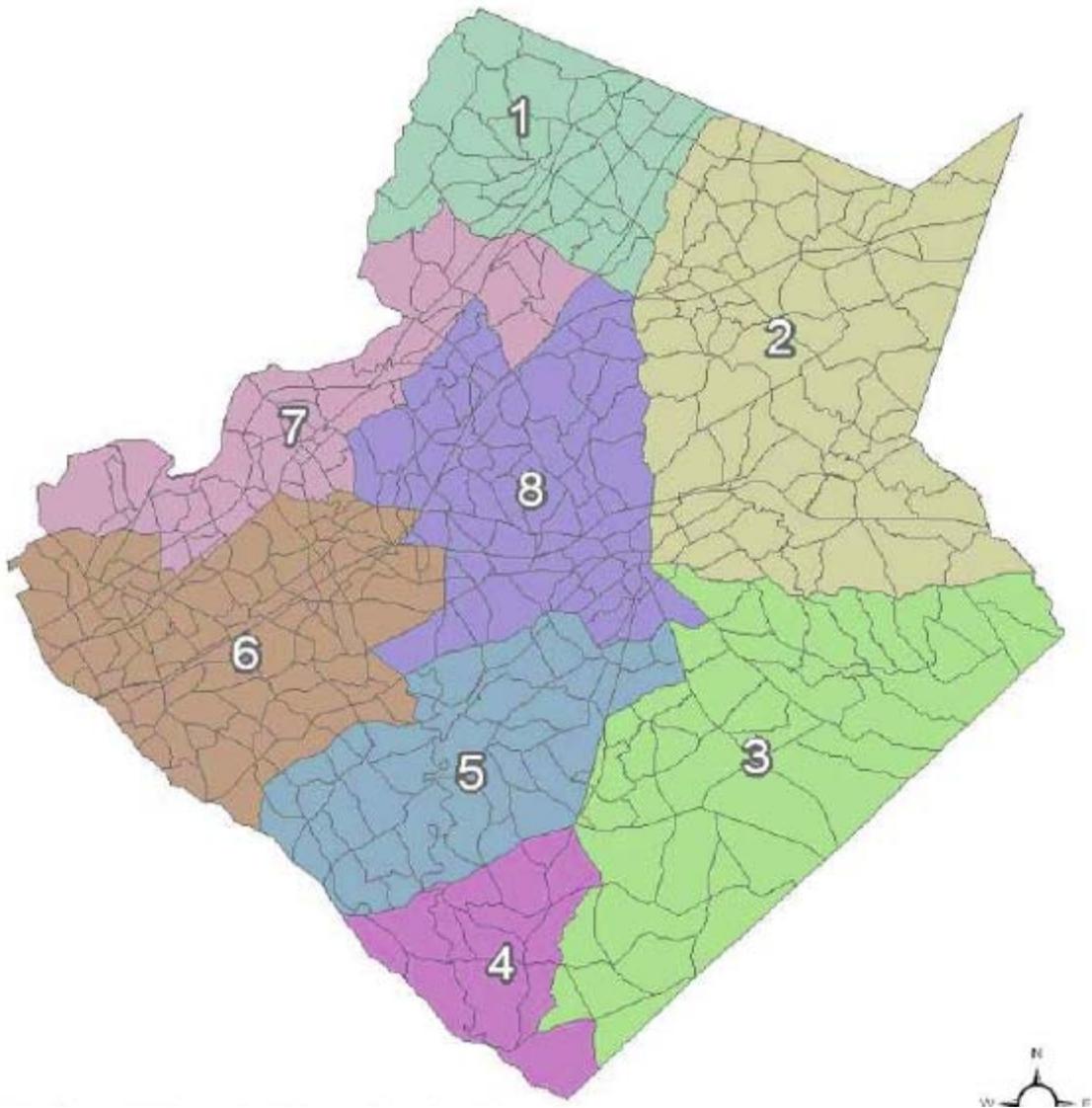
Figure 4: Gwinnett County Sub County Areas



Transportation Analysis Zones

The conversion of the SCA level forecasts, treated as control totals, down to the finer geography of TAZs was accomplished via an allocation model. This model used a set of rules to allocate households and jobs to parcels throughout the county.

Figure 5: Gwinnett County Transportation Analysis Zones (TAZs)



To convert acreages to employment and household, densities of future growth were assumed with the guidance of RCLCo, the Plan’s market analysts. Tables 4 and 5 give these densities (or intensities expressed as Floor Area Ratios or FARs) for residential and non-residential land uses. More detail on these conversions and on other related assumptions can be found in at the end of this Appendix.

To allocate projected employment and household to the county’s land areas, a broad set of factors that would influence the relative attractiveness of land was developed. These factors, 12 in all, were used to “score” the land areas for each of the 11 land use types (see list of land use types on Table 1). The factors are commonsense in nature and weights were established as an initial judgment that was later refined by the team and County over numerous iterations of outcomes. Table 7 reflects the final weightings used.

Additional features of the allocation process warrant mention. These addressed Conversion Difficulty, Expert Opinion Bonus, No Change Bonus and Overlays. Each of these is described in detail in the Allocation Model details. The additional features could be different for different scenarios.

The sequence in which the land uses are allocated is crucial since the first allocated have a much larger set of options than the last uses allocated. The logic of the allocation priority used in the modeling was that the overriding Overlays should go first, followed by the “highest and best” uses that would outbid lesser uses to gain their preferred locations. Table 1 shows the sequence used in the model.

Multiple iterations of each scenario and many tweaks to the model were needed before the team was satisfied that the land use patterns and outcomes were persuasive enough for testing. The land use outcomes are reported at the TAZ level visually and in tabular form (examples are shown in Figures 6 and 7). Planning Districts boundaries match the TAZ boundaries so the roll up to Districts is simple.

The actual allocation in the model is done at the parcel level but this is an illustrative and hypothetical allocation. While the model knows if land is vacant, it is entirely unaware of whether a particular parcel is actually available for development or constrained. This is not a problem when the results are rolled up into the TAZ level since each TAZ has many parcels and the errors of detailed allocation that inevitably accompany such modeling “come out in the wash”. Consequently, no reporting occurs at the parcel level.

However, there are other models that require other geography domains; for instance, the sewer model requires the data in the sewer sub-basin level. But the TAZ boundary and sub-basin level do not match up well, so the sub-basin aggregation is done at the parcel level, instead of conversion from TAZ into sewer sub-basin. Therefore, there is a need to allocate land use, employment, and population to a fine enough resolution that it can be used for other models for realistic planning.

Figure 6: High-Level Land Use Allocation Process

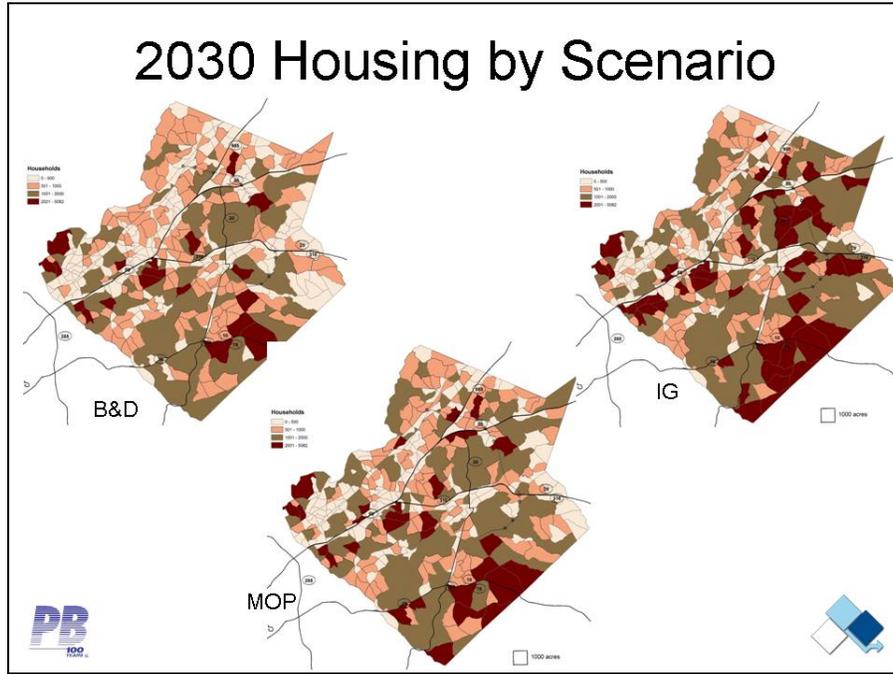
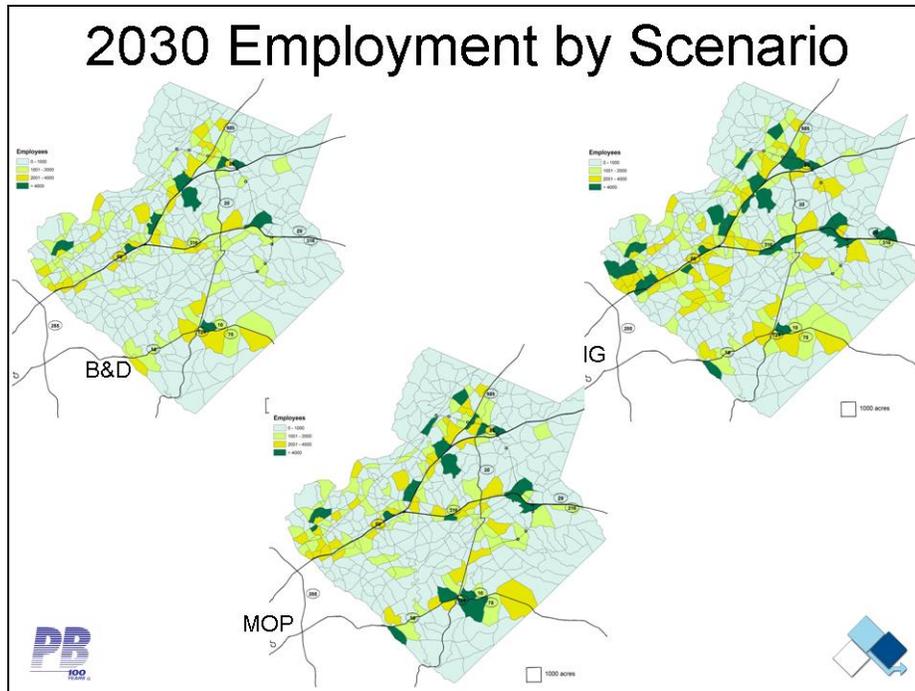


Figure 7: High-Level Land Use Allocation Process

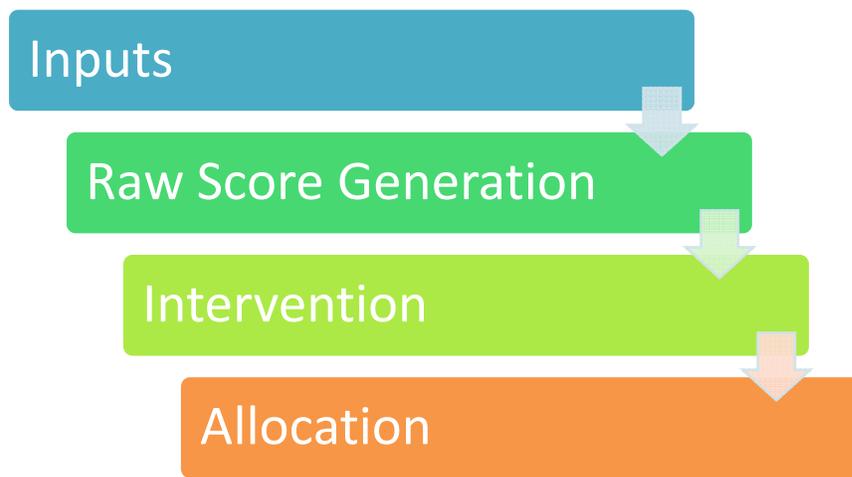


Details of Allocation Process

At the highest level, allocation follows a 4-step process:

- Each parcel was characterized according to a number of attributes that described its potential attractiveness for developments of different types (e.g.: commercial real estate is attracted to busy intersections, but single family dwellings aren't)
- Each parcel's attributes were used to develop a score for every potential land use.
- The planning team made interventions where necessary to show the impact of policies that would run counter to pure market forces.
- The allocation step matched the scenario's land use requirements for each SCA with the available land. This matching allocated land use based on market forces defined by the raw scores as modified by the interventions.

Figure 8: High-Level Land Use Allocation Process



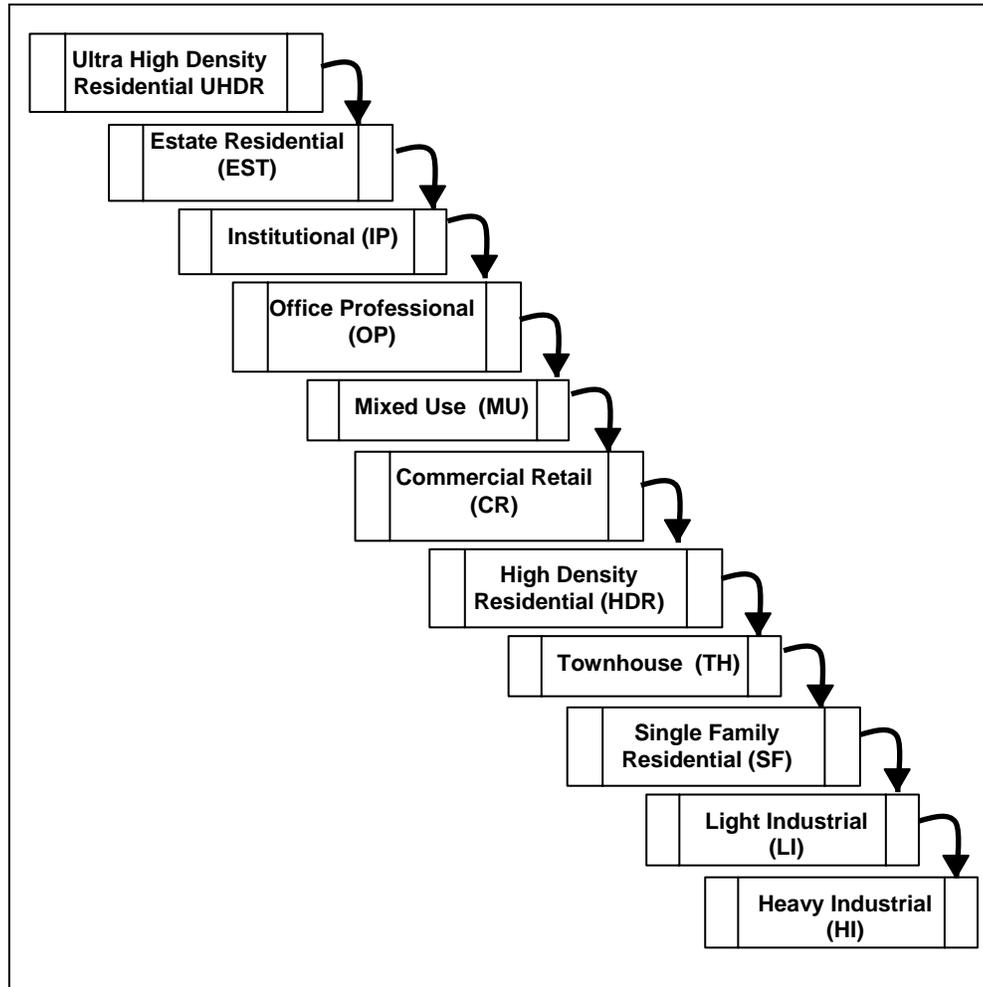
All land use types compete for their optimal location and condition with other types, so the allocation order of each land use type is an important determinant of the outcome. The appropriate sequence, therefore, was also the subject of much discussion and iteration. Once the parcels were scored, they were allocated in a priority order as follows:

Table 1: Land Use Types and Priority Order

1. Ultra High Density Residential (UHDR)
2. Estate Residential (EST)
3. Institutional (IP)
4. Office Professional (OP)
5. Mixed Use (MU in both MAC, also known as red area and city)
6. Commercial Retail (CR)
7. High Density Residential (HDR)
8. Townhouse (TH)

9. Single Family Residential (SF)
10. Light Industrial (LI)
11. Heavy Industrial (HI)

Figure 9: Land Use Allocation Order



The choice of allocation order was based on several considerations:

- 1) Any overlay defining an intervention was scored higher than any non overlay use.
- 2) The highest value land uses or high yielding land uses were allocated next because high density uses usually outbid lower density uses when land is purchased.
- 3) The land use types that were going to need a lot of acreage went toward the end; otherwise, there would be very little selection for the remaining land use types. Therefore the residential types place higher than the industrial types, the residential types starting with the highest density and lowest acres taken type.

Note the following:

- Under the first category, UHDR and some MU were added to the model by planning department overlays, so they were effectively “set” at the beginning of a given scenario.
- IP was also supposed to be allocated using planning department overlays; however, it was difficult to determine where the new IP was going to be. Therefore IP was allocated along with OP because it was assumed that most of the IP were office related.
- Both Parks and Recreation (PRC) and Telecom and Utilities (TCU) were dropped from the allocation list because no-one could specify where such overlays should be. The PRC and TCU employees accounted for very few employees and would have a minimal effect on the allocation result. The PRC and TCU employees were later distributed uniformly across the county.

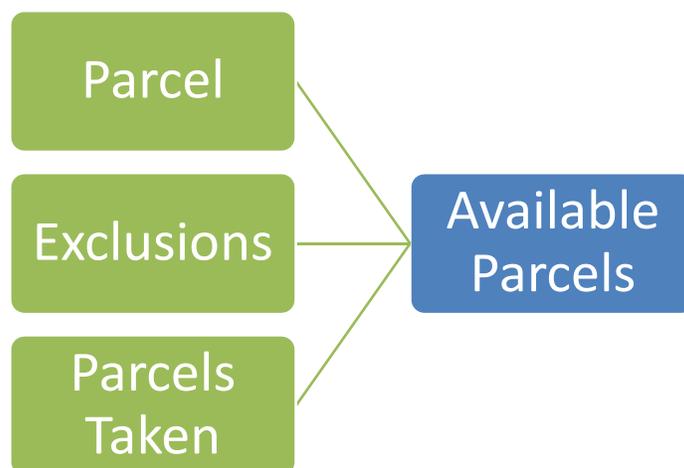
The following sections describe the allocation procedure itself in more detail. The overall procedure works the same for each land use type.

Inputs

There are three inputs to the allocation process. The inputs are processed and merged into the candidate set of available parcels that progress through the rest of any particular allocation iteration.

There are 3 main pieces of data that form the set of available parcels for each land use allocation Parcel, Exclusion and Parcels Taken. Each is discussed below.

Figure 10: Inputs



Parcel

The base set of parcel data used in this project was from 2005, as provided by Gwinnett County (James Pugsley in the Long Range Planning Division was the primary point of contact with the County for this work).

The initial parcel data contained the 3-digit property class, but had no land use and no number of households attached to it. This information was needed for modeling so the parcels were linked back to the 2004 parcel data to retrieve the land use and number of households. Unfortunately, the new parcel set of 2005 had been spatially realigned, which made the matching complicated. These problems were overcome and the County approved the baseline data set. The County later sent some updated parcels that had changed from the 2005 baseline data. These changes were incorporated into the model and will be discussed later.

Exclusions

Some parcels were entirely inappropriate for certain types of development due to their physical characteristics (e.g. a factory cannot be built on a small parcel). As a result, a large (generally -10.0) modifier was added to these parcels to ensure that they were not developed for a given use. The exclusions table mimics real estate market preferences and operations.

Table 2: Exclusions

-	<u>CR</u>	<u>OP</u> ¹	<u>LI</u>	<u>HI</u>	<u>MUR</u>	<u>MU</u>	<u>EST</u> ⁴	<u>SF</u>	<u>TH</u>	<u>HDR</u>	<u>UHDR</u> ³
Park, Row and Water in current land use	exclude	exclude	exclude	exclude	exclude	exclude		exclude	exclude	exclude	
5 miles away from highway interchange			exclude	exclude							
CR in current land use				exclude				exclude			
OP in current land use			exclude	exclude				exclude			
IP in current land use			exclude	exclude				exclude			
LI in current land use								exclude ²			
HI in current land use					exclude	exclude		exclude ²	exclude ²	exclude ²	
MU in current land use											
SF in current land use			exclude	exclude							

-	<u>CR</u>	<u>OP</u> ¹	<u>LI</u>	<u>HI</u>	<u>MUR</u>	<u>MU</u>	<u>EST</u> ⁴	<u>SF</u>	<u>TH</u>	<u>HDR</u>	<u>UHDR</u> ³
TH in current land use			exclude	exclude				exclude			
HDR in current land use			exclude	exclude				exclude			
UHDR in current land use	exclude	exclude	exclude	exclude	exclude	exclude		exclude	exclude	exclude	
1 miles within executive housing			exclude	exclude							
Parcel smaller than 1 acre				exclude						exclude	
Parcel greater than 40 acre	exclude										
Outside City Limit						exclude					
Within red area								exclude ²			
Outside red area					exclude						
Not on Road Frontage	exclude										

¹ Allocated along with OP

² These were not excluded for the International Gateway Scenario

³ Only had overlay layers

⁴ No New Estate was expected in the model, except that all remaining agriculture land use was turned into estate in the International Gateway scenario

Parcels Taken

The land use allocation is done in a sequential order and each parcel can only belong to one land use type. So if a parcel is taken earlier by another land use type, that parcel is no longer available for another type of land use allocation

Available Parcels

The resulting dataset is a list of available parcels with attributes describing each parcel (e.g.: its size and current use).

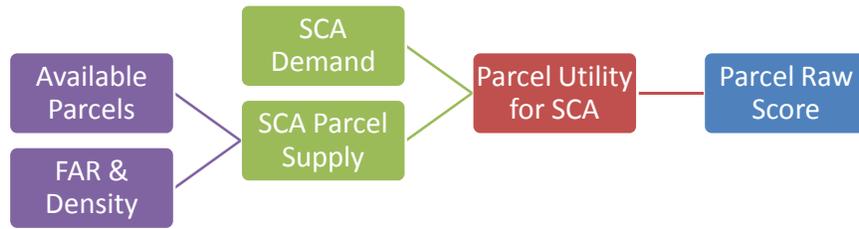
Raw Score Generation

A scoring system rated each parcel for every possible land use. The scoring system used the following data:

1. SCA Demand
2. FAR and Density
3. SCA Parcel Supply
4. Parcel Utility Score

A high level diagram of the process is shown here followed by a more detailed description of each.

Figure 11: Raw Score Generation



SCA Demand

The Countywide and SCA model by Dr. Tommy Hammer provided control numbers for each SCA. The 8 employment types used for the socio-economic projections were not exactly matched to the parcel commercial land use types and therefore, some conversions were necessary. Based on input from RCLCo and the other consultants, the final matrix was as follows:

Table 3: Breakout of Socio-Economic Employment Categories into Parcel Land Use Type

From	To						
	IP	PRC	CR	OP	LI	HI	TCU
Government	95%	5%					
Retail			80%	20%			
FIRE			20%	80%			
Services			40%	40%	20%		
Manufacturing					40%	60%	
Wholesales					100%		
TCU					20%		80%

Note that the Construction employment category was not mapped to any of the land use types. Construction workers were allocated based on where new development was occurring within the County.

FAR and Density

Based on information from RCLCo (Sarah Kirsch and Todd Noell) and input from other consultants, the following Floor Area Ratio (FAR) list and densities were used for the scenarios. These densities define how much land is needed to satisfy a certain demand.

Table 4: Floor Area Ratios for Different Land Use Types

Land Use Type	Area	
	Major Activity Center (MAC)	County
CR (Commercial Retail)	0.5	0.25
OP (Office Professional)	0.5	0.25
IP (Institutional Public)	0.5	0.25
Light Industry	0.25	0.25
Heavy Industry	0.13	0.13
MUR (Mixed Use in MAC only)	1	N/A
MU (Mixed Use)	0.5	0.5

The residential density list (households per acre) was as follows:

Table 5: Residential Densities

Land Use Type	Area						
	Middle of the Pack		International Gateway				
	MAC	County	MXD	Rural	SCA 6, 7, 8	MAC	County
SF (Single Family)	3	3	6	0.5	4	3	3
TH (Townhouse)	10	10	10	10	14	10	10
HDR (High Density Residential)	18	18	18	18	22	18	18
UHDR (Ultra High Density Residential)	25	25	25	25	32	25	25
MU Res (Mixed Use Residential Part)	10	10	10	10	10	10	10
MUR Res (Mixed Use Residential Part in MAC only)	30	N/A	N/A	N/A	N/A	30	N/A

The commercial density list (square footage per employee) was as follows:

Table 6: Commercial Density

<u>Land Use Type</u>	<u>Area</u>	
	<u>Major Activity Center (MAC)</u>	<u>County</u>
CR (Commercial Retail)	500	400
OP (Office Professional)	200	275
IP (Institutional Public)	200	275
Light Industry	400	400
Heavy Industry	800	800
MU Comm (Mixed Use Commercial Part)	440	440
MUR Comm (Mixed Use Commercial Part in MAC only)	250	N/A

Note: Where the parcel belonged to more than one of the pre-defined areas (some pre-defined areas overlapped), the highest density result was used.

The definition for the key land use areas follows:

Figure 12: Rural Area (only used in the International Gateway Scenario)

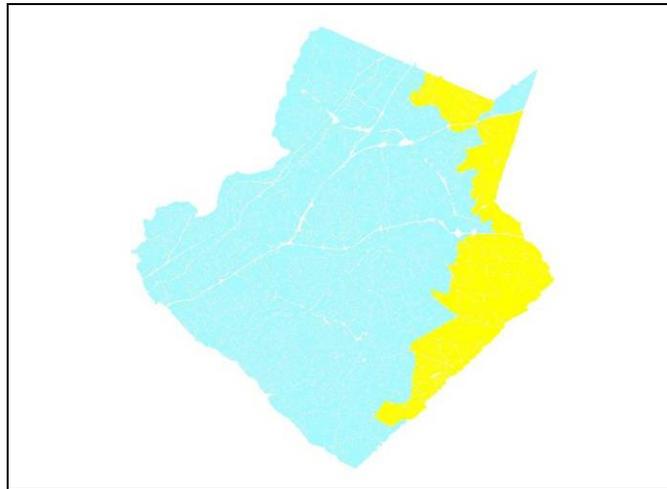


Figure 13: Major Activity Center Area (used in both Scenarios)

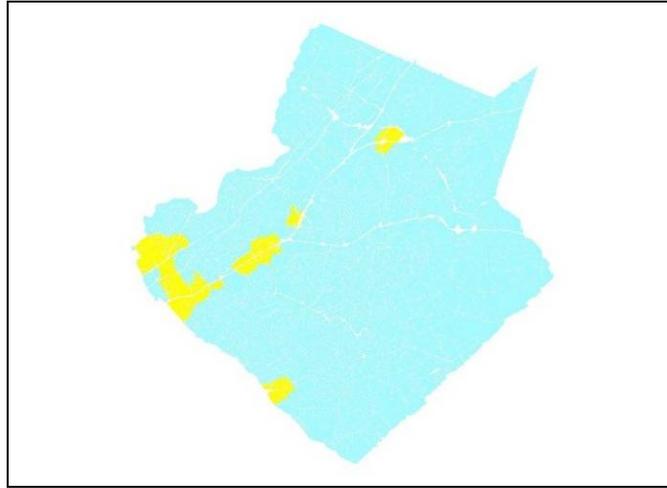
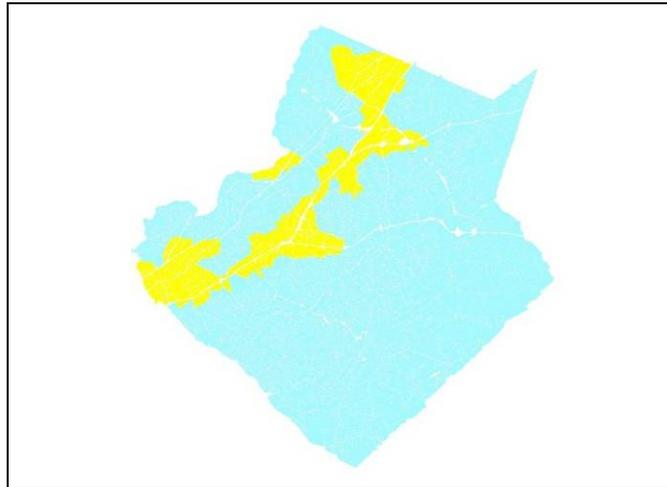


Figure 14: MXD Area (only used in the International Gateway Scenario)



SCA Parcel Supply

With the densities and FARs, each available parcel can yield a different number of householder or employees depending on which land use is chosen. The SCA Parcel Supply captures this information.

Parcel Utility Score

Several factors influence a parcel's attractiveness for each land use. These are listed in the rows in the table below and correspond with commonsense understanding of what drives different development types to different locations. Use similarity and highway access are two of the obvious factors. Several others found to be relevant in Gwinnett were also compiled. For example, The Proximity to Roads was a major factor for Single Family. Initially, the model only incorporated proximity to highway interchange and

principle arterials as the utility factors. During some runs, some new Single Family resulted in parcels not very close to the existing roads, in fact, rather far away. James Pugsley of the County suggested that existing roads should be a driver for the SF. This resulted in more Single Family being allocated closer to the existing roads, more representative of what actually occurs.

The attractiveness score ranges from 1 to 5, 1 being the least influential and 5 being the most influential. The values in the table below are the result of numerous iterations to achieve a plausible land use pattern. The attractiveness scores were a primary vehicle for tweaking the allocations but the other modifiers were also used.

Table 7: Attractiveness Scores

	<u>CR</u>	<u>OP</u>	<u>IP</u> ¹	<u>LI</u>	<u>HI</u>	<u>MUR</u> ²	<u>MU</u> ²	<u>EST</u> ³	<u>SF</u>	<u>TH</u>	<u>HDR</u>	<u>UHDR</u> ²
Cluster of similar use		1		2	2				3	4	4	
Proximity to Hwy Interchange		4		4	4						4	
Proximity to Principal Arterials						2	2			3		
Proximity to Roads									5			
Proximity to City Center		3										
Proximity to Commercial Center		4				2					3	
Proximity to Park									2	1	2	
Proximity to School												
Parcel Size				1	1							
Proximity to Employment Center										2	2	
Proximity to Executive Housing		5							3			
Traffic Count	5											

¹ Allocated along with OP

² Had overlay layers

³ No new parcels were allocated to Estate land use in the model, except that all remaining agriculture land use was turned into estate in the International Gateway scenario

A utility is a score of a specific attribute of a parcel for a given purpose. Each of the relevant utilities is a score for each parcel based on the SCA supply and demand. For example, to model proximity to highway: the parcels are sorted by distance; the nearest parcels are assigned a score of 1 until their combined area met the demand for a specific land use. Because competing land uses may preempt the use for a lower priority purpose, the remaining parcels are given scores in a linear ramp from 1 to 0 based on their distance (i.e.: the closest parcels have higher scores).

Parcel Raw Score

From each utility score, a weighted score was generated. There are raw scores for each land use types and are used to control the allocation process.

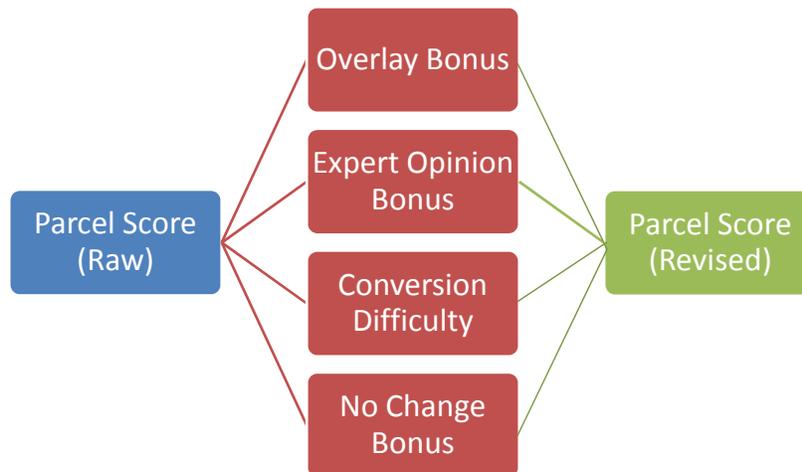
Interventions

The raw scores alone aren't sufficient for allocation purposes. A number of interventions were required.

- 1) No Change Bonus – this models inertia (i.e.: there is a tendency for land to remain in its current use even if that isn't optimal from a purely financial or economic viewpoint).
- 2) Overlay Bonus – This models special conditions or planning areas.
- 3) Expert Opinion Bonus – This allows direct intervention by the planning team to force patterns that go against market forces.
- 4) Conversion Difficulty – This models the difficulty of converting land from one use to another (usually because of high costs).

The raw score is combined with the 4 interventions to generate the revised parcel score as shown below. Each of the interventions was applied as a positive or negative effect on the raw score. The revised parcel score was used in the Allocation Process.

Figure 15: Interventions



No Change Bonus:

The allocation for each run was done for the total amount of land use in the County, not just the incremental increase for 2005 to 2030. However, it was assumed that most exiting parcels would stay the same land use type as they were today. The raw score measured the attractiveness of the land, but did not take into consideration what was currently on the ground. For example, assume two parcels – one with a single family home and the other parcel vacant. A townhouse was more likely to be built on the

vacant parcel than on the land that currently has a house on it. The No Change Bonus models the tendency of parcels to remain as their current type.

Overlay Bonus:

For some land uses, such as ultra high density residential (UHDR), the allocation is based on an overlay. A large bonus score is given to ensure that parcels in the overlay area will be picked up as UHDR. In addition, the overlay bonus was used to model development that took place between 2005 to 2007.

Expert Opinion Bonus:

New SF developments tend to develop in big parcels, rather than on individual small parcels. A bonus was therefore applied to SF development based on parcel size.

The county has also established MXD and RD zones to attract certain kinds of development, so in the International Gateway Scenario there is a bonus score for certain land uses, like OP and CR, for the parcels inside these zones.

Conversion Difficulty:

While the attractiveness factors draw development to certain parcels and Exclusion factors prevent obviously inappropriate substitutions of use, there is a middle ground of uncertainty where uses may be more or less susceptible to conversion depending on the uses themselves. A conversion difficulty relationship was therefore established, expressed in Table 8. The conversion difficulty was assessed as a penalty in the score. In the table, 1 indicates great ease in changing from one type to another, while 5 indicates extreme difficulty in changing from one type to the other.

Table 8: Conversion Difficulty Score

CONVERT FROM	CONVERT TO											
	CR	OP	IP ⁵	LI	HI	MUR	MU	Estate ⁶	Single Family	Townhouse	HDR	UHDR ⁴
CR	1	2		5	5	2	2		5	4	3	
OP	2	1		5	5	2	2		5	3	3	
IP	2	2		5	5	2	2		5	3	3	
LI ²	2	2		1	4	2	2		5	3	3	
HI ²	3	3		2	1	4	4		5	4	4	
PRC	4	4		5	5	4	4		5	4	4	
TCU	3	3		3	5	3	3		5	3	3	
MU ³	1	2		5	5	1	1		1	2	2	
Estate	1	1		1	5	1	1		1	1	1	
Single Family ¹	2	2		4	5	1	1		1	2	2	
Townhouse	3	3		4	5	3	3		4	1	3	
HDR	4	4		5	5	4	4		5	4	1	
UHDR	5	5		5	5	5	5		5	5	5	
AGRI or UNDEV	1	1		1	1	1	1		1	1	1	

¹ Single Family development within a large subdivision had a higher conversion difficulty to other land uses

² The conversion difficulty from LI and HI to residential was reduced for the International Gateway Scenario because of the obsolescing nature of some of the industrial lands especially in the southwestern area

³ The MU was re-adjusted because most of the current MU parcels were mistakenly identified as SF with 1 household. In the initial 2005 parcel land use, there were parcels identified as Mixed Residential/Commercial with three digit code 105. However, they were later found out to be small and the mixed use type had different meaning than the mixed use type used in the allocation model. Most of the current MU parcels were actually transformed back to SF in the model using interventions.

⁴ Overlay, so there is no conversion difficulty

⁵ Allocated along with OP

⁶ No New Estate parcels were expected in the model, except that all remaining agriculture land use was turned into estate in the International Gateway scenario

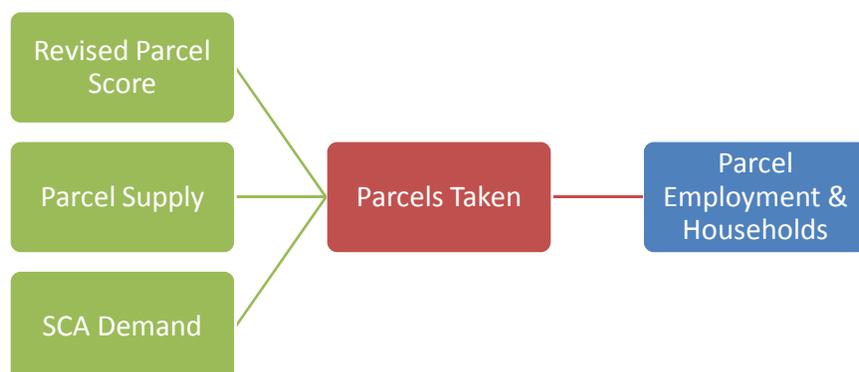
Revised Parcel Score

Combining the raw parcel scores with the above intervention scores, a revised parcel score was generated. The score is no longer normalized from 0 to 1. It provides the rank order of parcel attractiveness for each land use.

Allocation

For the Allocation itself, the Revised Parcel Score is combined with the original Parcel Supply, and the original SCA demand to determine the final land use allocation. This is shown below.

Figure 16: Allocation



The resulting Parcel Employment / Household allocation is used as input into the Financial, Transportation and Sewer Models.

SCA demand

As discussed in the Raw Score Generation section, the control numbers were generated by Dr. Tommy Hammer. Some conversions in land use, described earlier, were required to match the employment types used in Dr Hammer's model to the land use types used in the allocation model.

Parcel Supply

Parcel supply defines the number of households and/or jobs that could be supported by a parcel for each given land use.

Revised Parcel Score

This is the score of the parcel after it have been overlaid by interventions and other score modifiers.

Parcels Taken

Each land use is allocated in its own step in order of priority. For each step the unallocated parcels are sorted from the highest to the lowest score for the step's land use. Each of the parcels has a supply number associated with it for that land use. The parcel supply numbers are accumulated until the supply meets the SCA demand. All the parcels before this point are allocated to the land use. The rest of the parcels are freed so they can be allocated to lower priority land uses.

Once each parcel has a designated land use, acreage, land use type, future FAR, future density and current household/employee, the number of households and employees are calculated.

The Allocation model generates the following three pieces of data for each parcel.

- 1) land use type
- 2) number of households
- 3) number of employees

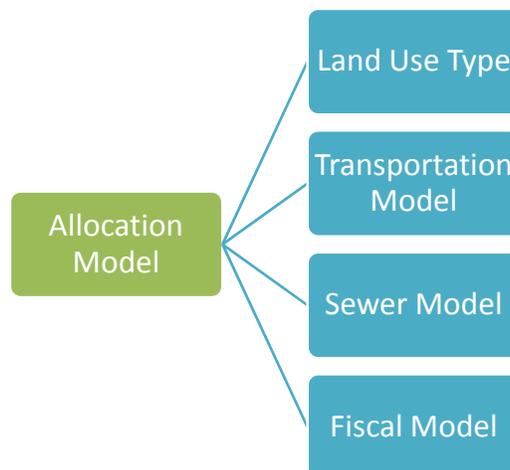
Linkages with Other Models

Introduction

Land use, employment, and number of household values are used to feed other models:

- 1) Land Use Type
- 2) Fiscal Impacts
- 3) Sewer Demand
- 4) Transportation Demand

Figure 17: Use of Allocation Model Results



Land Use Type

The land use type is a direct output from the allocation model.

Transportation Model

There is additional work to be done before the allocation model can feed into the transportation model:

- First, the land use employment type must be changed back to the control number employment types.
- Second, the land use household typed must be transformed into the 24 income-household size types that the transportation model uses as input.

The first transformation is the reverse of the step that transforms the employment control number into the land use control numbers.

Dr. Tommy Hammer in Appendix C, in the Additional Variables and Allocation Support section, describes the process to transfer the land use household types into the 24 income-household size types. A summary of the methodology can also be found at the end of this report

Sewer Model

The sewer model uses the number of households and number of employees as part input to generate its result.

The sewer model needs the data in the sewer sub-basin area which are different from the TAZs, so the aggregation to the sewer sub-basin is actually done from the parcel level. There was no conversion from TAZs to sewer sub-basin. The number of households and number of employees were given to the Department of Water Resources in both parcel and sewer sub-basin levels for their models.

Fiscal Model

For the fiscal numbers, all figures are in 2005 dollars. From his Alternative model, Robert Eger, the fiscal consultant, generated a rough revenue and expense for each land use type. Using the scenario numbers generated from the model, Dr. Eger was able to generate revenue and expense per household or acre. Using these per acre or per household calculations as parameters in the model, it is able to calculate the total revenues and expenses resulting from each of the scenarios. It is also possible to generate new fiscal results when new scenarios are created.

The fiscal model uses the number of households and the acreage to calculate projected revenue and expenditure using the following assumptions:

Table 9: Fiscal Model Expense and Revenue Assumptions

Land Use Type	Average Expense per unit (\$)	Average Revenues per unit (\$)
UNDEV (Undeveloped) Acre	0	214
AGRI (Agriculture) Acre	942	457
SF (Single Family) Household	2043	1800
ESTATE (Estate) Household	5657	5293
TH (Townhouses) Household	1277	1109
HDR (High Density Residential) Household	1245	1595
UHDR (Ultra High Density Residential) Household	1367	1590
CR (Commercial Retail) Acre	8844	12675
MU (Mixed Use) Acre	7631	13105
OP (Office Professional) Acre	6621	9976
PRC (Parks, Recreation, and Conservation) Acre	2962	4153
LI (Light Industrial) Acre	6684	10650
HI (Heavy Industrial) Acre	7982	13161
TCU (Transportation, Communications, Utilities) Acre	57	87
IP (Institutional Public) Acre	1689	0

A full discussion of the fiscal analysis can be found in Appendix H.

PlanMaster Web Tool

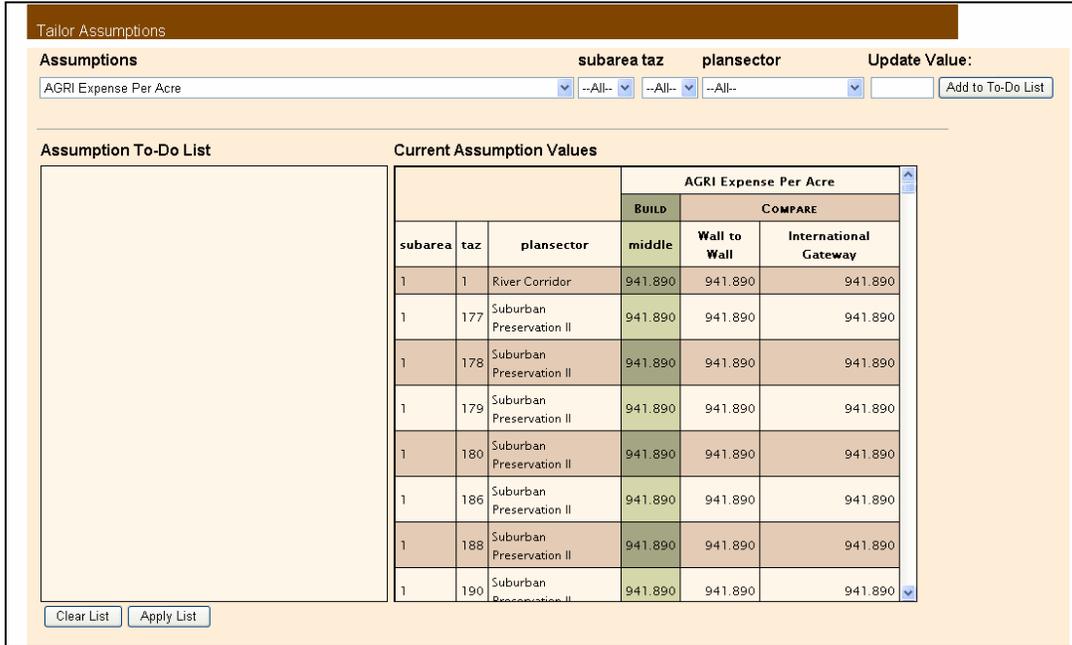
The land use model was also used in a web-based scenario testing tool. A key element of the website is the user's ability to select scenarios, create new scenarios by changing the assumptions, then comparing how the scenarios differ on measures. Figure 18 shows where the user would select scenarios to build upon.

Figure 18: PlanMaster Scenario Manager

The screenshot displays the PlanMaster Scenario Manager interface. At the top is a green header with the word "HOME". Below this is a section titled "Step 1: BUILD". Under "Step 1: BUILD", there are three sub-sections: "A: BASE SCENARIO" with a dropdown menu showing "middle" and an "Apply" button; "B: TRANSFER ACRES..." with a button; and "C: TAILOR ASSUMPTIONS..." with a button. Below these are two buttons: "SAVE AS..." and "SAVE". The next section is "Step 2: COMPARE", which contains two dropdown menus: the first shows "modgateway" and the second shows "Middle of the Pack", with an "Apply" button below them. The final section is "Step 3: VIEW".

To modify the assumptions, users select the assumption they want to modify, the geographic area they want to apply the assumption, and the updated value. The Assumption To-Do list captures all of the new scenario's assumptions. Once all the assumptions have been made, the list is applied and the new scenario is created. Figure 19 shows how the user tailors the assumptions.

Figure 19: Assumption Tailoring Screen



The most powerful component of the tool is comparing the different scenarios across various measures and geographic scales. The results can be displayed as tables, charts, and maps. Figure 20 shows examples of the possible outcomes.

Figure 20: PlanMaster Scenario Evaluation Displays



This tool can be used by Gwinnett County to evaluate land use changes and the impacts they could have.

Appendix G – Transit Testing

Table 1: Mode Splits for the Different Scenarios

	2005	2030 Middle of the Pack Scenario	2030 International Gateway Scenario	2030 IG LU/MoP Network Alternative
All Work Person Trips from Subarea 1	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 1 Driving Alone	86.3%	88.3%	83.9%	84.6%
All Work Person Trips from Subarea 1 Traveling in HOV	13.4%	11.4%	15.3%	15.1%
All Work Person Trips from Subarea 1 Using Transit	0.2%	0.3%	0.8%	0.3%
All Work Person Trips from Subarea 2	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 2 Driving Alone	87.2%	88.3%	86.8%	88.0%
All Work Person Trips from Subarea 2 Traveling in HOV	12.8%	11.4%	12.2%	11.7%
All Work Person Trips from Subarea 2 Using Transit	0.1%	0.3%	1.0%	0.3%
All Work Person Trips from Subarea 3	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 3 Driving Alone	86.7%	89.8%	89.3%	89.8%
All Work Person Trips from Subarea 3 Traveling in HOV	13.3%	10.0%	10.1%	9.9%
All Work Person Trips from Subarea 3 Using Transit	0.0%	0.2%	0.6%	0.3%
All Work Person Trips from Subarea 4	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 4 Driving Alone	85.1%	86.8%	86.3%	87.2%
All Work Person Trips from Subarea 4 Traveling in HOV	14.5%	11.5%	11.0%	11.3%
All Work Person Trips from Subarea 4 Using Transit	0.4%	1.7%	2.6%	1.5%
All Work Person Trips from Subarea 5	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 5 Driving Alone	86.8%	86.8%	86.4%	87.4%
All Work Person Trips from Subarea 5 Traveling in HOV	12.9%	12.0%	11.4%	11.5%
All Work Person Trips from Subarea 5 Using Transit	0.4%	1.2%	2.2%	1.1%
All Work Person Trips from Subarea 6	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 6 Driving Alone	83.3%	77.8%	68.8%	72.2%
All Work Person Trips from Subarea 6 Traveling in HOV	14.0%	18.0%	22.2%	23.1%
All Work Person Trips from Subarea 6 Using Transit	2.8%	4.2%	9.0%	4.7%
All Work Person Trips from Subarea 7	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 7 Driving Alone	87.9%	86.0%	83.3%	84.5%
All Work Person Trips from Subarea 7 Traveling in HOV	11.3%	13.0%	13.7%	14.6%
All Work Person Trips from Subarea 7 Using Transit	0.7%	1.0%	3.0%	0.9%
All Work Person Trips from Subarea 8	100.0%	100.0%	100.0%	100.0%
All Work Person Trips from Subarea 8 Driving Alone	86.5%	84.4%	80.8%	82.5%
All Work Person Trips from Subarea 8 Traveling in HOV	12.6%	14.6%	16.5%	16.4%
All Work Person Trips from Subarea 8 Using Transit	0.9%	1.0%	2.7%	1.1%

Figure 1: International Gateway Network - Transit Projects

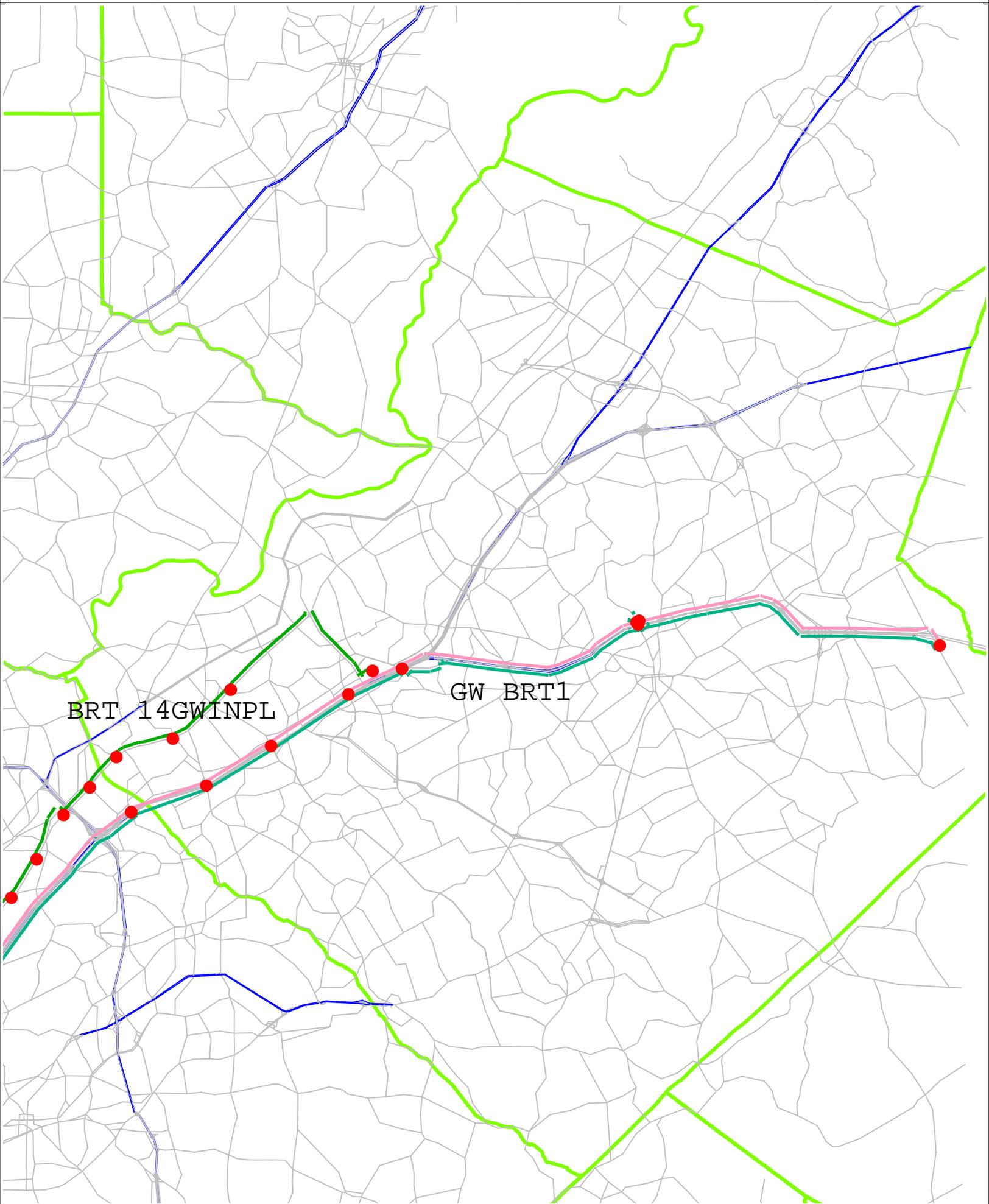


Figure 2: International Gateway Network - Transit Projects

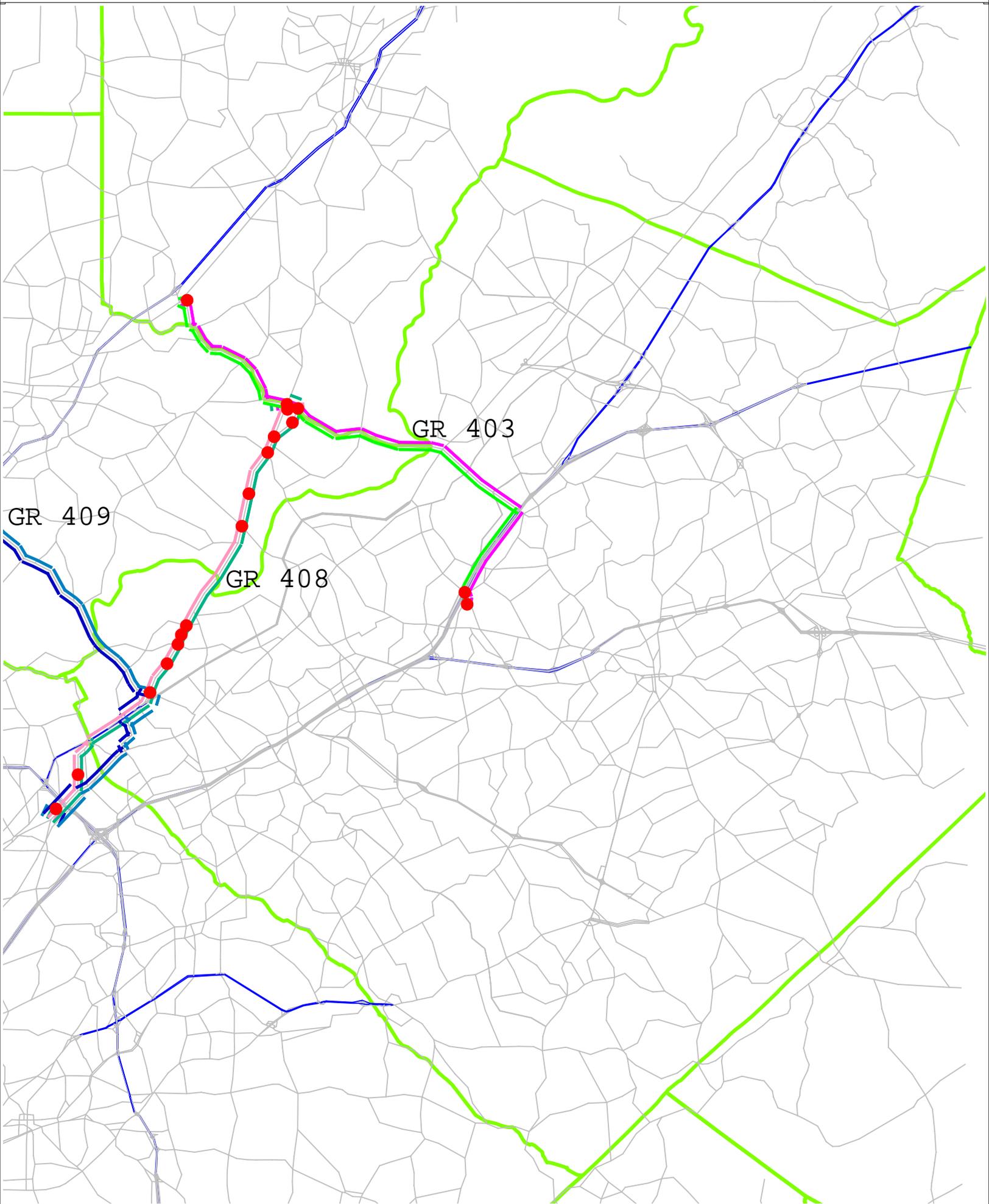
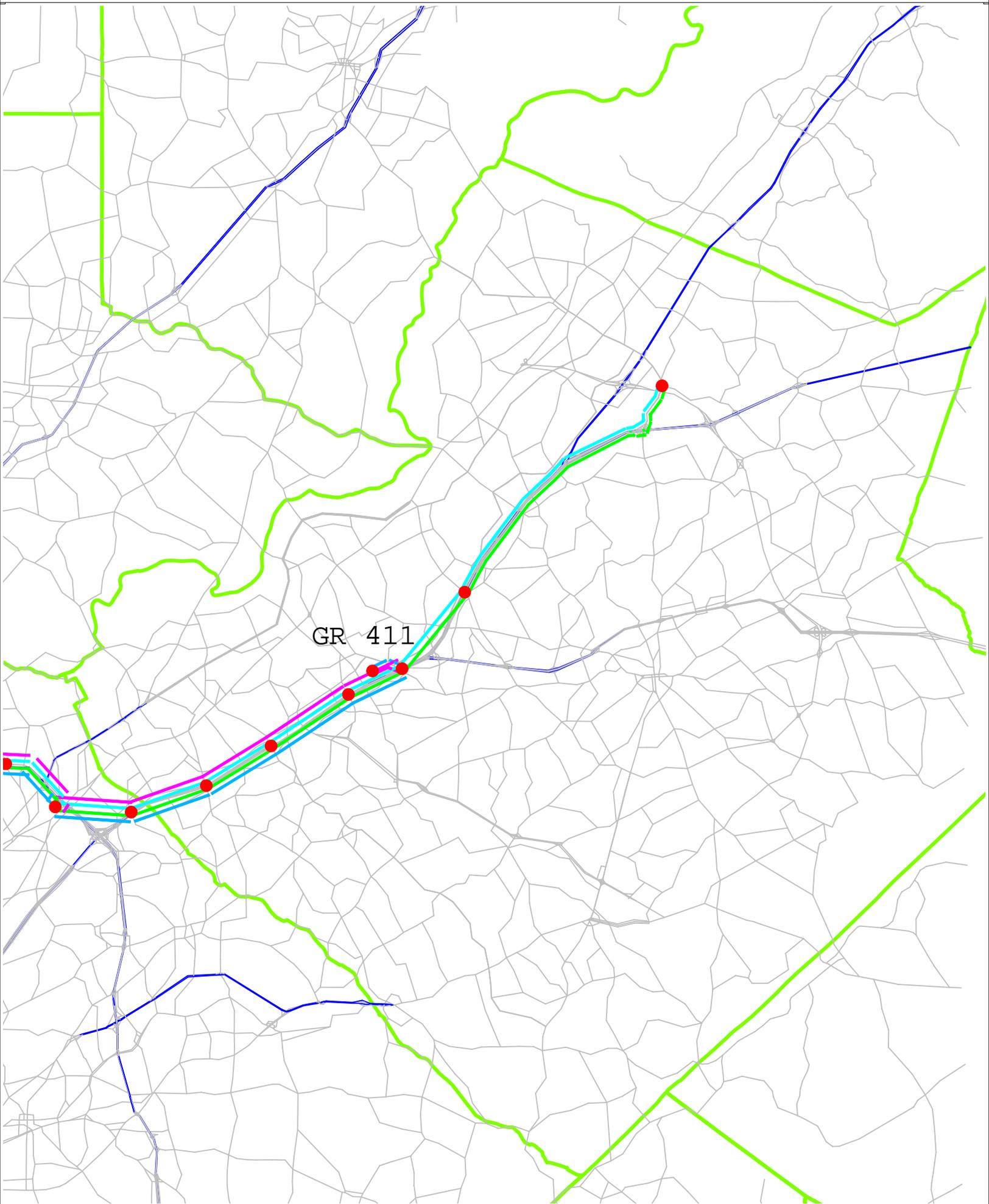


Figure 3: International Gateway Network - Transit Projects



GR 411

Figure 4: International Gateway Network - Transit Projects

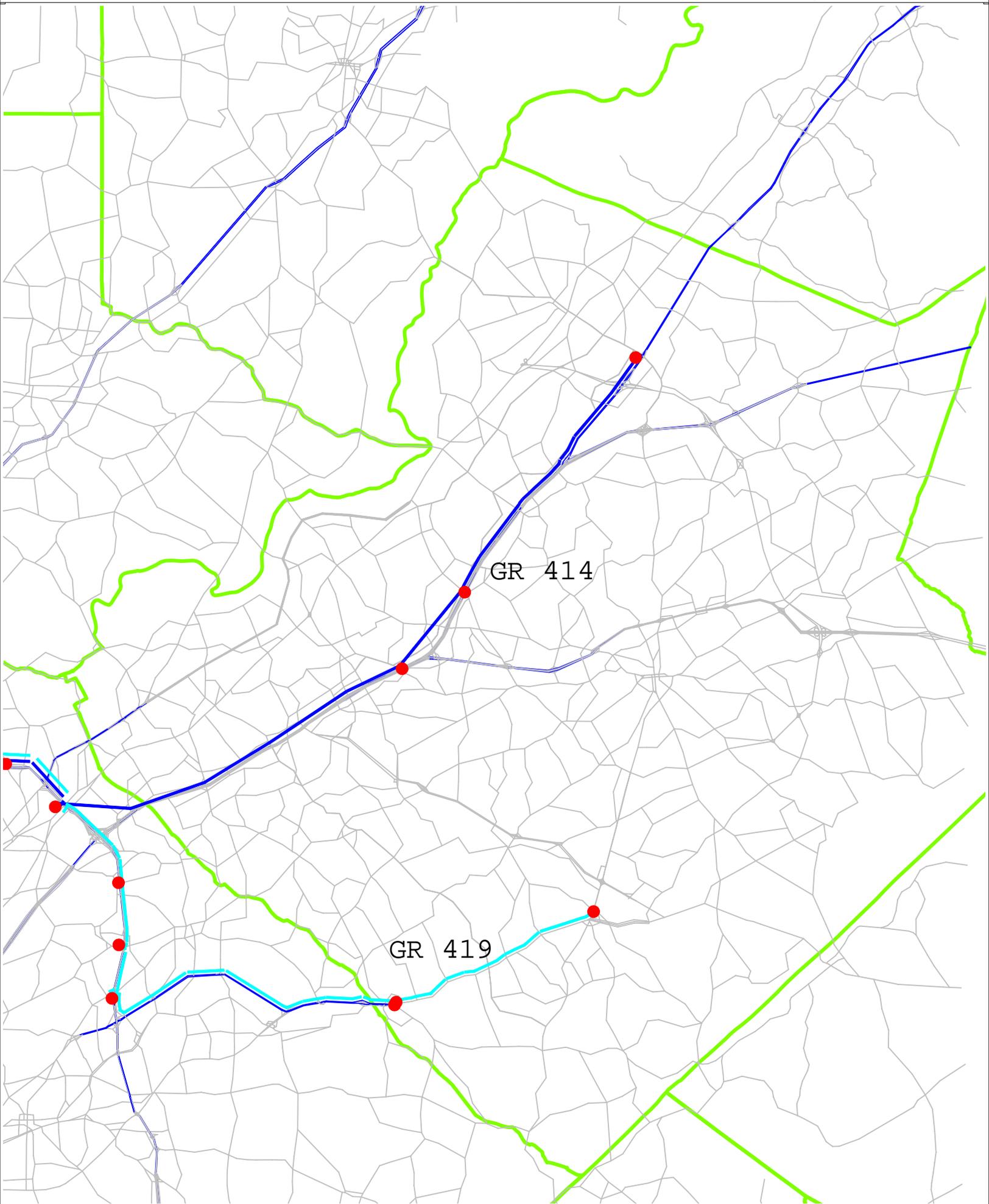


Figure 5: International Gateway Network - Transit Projects

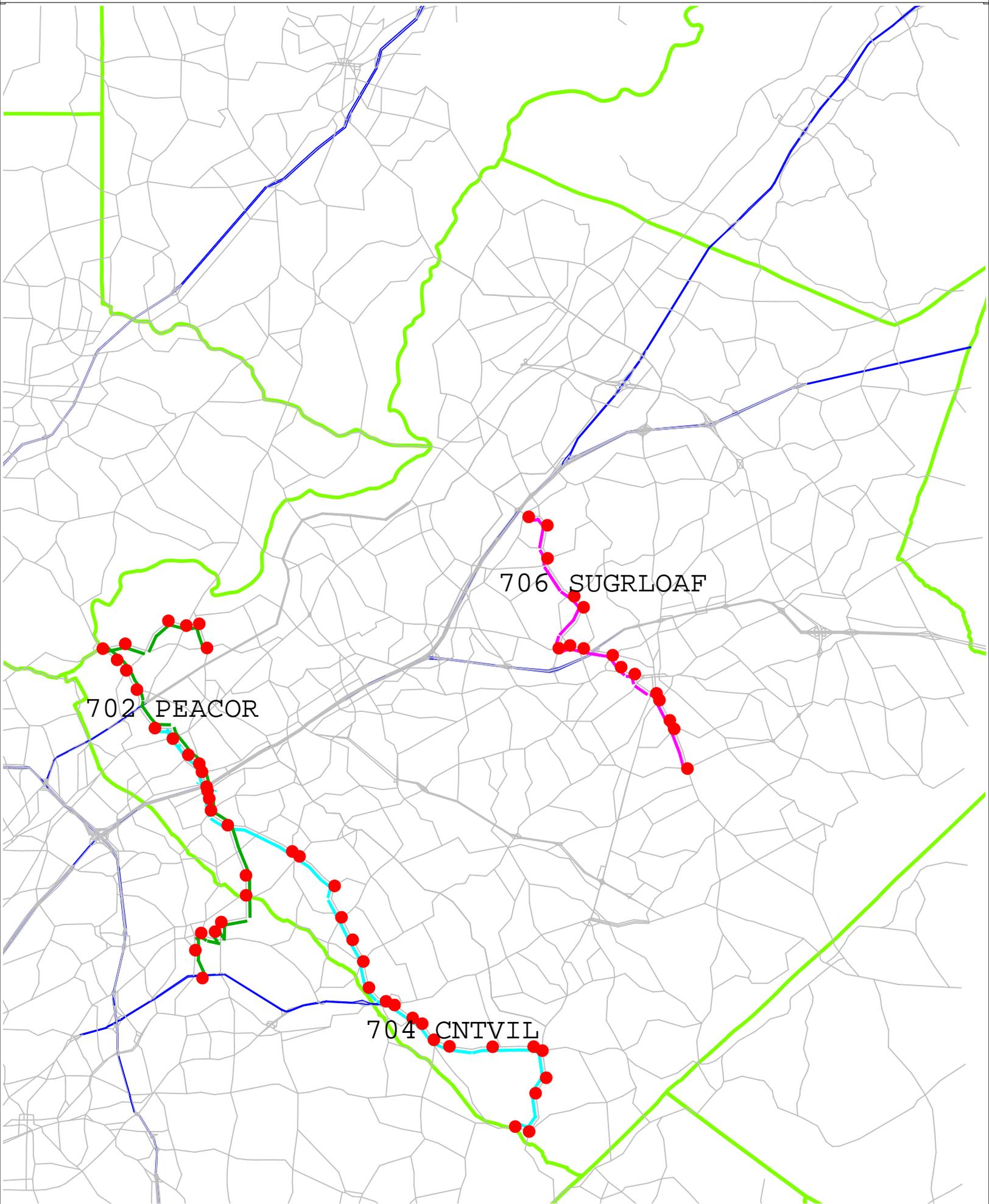
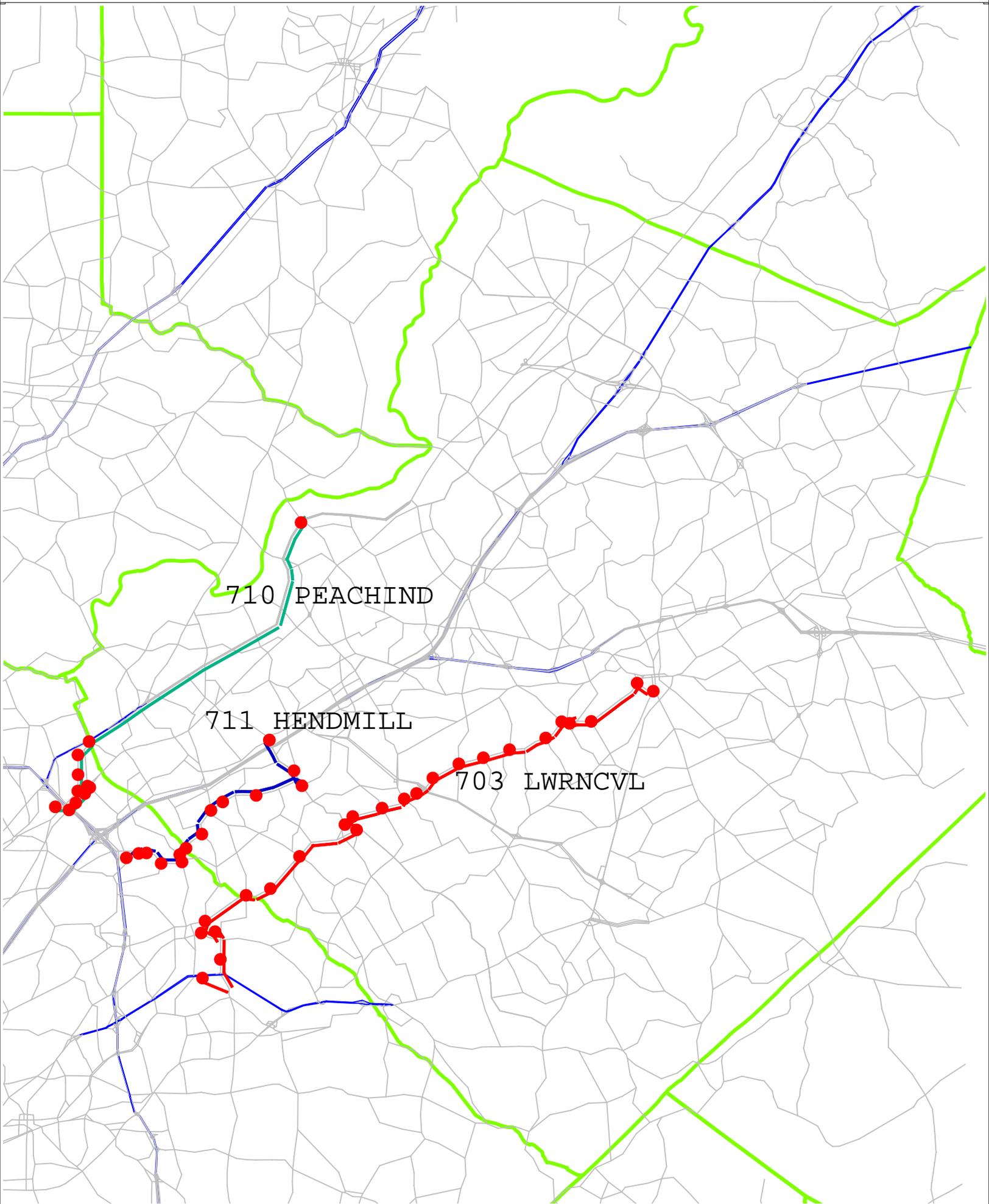


Figure 6: International Gateway Network - Transit Projects



710 PEACHIND

711 HENDMILL

703 LWRNCVL

Figure 7: International Gateway Network - Transit Projects

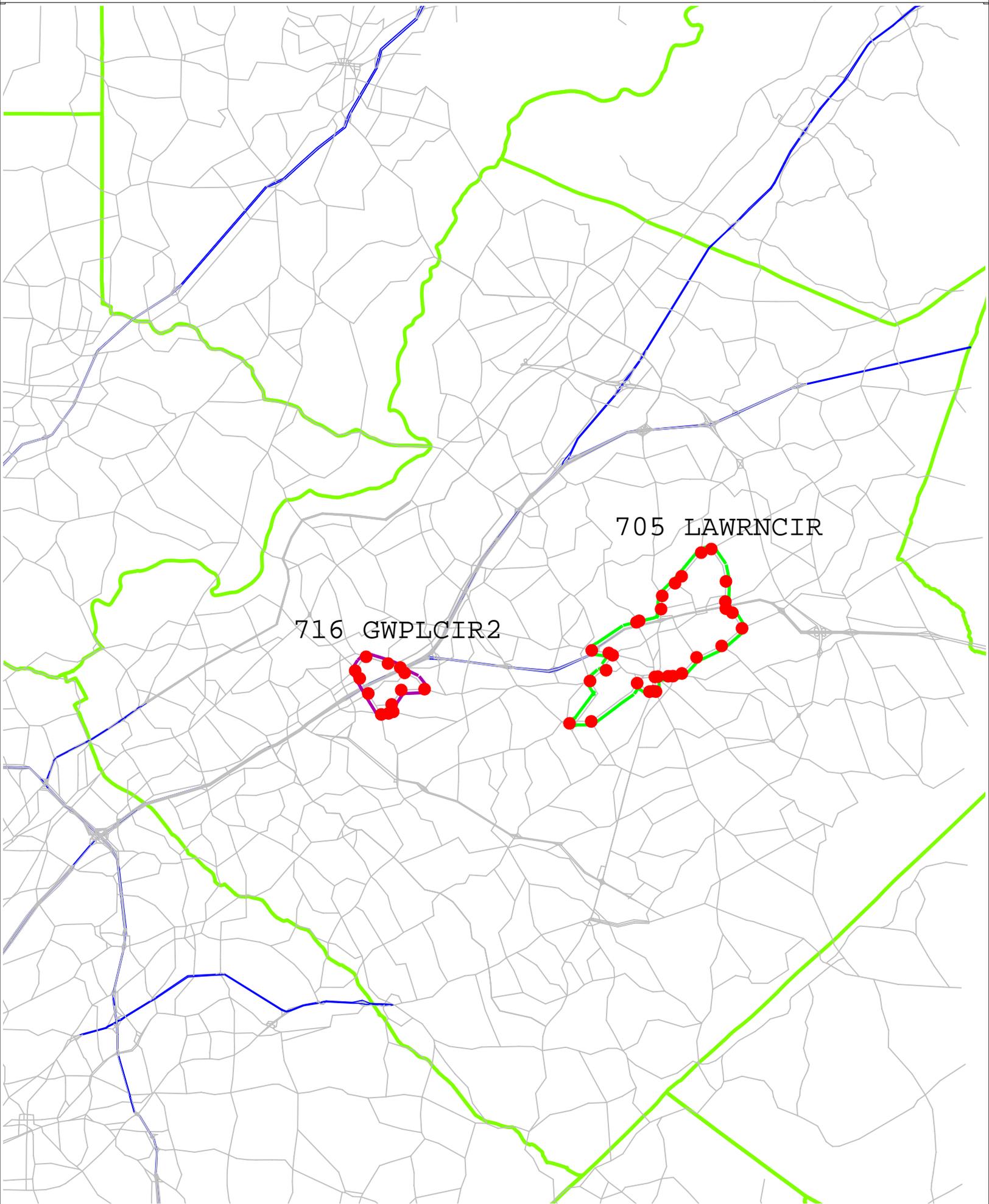
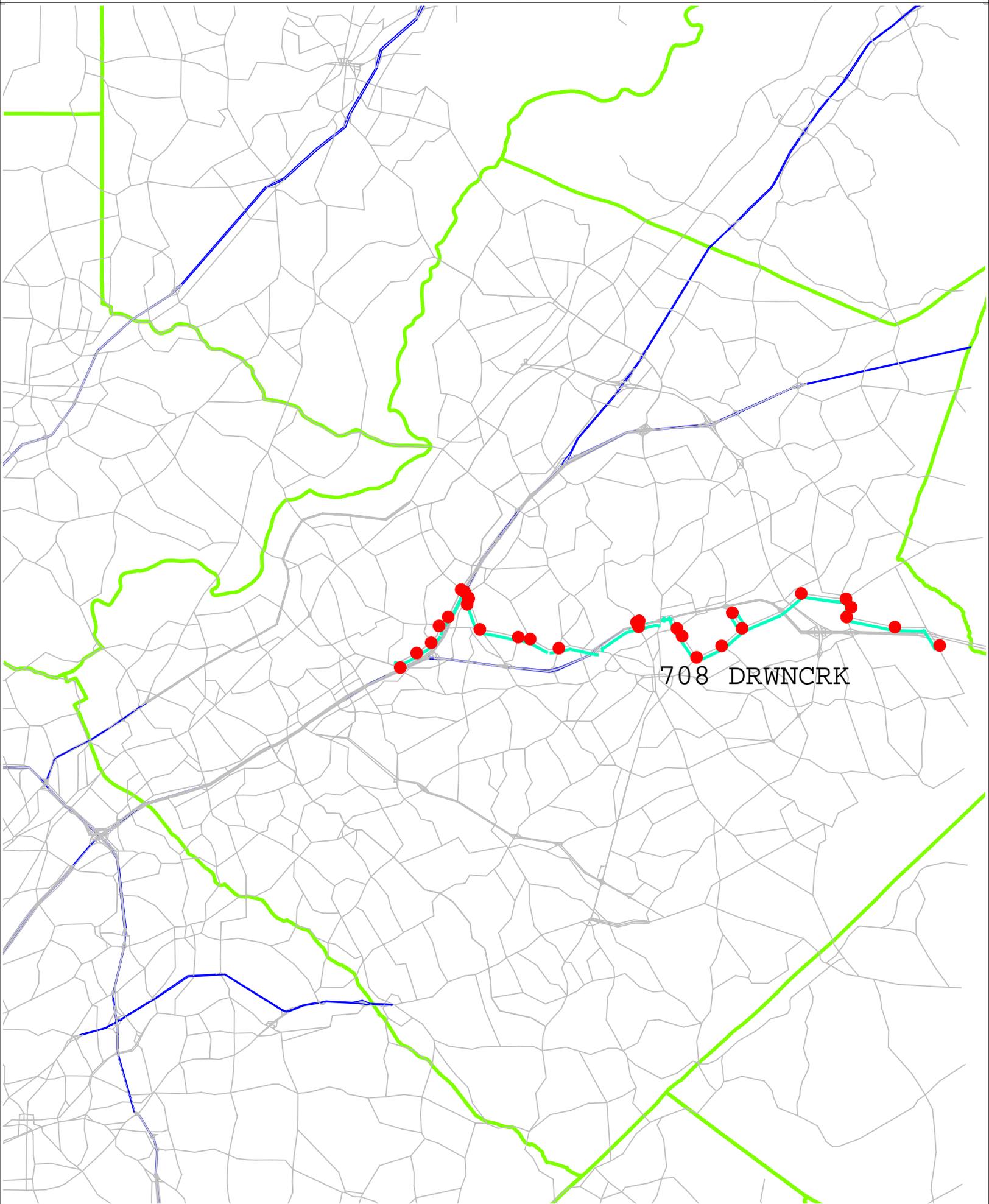
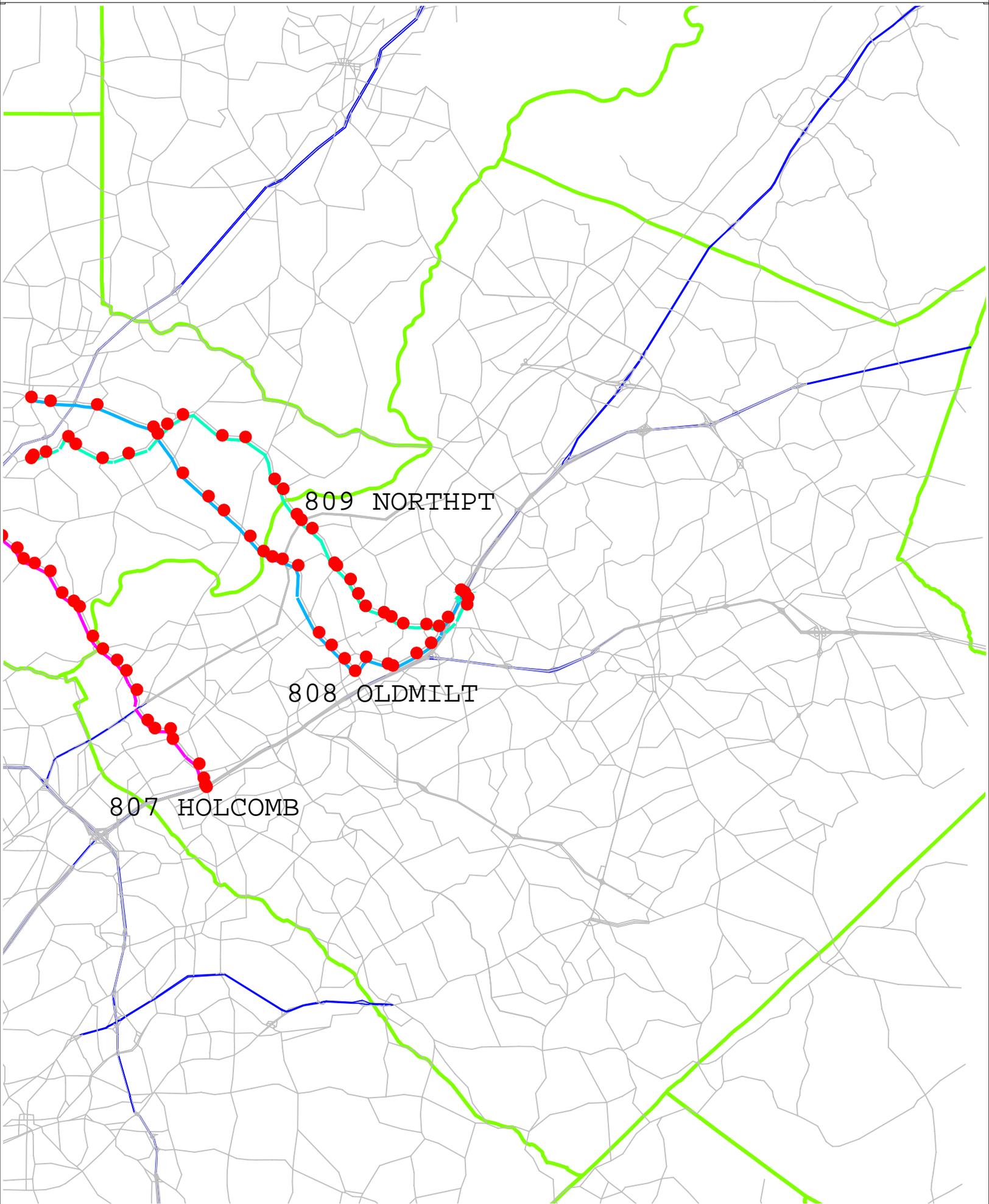


Figure 8: International Gateway Network - Transit Projects



708 DRWNCRK

Figure 9: International Gateway Network - Transit Projects



Appendix H – Fiscal Analysis

Gwinnett County 2030 Unified Plan
Fiscal Analyses & Financing Options

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February, 2008

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Executive Summary

The fiscal analyses presented in this report are one component of the 2008 Gwinnett County Unified Plan, an update of the County's Comprehensive Plan which sets the pattern for future land use and development patterns in the County. The fiscal analyses findings are offered as both information and an opportunity to take action to assure the County's fiscal stability. Two fiscal analyses were conducted. The results of both fiscal analyses have a long term viewpoint – out to 2030 - and focus on the three scenarios. These are called a Regional Slowdown scenario, a trends scenario (“Middle Of the Pack”), and an optimistic “International Gateway” scenario. Both analyses report revenues and expenses in 2005 dollars.

We begin the fiscal analysis with expenditure and revenue estimates based on Gwinnett County data provided to the Georgia Department of Community Affairs (DCA). This data is inclusive of operational expenses and revenues along with capital costs. The DCA data excludes enterprise funds, such as the water and sewer fund in Gwinnett County. Using the DCA data we estimate expenses and revenues for Gwinnett County for the year 2030 using a straightforward estimating tool called WebFIT™ that Gwinnett has previously applied to future land use plans. Using WebFIT™ all three scenarios expenditures and revenues are point estimates that increase over the three scenarios.

The WebFIT™ estimate has only one scenario in a budgetary surplus, the Slowdown scenario. This very counterintuitive outcome can be explained in several ways. First, the WebFIT™ outcomes do not take into consideration any direct changes in services based on the changing socio-economic conditions proposed in the scenario. This is a well-known limitation of this model. The second explanation is that changes in the capital investment required in maintaining the county infrastructure is based on FY2005 spending and therefore does not consider any infrastructure needs beyond the FY2005 spending levels although the SPLOST revenues are included. Third, the WebFIT™ estimates treat all areas in Gwinnett County as identical in service needs.

To address the limitations inherent in the WebFIT™ estimates, an Alternative model is derived. The Alternative model uses the fiscal operating base as reported in the County's financial reports. This fiscal base is composed of all operating expenses and revenues including the enterprise fund for water and sewer. Since the County wholly owns its water and sewer facilities and services we consider this an important aspect of County operations. We exclude any capital costs from the Alternative analysis due to the lumpiness of capital costs, annual capital costs vary year to year based on capital needs and priorities. This removal of capital costs renders the two analyses independent of each other; however the loss of direct comparability allows the Alternative model to focus on operating expenses and revenues, by far the largest component of the budget. Given the known limitations of the WebFIT™ estimates due to changes in socio-demographic conditions and treatment of all County areas as similar in service requirements, the Alternative model allows us to relax these assumptions. This ability to relax some of the assumptions of the WebFIT™ model should provide a more accurate analysis of potential operating expenses and revenues.

The Alternative model expenditures provide a low range and high range. This range, instead of a single point estimate, is due to the potential minimum and maximum effect of poverty over the time period. In the Alternative model, the low range expenditures are very similar in the three scenarios while the upper range expenditures decrease as we move from the Slowdown to the Gateway scenario. Revenues increase as we move from the Slowdown to Gateway scenario.

Table 27: Operational Expenditures and Revenues - Alternative Model

Scenario	Forecast (in Millions of Dollars)		
	Expenditures		Revenues
Slowdown	\$ 1,022	to	\$ 1,172
Middle	\$ 1,028	to	\$ 1,109
Gateway	\$ 1,028	to	\$ 1,045
			\$ 913
			\$ 1,025
			\$ 1,090

The Alternative model expenditures indicate that expenditures may be able to be held constant throughout the scenarios if the low range expenditures are realized. If revenues are realized as projected by the Alternative model, the smallest deficits for the Slowdown and Middle scenarios are realized, while the largest surplus is realized for the Gateway scenario. The Alternative model produces a more intuitive outcome where the regional economic slowdown produces the largest deficit and the regional gateway scenario offers the largest surplus of the three scenarios.

It appears that when we consider the Alternative model’s incorporation of poverty effects and treatment of the County as having potentially differing service requirements based on location that the scenario outcomes indicate these effects on both revenues and expenses. Although projecting the future is not an exact science, providing direct responses to poverty and differing service requirements may assist Gwinnet County in holding poverty and service impacts to the forecasted lowest range of expenditures. This policy choice can offer an opportunity to directly impact the potential outcomes of these three scenarios.

Introduction

This fiscal analysis is one component of the 2008 Gwinnett County Unified Plan, an update of the County's Comprehensive Plan which sets the pattern for future land use and development patterns in the County. Its findings are meant to provide information on actions that may be taken to assure the County's fiscal stability. Both the Unified Plan and this fiscal analysis have a long term viewpoint – out to 2030. The fiscal analysis is applied to various alternative future scenarios whose development and testing were central to the Unified Plan effort.

Fiscal Analysis Assumptions

We focus the financial analysis and the recommendations derived from the analyses on two major analytical techniques. The first technique is to estimate the 2030 revenues and expenditures with WebFIT™ a future land use Web-based simulation developed by Robert Lann of Georgia Institute of Technology. The WebFIT™ analysis uses data from the Georgia department of Community Affairs which is inclusive of operating expenses and revenues including capital allocations for a given year while non-inclusive of enterprise funds (this fund includes water and wastewater) for a local government. The reported data for the WebFIT™ model differs from a traditional assessment of operating expenses and revenues since it includes capital expenses and revenues. The second technique applies an Alternative model derived for forecasting expenditures based on four key elements: allocations by operating expenses/revenues, allocations by sub-county area, managerial effects¹, and poverty/income effects. The Alternative model excludes capital costs however, but is inclusive of enterprise funds for local governments. The Alternative model was calibrated to reproduce, within a 0.50% accuracy level, the actual expenses/revenues that occurred in Gwinnett County in FY2005 prior to analyzing the 2030 scenarios.

WebFIT™ and Alternative Model Assumptions

Both models assume:

- Level of Services provided are identical to those services provided in FY2005
- Millage rate is held constant at FY2005 level
- Water resources are available for each scenario

Both models estimate the fiscal impact of three different growth scenarios on Gwinnett County government. The growth scenarios are referred to in this report as: *gateway*, *middle*, and *slowdown*. The *gateway* (“International Gateway”) scenario assumed the highest growth in population and income and the *slowdown* (“Regional Slowdown”) scenario assumed less growth overall but far more growth in low income households. The *middle* (“*Middle of the Pack*”) scenario was an estimate that focused on a steady growth similar to that found in FY2005. All the growth scenarios use the base year FY2005 spending and revenue accumulation.

Assumptions of WebFIT™

The WebFIT™ model assumes:

¹ Based on the 2004 Gwinnett County management survey. The survey asked managers to provide an assessment of expenditures by land use type (Farm/Forest, Residential, and Commercial/Industrial). The focus was on what percentage of expenditures should be allocated to each land use type.

- Continuation of the Special Purpose Local Option Sales Tax (SPLOST)
- Capital costs are implicitly included in Gwinnett County's expenditures
 - This assumption is based on the presentation of the Statement of Activities the county provides which is inclusive of capital costs and the Special Purpose Local Option Sales Tax (SPLOST) as a revenue source.
- The mix of land use types, and therefore, property values captures changes in the level of service by category, based on historical relationships between service expenditures, property values, and population.
- Population per household is the same for each residential land use type and the same across unincorporated Gwinnett. City-specific ratios are used to estimate population change from household growth in each city.
- Income distributions are the same in each scenario except for what may be captured implicitly by the type and value of residential development forecast.
- Revenue is based on FY2005 millage rates.

Limitations of WebFIT™

The model can start with a rich array of land use types, such as, low-density residential, medium-density residential, and high-density residential, but property value projections for each are aggregated together into total residential before being passed to the regression equations to estimate the change in revenues and expenditures. Therefore, density, as implied by housing type (single or multi-family), does not directly enter the regression equations.

Furthermore, the cost of providing government services to higher-density development is not captured in the regression equations. The model also cannot include redevelopment of existing properties in its full buildout scenario, explicitly. Parcels designated for redevelopment must be held at their FY2005 land uses and property values for the full buildout scenario. To add redevelopment to the full buildout scenario, the redeveloped parcels must be run separately using the model's redevelopment module. The two sets of results must then be added together to get a complete full buildout scenario. Lastly, the model cannot explicitly incorporate changes in poverty or other income/wealth or managerial choices related changes during the forecast period.

Because of these limitations, an Alternative Model was developed to be sensitive to additional factors that impact fiscal outcomes.

Assumptions of the Alternative Model

The Alternative model assumes:

- Fire, police, and general government related operational expenditures are directly affected by constituent wealth.
- Service demand within a specific land use type varies across Gwinnett, but is constant across time.
- Persons per household are the same for each residential land use type and the same across unincorporated Gwinnett as in WebFIT™.
- Income distributions differ across Gwinnett.
- Revenue contributions differ based on land use type.

Limitations of the Alternative Model

The model separates residential land use type by categories. The model then applies a weight value based on operational cost/revenue allocations provided by management in Gwinnett. This implies that operational cost/revenue allocations will not change over time. The operational cost of providing government services to higher-density development is not captured in the equations.

We acknowledge this limitation with the following caveat. We looked at DeKalb County's Perimeter Mall as a function of density costs. We find that operational costs of services are not higher within the Perimeter Mall area. We conclude that density, as defined by the Perimeter Mall area, does not directly change the operational costs for providing services. Second, we looked at the Midtown Business District in the City of Atlanta, Fulton County. We find that capital and operational costs for high rise type density increases emergency service costs, but this type of density does not seem to affect other operational service costs. The emergency service cost increase is between 13 – 17% but is primarily due to changes in fire equipment (capital cost) and training costs (operational cost). Since the scenarios do not explicitly use a high rise business district, we assume the effects of emergency services costs will be minimal in Gwinnett.

The final limitation is in the explicit incorporation of poverty or other income/wealth related changes during the forecast period. Large shifts in the poverty rate can have additional effects on the level of service provision and revenue collection. The model does not take into account the poverty effects on potential revenue collections since the poverty effect focus is on operational expenses.

WebFIT™ Estimates

Gwinnett County was the first county in Georgia to implement the web-based tool called WebFIT™ for examining the fiscal impact of its future land use plan. The database used in the earlier implementation of WebFIT™ was modified to focus on the current analysis for Gwinnett County. In the following discussion, we provide a detailed description of the steps the developers at the Enterprise Innovation Institute, Georgia Institute of Technology led by Robert Lann used to adapt the tool's structure to the format of the scenarios, what data was updated for the scenarios, and the results obtained from the simulations.

The scenario development began with the FY2005 Gwinnett County tax digest. Informational updates were used in the WebFIT™ database including tax digest figures provided through the county's consolidated tax digest, sales tax rates, and property millage rates. Some demographic information such as households, population, and enrollment was also incorporated in the WebFIT™ model. These data were obtained from the county government and from the Georgia Department of Revenue.

Revenue and Expenditure Data for WebFIT™

WebFIT™ produces a fiscal impact for the county government, each city, and the county school system. In this analysis only county government data was used since other local governments in the county and the school district were not included in the simulations.

The forecast of fiscal impact for the county government is based on the land use scenario input to the model. This is accomplished through a series of regression equations, one for each major component of revenue and expenditure. Each equation is initially calibrated to current levels using the most recent data submitted to the Georgia Department of Community Affairs. This data corresponds to Gwinnett County's fiscal year 2005. Table 1 shows the revenues and expenditures used in the calibration.

In Table 1, two revenue categories are disaggregated to provide the major sub categories underlying the revenue amounts. For example, excise and special use taxes is composed of three subcategories. Each of the values in Table 1 provides the starting point for the WebFIT™ fiscal impact simulations.

Table 1: 2005 Revenue & Expenditures by Category

Revenue Categories	2005
Property Taxes	\$260,282,545
Sales Taxes	\$140,971,729
Excise and Special Use	\$30,216,872
Alcoholic beverage taxes	\$5,348,442
Insurance premium	\$20,699,676
Franchise taxes	\$4,168,754
Licenses and Permits	\$25,265,571
Business Occupation Tax	\$12,488,611
Liquor Licenses	\$1,930,822
Building Permits & Other	\$10,846,138
Charges for Services	\$30,639,128
Fines & Forfeitures	\$21,725,217
Other Revenue	\$165,511,880
Total Revenue	\$674,612,942
<hr/>	
Expenditure Categories	
General Administrative	\$218,901,936
Public Works	\$152,596,769
Courts	\$34,190,804
Public Safety	\$217,179,136
Health	\$6,011,708
Public Assistance	\$3,956,138
Recreation and Library	\$41,144,932
Other Expenditure	\$631,519
Debt Service	\$0
Total Expenditures	\$674,612,942

Source: Gwinnett County Finance Office

Demographics

Total households in 2005 for the county were estimated to be 265,462 and total population was estimated at 726,273. Figures for each city and for the unincorporated area of Gwinnett are shown in Table 2.

The population per household detail in Table 2 is used to determine the population in the forecasted build-out year of 2030 based on an estimate of total households. The households are estimated from the acres of new residential development in the scenario and household-per-acre densities for each residential land use.

Table 2: 2005 Population and Households

	Population	Households	Pop/HH
Buford	10,972	4,236	2.59
Dacula	4,425	1,570	2.82
Duluth	24,482	10,925	2.24
Grayson	1,314	761	1.73
Lawrenceville	28,393	9,678	2.93
Lilburn	11,416	4,166	2.74
Loganville	8,881	3,228	2.75
Norcross	9,887	3,606	2.74
Snellville	19,238	7,001	2.75
Sugar Hill	15,696	5,640	2.78
Suwanee	12,553	4,446	2.82
Berkeley Lake	2,071	630	3.29
Rest Haven	147	65	2.26
Auburn	7,134	2,350	3.04
Braselton	2,294	1,319	1.74
Total Cities	158,903	59,621	2.67
Incorporated	143,375	50,692	2.83
Unincorporated	582,898	214,770	2.71
County Total	726,273	265,462	2.74

Source: U.S. Census Bureau and Atlanta Regional Commission. City populations are based on the portion of each city within the Gwinnett County boundaries.

Tax Digest Update

A FY2005 tax digest configured for use in the WebFIT™ application for the land use types in the scenarios are listed below. The “LUT Code” is the coding system used in the database files.

The focus of the WebFIT™ fiscal impact simulations was based on the FY2005 building and land values for each parcel as well as the scenarios projected building and land values in 2030. Parcels that are undeveloped and designated to be developed into one of the land uses shown in Table 3 were marked in the database. Those parcels that were to be redeveloped from one land use to another were also marked in the database.

Table 3: Land Use Types

Land Use Type Name	LUT Code
Agricultural	AGRI
Commercial Sector LUTs	
Commercial/Retail	CR
Mixed Use Commercial	MUCOM
Office/Professional	OP
Industrial Sector LUTs	
Heavy Industrial	HI
Light Industrial	LI
Residential Sector LUTs	
Estate	EST
High Density Residential	HDR
Mixed Use Residential	MURES
Single Family	SF
Townhouse	TH
Ultra High Density Residential	UHDR
Public Sector LUTs	
Institutional/Public	IP
Parks, Recreation, Conservation (PRC)	PRC
Public Park	PARK
Other LUTs	
Brownfield	BROWN
Transportation, Communication, Utilities (TCU)	TCU
Undeveloped	UNDEV
Water	WATER

WebFit™ Fiscal Impact Simulations

Having future land and building values provided required modifications to the WebFIT™ structure. WebFIT™ has a series of regression equations that are focused on current values. Typically, future values are not estimated by planning departments and instead, current values are used. These have to be calculated from the parcel-level tax digest data. To accomplish this, summaries are calculated from current development for each tax district, land district, and land use type combination and then used in lieu of estimated future values for all developable acreage.

With this simulation it was not necessary to use current development patterns directly from the tax digest. Instead, future building and land values were estimated by other team members and provided for use in WebFIT™. Because of this, processing programs had to be modified to adapt to this situation.

Another difficulty with adapting the scenario data to WebFIT™ was encountered with the redevelopment parcels. WebFIT™ has the facility to estimate the fiscal impact of a redevelopment project, but not as part of a full build-out, future land use plan. However, the tool can read a set of parcel identification numbers that make up the parcels to be redeveloped and then create an “original” data summary based on existing improvements on these parcels. The

second step is to read in the future land and building values for the new land use types which define the redevelopment scenario. With these two sets of data, the tool can calculate the change in land and building value for each land use type and use these data to run the fiscal impact.

Once all modifications were made to the WebFIT™ program and its processing programs, each scenario could be run by first running a “greenfield” case and then the “redevelopment” case. Summing the results from each case produces the full fiscal impact of each scenario.

WebFIT™ Results for Each Scenario

The three scenarios were abbreviated to Slowdown (Regional Slowdown), Middle (Middle Of the Pack), and Gateway (International Gateway) scenarios. The Middle scenario is considered the most likely or base case. The Slowdown scenario is considered the low end in terms of economic growth and the Gateway scenario is considered to be the high end growth scenario.

The Slowdown scenario results are shown in Tables 4 and 5. This low growth scenario shows the smallest change in total revenues and total expenditures but net revenues in 2030 are positive. Net revenue for the greenfield portion of this scenario was slightly negative, but the redevelopment portion was quite positive, resulting in positive net revenue for the complete scenario. This counterintuitive outcome for this scenario can be explained when considering that expenses are not affected by the increase in poverty in the scenario. Thus, the slowdown of growth slows expense at a faster rate than revenues. This is clearly present when you look at the Middle scenario expenses. The Middle scenario expenses are rapidly increasing since the model is focused on population change as a focal driver of expenses. It has been shown in other research that wealth and poverty are important issues when considering a slowing or stagnant population growth. It is important to consider that expense may be under estimated in this model since wealth and poverty shifts are not considered.

Table 4: Slowdown Scenario Fiscal Impact - Totals

	Current - 2005	Forecast - 2030	Change	Percentage Change
Total Revenues	\$674,612,942	\$820,404,195	\$145,791,253	22%
Total Expenditures	\$674,612,942	\$811,016,986	\$136,404,044	20%
Net Revenues		\$9,387,209		

Table 5: Slowdown Scenario Fiscal Impact by Revenue and Expenditure Category

Revenue Category	Current - 2005	Forecast - 2030	Change	Percentage Change
Property Taxes	\$260,282,545	\$332,391,830	\$72,109,285	28%
Sales Taxes	\$140,971,729	\$166,148,460	\$25,176,731	18%
Excise and Special Use	\$30,216,872	\$35,639,635	\$5,422,763	18%
Alcoholic beverage taxes	\$5,348,442	\$6,351,721	\$1,003,279	19%
Insurance premium	\$20,699,676	\$23,931,405	\$3,231,729	16%
Franchise taxes	\$4,168,754	\$5,356,509	\$1,187,755	28%
Licenses and Permits	\$25,265,571	\$33,160,262	\$7,894,691	31%
Business Occupation Tax	\$12,488,611	\$16,795,641	\$4,307,030	34%
Liquor Licenses	\$1,930,822	\$2,286,636	\$355,814	18%
Building Permits & Other	\$10,846,138	\$14,077,985	\$3,231,847	30%
Charges for Services	\$30,639,128	\$37,100,585	\$6,461,457	21%
Fines & Forfeitures	\$21,725,217	\$25,732,050	\$4,006,833	18%
Other Revenue	\$165,511,880	\$190,231,373	\$24,719,493	15%
Total Revenue	\$674,612,942	\$820,404,195	\$145,791,253	22%
Expenditure Category				
General Administrative	\$218,901,936	\$260,457,153	\$41,555,217	19%
Public Works	\$152,596,769	\$181,950,195	\$29,353,426	19%
Courts	\$34,190,804	\$41,020,473	\$6,829,669	20%
Public Safety	\$217,179,136	\$263,811,271	\$46,632,135	21%
Health	\$6,011,708	\$7,003,173	\$991,465	16%
Public Assistance	\$3,956,138	\$4,687,777	\$731,639	18%
Recreation and Library	\$41,144,932	\$51,315,122	\$10,170,190	25%
Other Expenditure	\$631,519	\$771,822	\$140,303	22%
Debt Service	\$0	\$0	\$0	0%
Total Expenditures	\$674,612,942	\$811,016,986	\$136,404,044	20%

Table 6 contains the Middle scenario overall results and Table 7 provides a breakdown by category for revenues and expenditures. The difference in 2030 between total revenues and total expenditures is very small. Given the uncertainty in forecasting to 2030, this difference is not significant and the middle scenario can be said to be essentially “break even.” The greenfield portion of this scenario shows negative net revenues in 2030 but the redevelopment portion of this scenario shows slightly positive net benefits in 2030.

Table 6: Middle Scenario Fiscal Impact - Totals

	Current - 2005	Forecast - 2030	Change	Percentage Change
Total Revenues	\$674,612,942	\$916,998,334	\$242,385,392	36%
Total Expenditures	\$674,612,942	\$924,205,270	\$249,592,328	37%
Net Revenues		(\$7,206,936)		

Table 7: Middle Scenario Fiscal Impact by Revenue and Expenditure Category

Revenue Category	Current - 2005	Forecast - 2030	Change	Percentage Change
Property Taxes	\$260,282,545	\$363,242,511	\$102,959,966	40%
Sales Taxes	\$140,971,729	\$190,363,506	\$49,391,777	35%
Excise and Special Use	\$30,216,872	\$37,418,051	\$7,201,179	24%
Alcoholic beverage taxes	\$5,348,442	\$6,683,143	\$1,334,701	25%
Insurance premium	\$20,699,676	\$24,863,711	\$4,164,035	20%
Franchise taxes	\$4,168,754	\$5,871,197	\$1,702,443	41%
Licenses and Permits	\$25,265,571	\$38,918,001	\$13,652,430	54%
Business Occupation Tax	\$12,488,611	\$20,344,634	\$7,856,023	63%
Liquor Licenses	\$1,930,822	\$2,413,646	\$482,824	25%
Building Permits & Other	\$10,846,138	\$16,159,721	\$5,313,583	49%
Charges for Services	\$30,639,128	\$42,626,584	\$11,987,456	39%
Fines & Forfeitures	\$21,725,217	\$29,740,641	\$8,015,424	37%
Other Revenue	\$165,511,880	\$214,689,040	\$49,177,160	30%
Total Revenue	\$674,612,942	\$916,998,334	\$242,385,392	36%
Expenditure Category				
General Administrative	\$218,901,936	\$289,585,572	\$70,683,636	32%
Public Works	\$152,596,769	\$207,472,571	\$54,875,802	36%
Courts	\$34,190,804	\$47,503,314	\$13,312,510	39%
Public Safety	\$217,179,136	\$308,053,034	\$90,873,898	42%
Health	\$6,011,708	\$8,099,392	\$2,087,684	35%
Public Assistance	\$3,956,138	\$5,235,094	\$1,278,956	32%
Recreation and Library	\$41,144,932	\$57,351,347	\$16,206,415	39%
Other Expenditure	\$631,519	\$904,946	\$273,427	43%
Debt Service	\$0	\$0	\$0	0%
Total Expenditures	\$674,612,942	\$924,205,270	\$249,592,328	37%

The Gateway scenario results are shown in Tables 8 and 9. In this scenario the net revenue in 2030 is substantially more negative than in the Middle scenario. Net revenue for the greenfield portion of the scenario was slightly positive, but the redevelopment portion was very negative, resulting in negative net revenue for the complete scenario. Similar to the Slowdown scenario, expenses are driven by population and are not inclusive of wealth or poverty shifts. Thus, expenses may be overestimated in this scenario. Overall, revenues and expenditures are much larger in this high-growth scenario.

Table 8: Gateway Scenario Fiscal Impact - Totals

	Current - 2005	Forecast - 2030	Change	Percentage Change
Total Revenues	\$674,612,942	\$964,068,925	\$289,455,983	43%
Total Expenditures	\$674,612,942	\$1,008,494,878	\$333,881,936	49%
Net Revenues		(\$44,425,953)		

Table 9: Gateway Scenario Fiscal Impact by Revenue and Expenditure Category

Revenue Category	Current - 2005	Forecast - 2030	Change	Percentage Change
Property Taxes	\$260,282,545	\$379,418,549	\$119,136,004	46%
Sales Taxes	\$140,971,729	\$201,555,794	\$60,584,065	43%
Excise and Special Use	\$30,216,872	\$39,465,641	\$9,248,769	31%
Alcoholic beverage taxes	\$5,348,442	\$7,130,442	\$1,782,000	33%
Insurance premium	\$20,699,676	\$25,906,911	\$5,207,235	25%
Franchise taxes	\$4,168,754	\$6,428,288	\$2,259,534	54%
Licenses and Permits	\$25,265,571	\$45,509,095	\$20,243,524	80%
Business Occupation Tax	\$12,488,611	\$23,955,047	\$11,466,436	92%
Liquor Licenses	\$1,930,822	\$2,571,716	\$640,894	33%
Building Permits & Other	\$10,846,138	\$18,982,332	\$8,136,194	75%
Charges for Services	\$30,639,128	\$47,335,038	\$16,695,910	54%
Fines & Forfeitures	\$21,725,217	\$32,554,922	\$10,829,705	50%
Other Revenue	\$165,511,880	\$218,229,886	\$52,718,006	32%
Total Revenue	\$674,612,942	\$964,068,925	\$289,455,983	43%
Expenditure Category				
General Administrative	\$218,901,936	\$315,087,483	\$96,185,547	44%
Public Works	\$152,596,769	\$228,888,963	\$76,292,194	50%
Courts	\$34,190,804	\$52,571,693	\$18,380,889	54%
Public Safety	\$217,179,136	\$336,976,497	\$119,797,361	55%
Health	\$6,011,708	\$8,684,373	\$2,672,665	44%
Public Assistance	\$3,956,138	\$5,780,142	\$1,824,004	46%
Recreation and Library	\$41,144,932	\$59,489,148	\$18,344,216	45%
Other Expenditure	\$631,519	\$1,016,579	\$385,060	61%
Debt Service	\$0	\$0	\$0	0%
Total Expenditures	\$674,612,942	\$1,008,494,878	\$333,881,936	49%

WebFit™ Fiscal Impact Simulations Conclusions

The three scenarios were all run through WebFIT™ with the treatment of redevelopment as described in the limitations. Given the forecast of new development, redevelopment, and changes in the real property values of current development that did not get redeveloped, the model was able to produce reasonable estimates of the change in revenues and expenditures for the county, if one assumes no change in socioeconomic factors.

The slowdown scenario is the one in which WebFIT™ cannot accurately forecast the change in expenditures because of the limitation on its ability to factor in a change in wealth or poverty. There is ample evidence that growth in poverty drives growth in certain expenditure categories irrespective of growth in population or households. In other words, given two scenarios where population and households show the same growth but where poverty rates grow more rapidly in one than in the other, expenditures should increase faster in the scenario with the more rapid growth in poverty level.

The gateway scenario shows about a six percentage point difference in revenue growth and expenditure growth, with expenditure growth the more rapid. In this scenario, the redevelopment portion showed a sharp decline in industrial property values and a slight rise in residential property values. This cuts down considerably on property taxes collected on redeveloped parcels in 2030. This is one of the primary reasons for the growth in expenditures outstripping the growth in revenues in the redevelopment portion of the scenario. Furthermore, the growth in ultra high-density development in the gateway scenario is multiple times higher than in the middle scenario. This creates rapid household growth in the gateway scenario and subsequently greater pressure on expenditure growth.

The middle scenario showed the smallest difference in the spread between total revenues and total expenditures at about one percentage point. But, the one percentage point difference cannot be considered statistically significant given the 25 years of the simulation and the known uncertainty in estimates over such a long period. Therefore, the middle scenario shows basically the same growth in revenues and expenditures.

Alternative Model Estimates

One of the limitations of the WebFIT™ fiscal impact simulations is WebFIT™’s inability to vary as population and income shifts change the need for service within sub-county areas. This limitation leads to an alternative estimate that incorporates the active socio-economic change that can occur within sub-county areas. To address these active changes we focus on a base case for expenses and revenues per land-use type. Recall, as stated in the assumptions, that WebFIT™ incorporates capital spending and revenues. The Alternative model’s focus is on operating expenses and revenues and is inclusive of enterprise funds. Thus, although the Alternative model addresses some of the limitations of WebFIT™, the fiscal base differs between the two models.

We establish the base case for expenses and revenues by land-use type by using the 2004 Gwinnett County management survey. This survey, conducted by the Economic Development Division, directed by Alfie Meek PhD, focused on level of service expenses and revenues in three land-use types, residential, commercial/industrial and farm/forest. Each major category and subcategory of expenses and revenues were assessed a weighting based on the perceived contribution for each land-use type for the entire county. We aggregate the information into total expenditure and total revenues by land-use type as shown in Table 10 to provide an overview of the total allocations. The first analysis, based on WebFIT™, does not incorporate this managerial data, instead assigning expenses and revenues based on amount of land within each land-use type.

Table 10: Distribution of Expenditures and Revenues

	<u>Residential</u>	<u>Commercial/Industrial</u>	<u>Farm/Forest</u>
Total Expenditures	71.98%	26.58%	1.43%
Total Revenue	65.17%	33.71%	0.82%

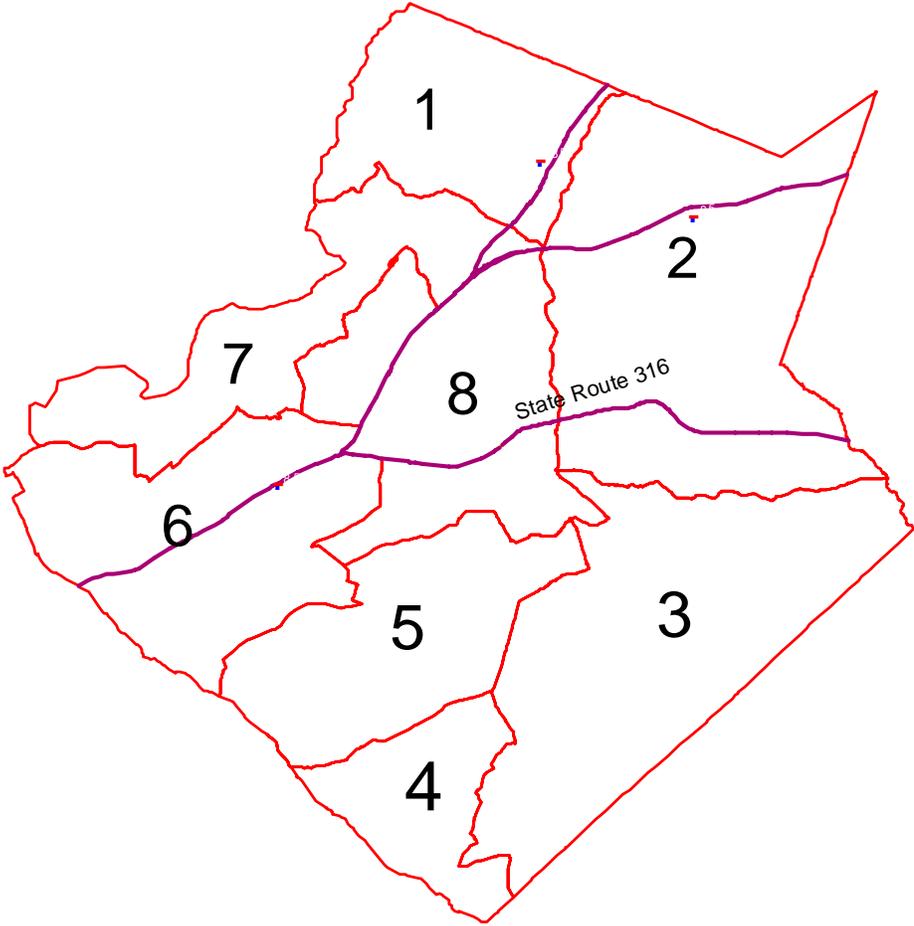
Note: Revenues distribution does not include 0.30% of revenues that come from external sources.

Using the percentages obtained from the survey, we break the major land-use types offered in Table 10 into the tax digest property categories as follows:

- Residential includes the following property categories: Single Family; Estate; TownHouse/Condo; Mobile Home; and Multifamily
 - In the residential land-use type we allocate multifamily. We use this classification since we are treating multifamily (usually apartments) similar to the treatment by service providers, such as police and fire. Our assumption is that the call for service is to a residence, such as apartment #3, not to a building.
- Commercial/Industrial includes the following property categories: Hotel/Motel; Commercial; Mixed; Office, Bank, etc; Rinks, Clubhouses, etc; Warehouse/Light Industrial; Utilities; and School/Church/etc.
- Farm/Forest includes Agricultural land and Vacant/Undeveloped land

To redistribute the multiple property categories into the three survey land-use types, we use the proportion of each property type within the three land-use types. For example, if single family is 80% of residential land-use then 80% of expenses and revenues are allocated to single family. After redistributing the expenses and revenues to each property category, we use GIS to place each property into each of the sub-county areas as shown in Figure 1.

Figure 1: Sub-County Areas in Gwinnett County



Gwinnett Study Areas



The use of each property category and its corresponding expense and revenue contribution leads to allocations of expenses and revenues into each sub-county area that is equivalent. For example, if sub-county area 2 has the same number of single family properties as sub-county area 3, then expenses are equal in single family properties for those sub-county areas while revenues vary based on property values. One of the distinct disadvantages of this process of expense and revenue allocations is that sub-county areas may differ in socio-economic condition and managerial allocation of service need. Thus, calls for service (the expenses associated with the sub-county area) may not be identical across all the different sub-county areas violating one of the assumptions in WebFIT that all sub-county areas request/require the same service levels. We assume that for the largest single revenue source, property tax, the tax assessor's office will accurately provide property values across all sub-county areas regardless of socio-economic conditions within the sub-county area. Given that the millage rate is identical across sub-county areas, the revenue and expenses derived within each sub-county area will be unique to that area, varying based on socio-economic forces.

To explore differential service needs (expenses) by sub-county area, we begin by graphically looking at the calls for service for fire and police. In Figure 2 we offer calls for service by police and fire along with the median for both of these services. The median calls for service indicates the number in which 50% of the calls for service are below that number and 50% of the calls for service are above that number. In this way, the median provides an accurate statistic for expected calls for service. As shown in the figure areas 2, 6, 8 are higher than the median for both fire and police calls for service. This indicates that the use of equivalent expenses across the sub-county areas may be misleading.

This graphic presents a visual assessment of the future requirements for Gwinnett County within sub-county areas. The graph shows us that calls for service vary greatly and particularly in sub-county areas 2, 6, and 8. The information gained from the graphic allows us to make modifications to the future scenarios that incorporate our best forecast for expenses and revenues in Gwinnett County in the year 2030.

Service Changes and Analysis

Municipal-like services offered by Gwinnett County provide a practical basis to look at the changing demographic and economic patterns within the scenarios. These services, such as police, fire, and recreation services allow us the opportunity to look at Gwinnett County as a large municipal-like service provider. This differs from the WebFIT™ analysis in that we can incorporate the issues of income and population shifts/changes, important factors to municipal-type services. This allows for Gwinnett County to experience income and population shifts/changes similar to the fiscal impact felt by a municipal government. While WebFIT™ provides us an expenditure analysis focusing on land-use changes; WebFIT™ cannot incorporate the changing dynamics of demographics and income, a similar outcome to our analysis of expenses when considering all sub-county areas as equivalent in service need.

Prior work in cities with populations greater than 300,000 (Pack, 1998) shows that non-poverty related expenses- defined as police, fire, and general government- rise by \$27.75 per capita as poverty changes by one percentage point. Pack's (1998) analysis focused on large cities and although Gwinnett County spending on municipal-like services is indicative of large city like

spending, consideration must be given to the intrametropolitan nature of Gwinnett County. Simply put, Gwinnett County is part of a large metropolitan area, the Atlanta Metropolitan region. Prior research by Joassart-Marcelli et al. (2005) focuses on the issues oriented toward intrametropolitan locations. Joassart-Marcelli et al. (2005) find that non-poverty expenses (fire, police, and general government) rise by \$64 per capita for each one percent increase in poverty in the intrametropolitan areas.

Using these prior studies, we have the opportunity to look at expense *ranges* for the scenarios based on income and demographic changes while incorporating land use changes. An important factor when using prior studies as a basis for current fiscal analysis is to analyze the government under study to assure us that the prior study outcomes may be generalizable to the current government under study, Gwinnett County.

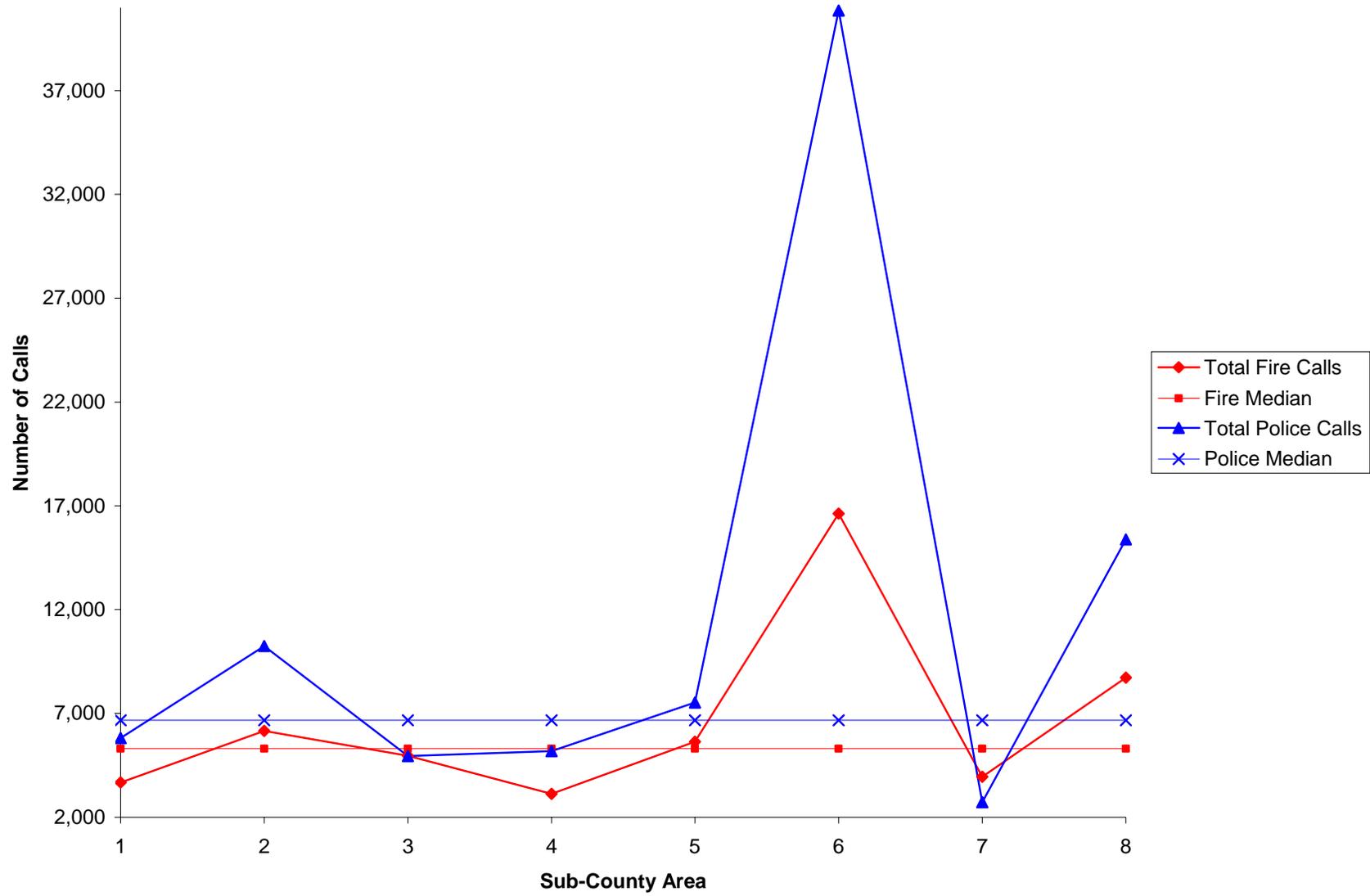
To generalize the affects of poverty found in earlier studies to Gwinnett County, we first need to establish a relationship between service needs, income levels, and poverty demographics. To begin the analysis of the effect of income and demographic changes/shifts for Gwinnett County we establish that the eight sub-county areas, as defined in the scenarios, are currently correlated with calls for service by police and fire. We disaggregate calls for fire service into fire calls only, medical calls only, and all other fire calls. We disaggregate police calls for service into person crime calls (armed robbery, battery, sexual assault, rape, aggravated assault, false imprisonment, murder, and carjacking), property crime calls (criminal damage, burglary, and criminal trespass), and all other crime calls. We establish a simple correlation analysis to look at the correlation between police and fire calls in the sub-county areas. We find that police and fire calls are significantly correlated with a correlation coefficient of 0.96 or greater. This indicates that as fire calls for service increase police calls for service also increase at about the same rate. This finding is expected since this is one of the reasons municipal governments combine the fire and police budgets into a service commonly identified as safety or emergency services.

To focus on the correlation analysis, we define the income quintiles in Table 11. Using the calls for service data for both police and fire for the last 2 years (FY2005, FY2006) we correlated the calls for services in the eight sub-county areas with household income.

Table 11: Income Quintiles Defined

	Definition of Income Quintiles
Lower	Under \$27,380
Lower Middle	\$27,380 to \$47,215
Middle	\$47,215 to \$69,728
Upper Middle	\$69,728 to \$105,415
Upper	Over \$105,415

Figure 2: Gwinnett County FY2006 Calls for Service Police and Fire



We find, as shown in Table 12, that the correlation between the household income quintile and calls for services are very strong for all household income levels except middle income households. The important findings from the correlations are:

- Households that are in the lower and lower middle income quintiles have a positive relationship with calls for service in both police and fire services.
- As the number of households in the lower and lower middle income quintiles increase in Gwinnett County, calls for fire and police services also rise.
- Households in the middle income quintile have no direct effect on calls for service for police and fire.
- Households in the upper and upper middle income have a negative effect on calls for police and fire services.
- As the number of households in the upper and upper middle income quintiles increase in Gwinnett County, calls for fire and police services decline.
- Fire calls for service are not as strongly related to household income as are police calls for service

Table 12: Correlations for Fire and Police Services with Sub-County Areas

Income Quintile	Fire Call	Medical Call	Other Fire	Person Crime	Property Crime	Other Crime
Lower	0.62*	0.65*	0.67*	0.69*	0.74*	0.72*
Lower Middle	0.58*	0.66*	0.64*	0.75*	0.73*	0.73*
Middle	0.36	0.45	0.39	0.53	0.44	0.47
Upper Middle	-0.65*	-0.63*	-0.65*	-0.69*	-0.72*	-0.71*
Upper	-0.55*	-0.64*	-0.62*	-0.72*	-0.70*	-0.70*

* = statistically significant

In Table 13 we focus on the specific sub-county areas noted as sub-county areas 2, 6, and 8. These three areas include the major interstate corridor of I-85, I-985 and State Route 316. The three sub-county areas account for 60% of total fire calls for service and 72% of total police calls for service in Gwinnett County. Table 13 shows that in these three sub-county areas total calls for service for police and fire are highly correlated with household income.

- Both total fire and total police calls are highly positively correlated with lower and lower middle income households
- Both total fire and total police calls are highly negatively correlated with upper and upper middle income households
- Neither total fire and total police calls are statistically significantly correlated with middle income households

There is an important assumption in the correlations for police and fire service and income levels. We have assumed that calls for service are not affected by the surrounding geography, e.g. the interstate freeway system only affects specific sub-county areas. We relax this

assumption by looking at the correlation between calls for police and fire service and income when calls oriented to traffic related issues are removed. We find that the results shown in Tables 12 and 13 are robust when calls related to traffic incidents are removed.

Table 13: Correlation of Income Quintile with Fire and Police Service Calls in the Three Sub-County Areas

Income Quintile	Total Fire Service Calls	Total Police Service Calls
Lower	0.95*	0.92*
Lower Middle	0.99*	0.99*
Middle	0.56	0.63
Upper Middle	-0.98*	-0.97*
Upper	-0.99*	-0.99*

* = statistically significant

Although we have evidence that lower and lower middle incomes are positively correlated with calls for police and fire services, we reassess the relationship by focusing on poverty rates in each sub-county area. Poverty is not an identical measure to lower and lower middle income quintiles. Poverty is defined in the Federal Register in 2005 as an income of \$16,090 or less for a family of three. Since the average household size in Gwinnett County in 2005 has a range of 2.87 to 2.95, we use a family of three as our comparative base. The Federal poverty guidelines are shown in Table 14.

Table 14: 2005 Poverty Guidelines for the 48 Contiguous States for FY2005

Persons in Family Unit	Federal Poverty Guideline
1	\$ 9,570
2	12,830
3	16,090
4	19,350

Using the guidelines in Table 14, we show the correlation between poverty and the calls for service in Gwinnett County for FY2005 in Table 15. Table 15 indicates that as poverty increases within sub-county areas calls for both fire and police services increase. The findings of the positive correlation between income quintiles and poverty rates with calls for both fire and police services support an analysis that takes into account the demographic and socioeconomic shifts within Gwinnett County for our forecast, similar to the results found in Joassart-Marcelli et al. (2005) analysis of metropolitan area governments. These indicators of service need, income level and poverty, establish a generalizability of earlier studies in assessing their role in the dynamic expenditures of governments that provide municipal services.

Table 15: Correlation of Poverty with Fire and Police Calls for Service in the Sub-County Areas

	Total Fire Service Calls	Total Police Service Calls
Poverty July 2005	0.86	0.91

Establishing a Baseline Budget

In the correlation analysis, we established that changing demographics and income play a role in service provision. We begin establishing our baseline budget by making several revisions to the FY2005 expenditures for Gwinnett County. The first modification to FY 2005 expenditures is in emergency services. In 2006, the county had a large change in police officers, leading to a total of 696 sworn officers. The second change is in the budget for the fire department to accommodate the acceptable service level of 80% of calls responded to within an 8 minute time period. Since we are forecasting out 25 years, the baseline budget provides us an opportunity to establish acceptable levels of services.

The change for both fire and police are based on acceptable service levels. Since the scenarios focus on a vision of Gwinnett County in 2030, we make the following changes to both the police and fire budgets:

- Change Police to 955 positions based on interview with Police Chief and supporting analysis. Desired minimal staffing level is 1.1 personnel per 1000 population. Staffing in FY2005 was approximately 0.9 personnel per capita. Desired ideal staffing is 1.5 personnel per 1000 population. Gwinnett County's 2005 population as defined by Dr. Thomas Hammer, the Plan's demographic consultant, is 726,581 rounded up to 727,000. We chose the midpoint between minimal and ideal staffing as defined by the Police Chief which is 1.3 personnel per 1000 population. This provides for 955 Police personnel.
 - To support the change in police personnel, we investigated surrounding like size counties. DeKalb County (2005 Population 677,959) has about 1.95 police personnel per 1000 population, Fulton County (2005 Population 915,623) has about 1.8 police personnel per 1000 population, and Cobb County (2005 Population 663,818) has about 1.1 police personnel per 1000 population.
 - Derive police expenses as follows:
 - Use 2007 proposed budget of 895 police personnel as base with expenses inclusive of staffing starting October 2007. This expense is \$79,926,981 in 2007 dollars. Add \$6,806,048 (2007 dollars) for an additional 60 personnel which include:
 - 42 Police Officers
 - 7 Corporals
 - 7 Sergeants
 - 2 Lieutenants
 - 2 Administrative Support Personnel
- Adjust for Consumer Price Index from 2007 to 2005 dollars. This provides a budget of \$81,529,047 in 2005 dollars.
- Fire is focused on response times as a major factor. We use an acceptable level of staffing to respond to 80% of all calls within eight minutes or less. This standard is

identical to that set by the National Fire Protection Association Standard 1710-3 (5) that states:

“Eight minutes or less for the arrival of an advanced life support unit to eighty (80) percent of emergency medical incidents, where this service is provided by the fire department.”

However less than the National Fire Protection Association Standard can apply for urban area response times which states in 1710-3 (3):

“Urbanized Cluster Area Deployment. Six minutes or less for the arrival of the first engine company to eighty (80) percent of the fire suppression and emergency medical incidents and a second engine company and a Supervisory Chief Officer within ten minute response time to eighty (80) percent of the incidents. Definition: Urbanized Cluster area with over 15,000 residents as defined by the U.S. Census Bureau’s 2000 census.”

The use of the 8 minute response time for 80% of calls may be due to Gwinnett County’s mixed urban and rural settings. Therefore, the 8 minute for 80% of calls response time appears to be accordance with NFPA standards. In 2005, 68% of calls were responded to within 8 minutes or less. Using this response time, to achieve an 8 minute response time for 80% of calls, we calculate a ratio of expenses per percentage change. Using 2004 through 2007 data, we find that an expense per 1% increase to the acceptable 8 minute response time provides a median expense of \$862,003. This leads us to a budget that accommodates the 8 minute or less response time for 80% of all calls equivalent to \$69,242,134 for FY2005.

Our second change to the FY2005 budget is based on the changing demographics of Gwinnett County. Recall that income and poverty increase calls for service. It has been found in the literature that poverty also increases poverty related services (public welfare and public assistance) although the results are mixed. Pack (1998), Summers and Jakubowski (1996), and Joassart-Marcelli et al. (2005) have argued that poverty increases municipal expenditures. Although the argument has been posited, little empirical support has been found for the relationship between poverty and poverty related spending. The results of this mixed outcome have led many to suggest that fiscal or institutional characteristics may be more important than the change in poverty when looking at poverty related expenses. Therefore, to analyze the issue of poverty and poverty related expenses, we look at the proportion of poverty spending as it relates to general revenues for like-size counties, a fiscal measure. Table 16 offers the comparison counties to Gwinnett. We find that Cobb and DeKalb Counties have similar spending on poverty related expenses, while Fulton County has a very high amount of poverty spending and Gwinnett County has the lowest poverty spending of the like-size counties.

Table 16: Poverty Spending as a Percent of General Revenues* for FY2005 using DCA Data

County	Poverty Spending**	Difference from Median
Cobb	8.23%	0.12%
DeKalb	7.98%	-0.12%
Fulton	15.15%	7.04%
Gwinnett	4.48%	-3.62%
Mean	8.96%	
Median	8.10%	

*General revenues are computed by combining total property taxes, total sales taxes, total excise taxes, total fees, licenses, and permits with welfare grants and community development block grants. Public welfare grants include grants for welfare purposes such as reimbursements for food stamp distributions, U.R.E.S.A., indigent care, and indigent defense payments. Community development block grants include either the Small Cities Program or the Entitlement Program.

** Poverty spending is the combining of public health, public welfare and social services, and community development expenditures. Public health spending includes expenditures for health center, animal control, immunizations, classes for unwed mothers, mosquito abatement; Public welfare and social services spending includes DFACS payments, senior citizen programs, food stamps, WIC, Head Start, etc.; Community development expenditures include expenditures for urban renewal, slum clearance, housing rehabilitation projects (other than housing authority projects), trees for a mall, contributions to the Chamber of Commerce, community Development block grant activities unless for a utility system or other enterprise fund, hotel/motel tax expenditures for such items as tourism, and conventions and trade shows.

We acknowledge the inaccuracy of the expenditure side since it includes spending on Chamber of Commerce, tourism, and conventions and trade shows. However, the data is limited since the DCA does not separate “poverty” spending only. We do take care to not include any funds from or to an enterprise fund.

Our finding in Table 16 suggests that the poverty rates between Cobb and DeKalb counties should be similar and both Gwinnett and Fulton counties should differ, with Gwinnett County having a lower poverty rate than any of the other counties based on poverty spending. Table 17 shows the poverty rates in 2005 and 2006 for our counties of interest. As shown in Table 17, Gwinnet and Cobb counties have very similar poverty rates in 2006, while DeKalb has a higher poverty rate. Focusing on just the two years offered in Table 18, we see that both Cobb and Gwinnett counties poverty rates are rising while DeKalb County’s poverty rate is declining. If we included the poverty rate in Gwinnett and Cobb counties in 2003, we would find that Cobb County’s poverty rate in 2003 was 6.6% – 9.9%, while Gwinnet County’s was 4.2% - 8.1%. Thus, over the last several years Gwinnett County’s poverty rate has increased at a faster rate than Cobb County. This leads to our final adjustment to the FY2005 baseline budget for Gwinnett County. We increase poverty related spending to equal that percentage spent by Cobb County in 2005, 8.23% of general revenue as shown in Table 16.

Table 17: Poverty Rates Range* for 2005 and 2006

County	2005	2006
Cobb	7.2% - 9.6%	8.6% - 10.4%
DeKalb	14.6% - 17.6%	12.9% - 15.9%
Fulton	14.1% - 16.7%	14.3% - 16.5%
Gwinnett	6.2% - 8.6%	8.0% - 10.4%

* Poverty rates are from the American Community Survey. Ranges are inclusive of the confidence intervals.

We have provided an analysis of the changes needed to the FY2005 budget based on both evidence from the fire and police services and an analysis of poverty spending by similar size jurisdictions in the Atlanta Metropolitan region. We conclude that an increase for police and fire services are necessary to provide accurate future estimates for the year 2030. We also find that increasing poverty expenditures in the baseline budget by 3.62% will increase the accuracy of our estimates. Taking demographic and income shifts into account will provide an improved estimate for Gwinnett County in 2030.

Alternative Model Estimates

The resulting analyses lead us to an estimation of the poverty levels that may be experienced by Gwinnett County in 2030. Table 18 provides poverty estimates by sub-county area and scenario. Using the July 1, 2005 American Community Survey as our base, the identical base used in the estimates provided by Dr. Thomas Hammer, we see that by 2030 in the Middle and Slowdown scenarios, poverty increases in Gwinnett County. The most dramatic change is the Slowdown scenario, while in the Gateway Scenario poverty levels are similar to those in 2005.

Table 18: Poverty estimates for 2030 by Sub-County Area (SCA)

	SCA 1	SCA 2	SCA 3	SCA 4	SCA 5	SCA 6	SCA 7	SCA 8	County
July 1, 2005 est.	6.85%	3.11%	3.21%	5.26%	3.78%	14.82%	4.94%	7.26%	7.44%
Gateway 2030	7.23%	3.33%	3.42%	5.56%	4.03%	15.50%	5.27%	7.69%	7.86%
Middle 2030	6.50%	4.23%	4.20%	8.36%	6.77%	20.57%	8.29%	10.73%	9.62%
Slowdown 2030	8.21%	5.51%	5.37%	10.17%	8.51%	24.20%	10.51%	13.17%	12.10%

To address the issue of population shift, Table 19 provides the population estimates as obtained by Dr. Thomas Hammer, who generated the socio-economic projections for this study (see Appendix C – Population and Employment Forecasts). From these estimates the number of households are derived which lead to the estimated land use for residential properties.

Table 19: Population Estimates for 2030

Scenario	Population Estimate
Gateway 2030	1,136,476
Middle 2030	1,027,880
Slowdown 2030	887,847

Alternative Model Results for Each Scenario

Using the poverty change and the population estimates, we derive the operational expenses and revenues that Gwinnett County could face based on the scenarios. We base the scenario estimates on the modified FY2005 budget for Gwinnett County.

The Slowdown scenario results are shown in Tables 20 and 21. This low growth scenario shows the largest change in total expenditures of the scenarios. We estimate revenue at \$913 million realizing a deficit in the range of \$109 million and \$259 million. We use a range since the poverty estimates are not a point estimate. This leads to low and high operational expenses

which we note as our operational expenses range. This deficit is in the range of 11.9% and 28.4% of total estimated revenues. Driving this outcome is the large change in poverty forecasted for Gwinnett causing a large rise in the costs of services, particularly in police and fire services.

Table 20: Summary Expenditure and Revenue Estimates for Slowdown Scenario

Scenario	Estimates
Slowdown Revenue	\$913 million
Slowdown Expenditure	\$1,022 million to \$1,172 million

Table 21: Detail Expenditure and Revenue Estimates for Slowdown Scenario

Revenue Category	Forecast Revenues
Real/Personal Property Taxes	\$ 355,000,000
Motor Vehicle Taxes	35,000,000
All Other Property Taxes	14,000,000
Insurance Premium Taxes	25,000,000
All Other Taxes	32,000,000
Business License	19,000,000
Total Other Licenses & Permits	13,000,000
Total Intergovernmental Revenue	8,000,000
Total Judicial Revenue	31,000,000
Building Permits/Fees	14,000,000
Tax Commissions	15,000,000
E-911 Fees and Charges	16,000,000
Street Lighting Assessment Fees	8,000,000
Other Charges for Services	12,000,000
Water and Sewer Sales and Fees	274,000,000
Other Sales and Rental	30,000,000
Total Miscellaneous	13,000,000
Total Revenues	\$ 913,000,000

Expenditure Category	Forecast Expenditure Range		
Administration	\$ 83,000,000	to	\$ 95,000,000
Tax Commissioner	13,000,000	to	15,000,000
Justice	72,000,000	to	82,000,000
Sheriff & Corrections	101,000,000	to	116,000,000
Medical Examiner	1,000,000	to	1,000,000
Community Services	91,000,000	to	104,000,000
Planning, Transportation & Utilities	360,000,000	to	412,000,000
Police & Fire	239,000,000	to	274,000,000
Non-Departmental Expenses	62,000,000	to	72,000,000
Total Expenditures	\$ 1,022,000,000	to	\$1,172,000,000

The Middle scenario results are shown in Tables 22 and 23. This steady-state scenario shows the low range of total expenditures identical to that of the Gateway scenario. We estimate revenue at \$1,025 million realizing a deficit in the range of \$3 million and \$84 million. This deficit is in the range of 0.3% and 8.2% of total estimated revenues. At the low estimate of expenditures this is a breakeven scenario and at the high end of expenditures there is a deficit. This steady state

scenario may leave Gwinnett County at breakeven in the year 2030 or has a potential revenue shortfall of about 8% in 2030.

Table 22: Summary Expenditure and Revenue Estimates for Middle Scenario

Scenario	Estimated Range
Middle Revenue	\$1,025 million
Middle Expenditure	\$1,028 million to \$1,109 million

Table 23: Detail Expenditure and Revenue Estimates for Middle Scenario

Revenue Category	Forecast Revenues
Real/Personal Property Taxes	\$ 393,000,000
Motor Vehicle Taxes	40,000,000
All Other Property Taxes	15,000,000
Insurance Premium Taxes	30,000,000
All Other Taxes	35,000,000
Business License	20,000,000
Total Other Licenses & Permits	14,000,000
Total Intergovernmental Revenue	9,000,000
Total Judicial Revenue	36,000,000
Building Permits/Fees	16,000,000
Tax Commissions	16,000,000
E-911 Fees and Charges	18,000,000
Street Lighting Assessment Fees	9,000,000
Other Charges for Services	13,000,000
Water and Sewer Sales and Fees	314,000,000
Other Sales and Rental	33,000,000
Total Miscellaneous	14,000,000
Total Revenues	\$ 1,025,000,000

Expenditure Category	Forecast Expenditures Range	
Administration	\$ 84,000,000	to \$ 91,000,000
Tax Commissioner	13,000,000	to 14,000,000
Justice	72,000,000	to 78,000,000
Sheriff & Corrections	102,000,000	to 110,000,000
Medical Examiner	1,000,000	to 1,000,000
Community Services	91,000,000	to 98,000,000
Planning, Transportation & Utilities	365,000,000	to 394,000,000
Police & Fire	236,000,000	to 255,000,000
Non-Departmental Expenses	63,000,000	to 68,000,000
Total Expenditures	\$ 1,028,000,000	to \$ 1,109,000,000

The Gateway scenario results are shown in Tables 24 and 25. In this scenario the police and fire expenses in 2030 are higher than the Middle scenario on the low range but lower on the upper range *This scenario assumes limited suburbanization on the east side of Gwinnett County, which may directly affect the operational expenditures.* This assumption is not present in either the Slowdown or Middle scenarios. Expenditures overall have a much smaller range than either the Slowdown scenario or the Middle scenario. We estimate revenue at \$1,090 million realizing a

surplus in the range of \$62 million and \$45 million. This surplus is in the range of 4.1% and 5.7% of total estimated revenues. This outcome indicates that the Gateway scenario is considered a potential budgetary surplus result.

Table 24: Summary Expenditure and Revenue Estimates for Gateway Scenario

Scenario	Estimated Range
Gateway Revenue	\$1,090 million
Gateway Expenditure	\$1,028 million to \$1,045 million

Table 25: Detail Expenditure and Revenue Estimates for Gateway Scenario

Revenue Category	Forecast Revenues
Real/Personal Property Taxes	\$ 414,000,000
Motor Vehicle Taxes	43,000,000
All Other Property Taxes	15,000,000
Insurance Premium Taxes	33,000,000
All Other Taxes	36,000,000
Business License	20,000,000
Total Other Licenses & Permits	14,000,000
Total Intergovernmental Revenue	10,000,000
Total Judicial Revenue	38,000,000
Building Permits/Fees	17,000,000
Tax Commissions	17,000,000
E-911 Fees and Charges	19,000,000
Street Lighting Assessment Fees	10,000,000
Other Charges for Services	14,000,000
Water and Sewer Sales and Fees	338,000,000
Other Sales and Rental	35,000,000
Total Miscellaneous	15,000,000
Total Revenues	\$ 1,090,000,000
Expenditure Category	Forecast Expenditures Range
Administration	\$ 84,000,000 to \$ 85,000,000
Tax Commissioner	13,000,000 to 13,000,000
Justice	72,000,000 to 73,000,000
Sheriff & Corrections	101,000,000 to 103,000,000
Medical Examiner	1,000,000 to 1,000,000
Community Services	87,000,000 to 88,000,000
Planning, Transportation & Utilities	365,000,000 to 371,000,000
Police & Fire	242,000,000 to 246,000,000
Non-Departmental Expenses	63,000,000 to 64,000,000
Total Expenditures	\$ 1,028,000,000 to \$ 1,045,000,000

Alternative Model Conclusion

Overall the three scenarios result in very different fiscal outcomes. When poverty and cost allocation are taken into account, we find that the Alternative model that incorporated a series of socioeconomic issues provides a very intuitive outcome. In an economic slowdown, as forecasted with the Slowdown scenario, Gwinnett County is in deficit throughout the expenditure

range. In the Middle scenario, a steady state based on FY2005, we find that Gwinnett County has two potential outcomes based on the expenditure range. Those outcomes, breakeven or deficit are important. Throughout the expenditure range of the Middle scenario the County is never in fiscal surplus. In the Gateway Scenario, revenues exceed expenditures throughout the expenditure range, providing the County with a fiscal surplus.

Summary of the Two Fiscal Analyses

We begin the summary analysis with Table 26 showing the resulting expenditures and revenues of the three scenarios using WebFIT™. Note that all three scenarios expenditures and revenues in the model are point estimates that increase over the three scenarios.

Table 26: Expenditures and Revenues - WebFIT™ Model

Scenario	Forecast (in Millions of Dollars)	
	Expenditures	Revenues
Slowdown	\$ 811	\$ 820
Middle	\$ 924	\$ 924
Gateway	\$ 1,008	\$ 964

In Table 27 the Alternative model offers revenues that are point estimates like found in the WebFIT™ model. The Alternative model expenditures provide a low range and high range. In the Alternative model, the low range expenditures are very similar in the three scenarios while the upper range expenditures decrease as we move from the Slowdown to the Gateway scenario.

Table 27: Operational Expenditures and Revenues - Alternative Model

Scenario	Forecast (in Millions of Dollars)			Revenues
	Expenditures			
Slowdown	\$ 1,022	to	\$ 1,172	\$ 913
Middle	\$ 1,028	to	\$ 1,109	\$ 1,025
Gateway	\$ 1,028	to	\$ 1,045	\$ 1,090

Outcomes of the two modeling techniques provide an opportunity to project potential outcomes in FY2030 for Gwinnett County. Focusing on the Alternative model expenditures, it appears expenditures may be able to be held constant throughout the scenarios if the low range expenditures are realized. If revenues are realized as projected by the Alternative model, the smallest deficits for the Slowdown and Middle scenarios are realized, while the largest surplus is realized for the Gateway scenario. Although projecting the future is not an exact science, providing direct responses to poverty may assist Gwinnet County in holding poverty impacts to the forecasted lowest range of expenditures offering an opportunity to directly impact the potential outcomes of these three scenarios.

Optional Financing Choices using the Alternative Model Outcomes

Given that the Slowdown scenario leads to a large deficit and the Middle scenario leads to a potential deficit in the Alternative model, we look at optional financing structures. We approach the issue of optional financing with the following assumptions:

- Gwinnett County financial focus is to retain their AAA bond rating
- Revenue sources are those currently approved by the State of Georgia

We begin our analysis with the most obvious solutions to Gwinnett County under the Slowdown and Middle scenarios. Revenue shortfall for the Slowdown scenario ranges from 11.9% to 28.4% of total estimated revenue. The Middle Scenario has a potential deficit of 8% of revenues.

There is little doubt that the initial choices are the most controversial. First, Option 1 would be to reduce services to only those required under the Georgia Constitution for County governments. This would eliminate the service cost of municipal services that are currently provided by Gwinnett County. Table 28 highlights those costs that are the provision of municipal like services.

Table 28: Option 1: Municipal Like Services and Costs

Expenditure Category	Service	Potential Savings
Police & Fire	Police and Fire	\$236.0 to \$274.0 million
Planning, Transportation, & Utilities	Planning	\$15.2 to \$19.8 million
Community Services	Parks and Recreation	\$51.8 to \$67.6 million
Total Potential Savings		\$303 to \$361.4 million

Under Option 1, the reduction of Police and Fire services would have an adverse impact not only on the unincorporated areas in the county, but also on the municipalities whom are dependent on fire services and police services for major crimes that are provided by the county. In our opinion, although the removal of Police and Fire services does not affect the County under Georgia Statutes, the impact on both the citizens of the unincorporated area and the municipalities make this portion of Option 1 impossible. When looking at Planning, this service provides land use and land development information for the county. Given that Gwinnett County has approximately 80% of its citizens residing in the unincorporated areas; the removal of planning appears infeasible. The reduction or elimination of Parks and Recreation in the county would have adverse effects on the quality of life. In our opinion, Option 1 may be plausible under Georgia Law; however, the negative effects appear to be unacceptable.

Option 2 would increase the millage level to accommodate the deficit in the scenarios. For property, this would increase the millage rate based on a 1 mill per \$1000 in property value as shown in Table 29. Following this potential option, a two (2) mill increase would position the Middle scenario at breakeven at the high range of expenditures. Looking at the Slowdown scenario the millage rate would require an increase of about 26% of the FY2005 millage to approximately 15 mills at the low range of expenditures and an increase of about 44% of the FY2005 millage to approximately 17 mills at the high range of expenditures.

Table 29: Increased Millage Effect on Property Tax Revenue

Revenue Category	Scenario	Eliminate Forecasted Deficit*	Potential Revenue Increase
Property Taxes	Slowdown	+3 to 5 mills	1 mill ≈ \$35 million
	Middle	≈ 2 mills	1 mill ≈ \$39 million

* based on FY2005 millage of 11.47

Increasing taxation is complicated by the fact that revenue capacity and effort both affect the potential outcome. Simply put, we need to evaluate whether or not the economic base of the County is either under or over utilized. To provide this assessment, we look at both revenue capacity and effort in Gwinnett compared to the Atlanta Regional Commission (ARC) 20 county area.

Table 30: Estimated 2005 Expected Per Capita Revenue, Effort and Capacity for ARC's Regional Counties

ARC's 20-County	Estimated 2005 Population*	Expected Revenue Per Capita**	Estimated Capacity	Estimated Effort
Barrow County	59,920	\$ 423	0.79	0.69
Bartow County	89,049	491	0.92	0.86
Carroll County	104,386	413	0.77	0.65
Cherokee County	184,360	554	1.04	0.77
Clayton County	266,614	461	0.86	1.09
Cobb County	663,528	561	1.05	1.04
Coweta County	109,769	494	0.92	0.74
DeKalb County	713,679	516	0.97	1.09
Douglas County	112,914	486	0.91	0.87
Fayette County	104,186	659	1.23	0.65
Forsyth County	140,804	664	1.24	0.79
Fulton County	934,242	639	1.20	1.03
Gwinnett County	726,790	524	0.98	1.25
Hall County	166,302	502	0.94	0.82
Henry County	168,204	500	0.94	1.00
Newton County	86,529	451	0.84	0.91
Paulding County	112,566	461	0.86	0.79
Rockdale County	78,398	482	0.90	1.17
Spalding County	61,262	408	0.76	1.18
Walton County	75,670	Did not report all revenue sources		

* U.S. Census July 1, 2005 estimates.

** Based on average millage of 10.46 per \$1000 property value and average SPLOST/LOST revenues.

Includes average fee, charge, and other source revenues.

The twenty ARC counties are listed in Table 30 along with expected (average) millage rate, expected revenues per capita, estimated capacity, and estimated effort. Using the net certified tax digest² provided by the Georgia Department of Revenue, we derive the expected average

² Traditionally, the Department of Community Affairs has used the gross tax digest. Using the gross digest produces an overall expected revenue collection. One issue with using the gross digest is that it assumes an ability to collect revenue from exempt properties. This distorts a county's revenue constraint in that the State and Federal

revenue per capita for Gwinnett which is \$524 per capita. Using the Representative Tax System (RTS) method, we estimate Gwinnett County's tax capacity. Tax capacity is defined as how much revenue Gwinnett County would collect in a year if it levied the average tax rate for the ARC 20 county area for Gwinnett County's economic base.

Estimated revenue effort is the percentage value of each county's actual revenue collections relative to its revenue capacity. Accordingly, effort measures the extent to which a county is taxing its taxable resources relative to the average of all counties in the ARC 20 county area.

Both the estimated revenue capacity and the estimated revenue effort indicate the fiscal effort in Gwinnett County. Revenue capacity based on Gwinnett County's economic base is at 98%. Looking at effort, Gwinnett County actually collects 125% of its tax capacity, the highest in the ARC 20 county area.

In Option 3, we begin to look at options not used in Gwinnett County in FY2005. The major revenue choice that Gwinnett County currently uses includes property taxes and SPLOST. These two major revenue sources accounted for about 59.5% of all revenues in FY2005. An option to the SPLOST is the Local Option Sales Tax (LOST), a tax that unlike the SPLOST can be used for operating costs. Under the LOST, any government within the county is deemed qualified to receive a distribution of the LOST revenues if that government levies at least one tax in addition to the sales tax and provides at least three of the following six services: water, sewage, law enforcement, fire protection, garbage collection, or libraries. Incorporated governments that fulfill these conditions are allowed under the legislation to receive a share of the LOST revenues. The limitation of the LOST is that a population based proportion of the revenue generated under the LOST is allocated to the incorporated cities within the county. This usually differs from the SPLOST which may have a revenue share with the incorporated cities within the county; however the revenue is restricted to capital spending. Thus, Option 3 would include a shift away from a SPLOST and into a LOST. The effect would be a decrease in infrastructure construction, but an increase in flexibility to use the LOST funding for operating or recurring expenses. In Table 31, we show the projected SPLOST and LOST revenue in 2005 dollars for the three scenarios in 2030.

Table 31: SPLOST and LOST Forecasted Revenue in 2030 (in Millions of Dollars)

Revenue Category	Scenario	Forecasted Revenues
SPLOST or LOST	Slowdown	\$166
	Middle	\$190
	Gateway	\$202

Revenue derived by either source, SPLOST or LOST, should be virtually identical since the sales tax base is the same. Given that the population of unincorporated Gwinnett County is about 80% of the total population of the county, about 20% of the funds raised in a LOST would be allocated to the municipal governments within the county. Care must be taken with these general estimates since the distribution of LOST dollars is traditionally resolved within an intergovernmental agreement. The intergovernmental agreement between the County and the

governments exempt properties based on enacted laws that counties cannot effect. Thus, a more accurate measure is to use the net tax digest when computing a capacity or tax effort numeric.

municipalities is usually based on an authoritative population count, traditionally within the State of Georgia this authority is the Decennial US Census.

Option 4 follows from Option 3. If Gwinnett County moved to a LOST that would leave a large loss in revenue for infrastructure construction. However, with the introduction of a LOST, the County would have a series of options. One option would be to spend all the revenue raised by the LOST in the same manner as the current SPLOST. This would have no effect on infrastructure spending, however it would not provide the needed operating revenue. Another option would be to address infrastructure needs with Tax Allocation Districts (TAD). The most significant financing innovation associated with TADs is the use of TAD-backed debt. The County can issue debt to fund infrastructure improvements in a specifically recognized area, dedicating the anticipated increase in property revenue to finance the debt. Recently, Georgia expanded this law to allow localities to commit incremental gains in sales taxes and other taxes such as the hotel-motel taxes to support TAD activities. In most cases, the incremental revenues involved include those of all the tax jurisdictions that overlap with the TAD – cities, counties, schools, and special districts. One limitation is that intergovernmental cooperation is required: under Georgia State Law all the affected jurisdictions must agree to commit their incremental revenues to the TAD.

TAD benefits are:

- Finance economic development activities based on anticipated increases in revenues, rather than drawing on the current tax base.
- Issue TAD debt, which is not calculated in the state-imposed local debt ceilings.
- TAD debt does not require the full faith and credit of the issuing jurisdiction.
- Overlapping jurisdictions can use pooled resources to support economic development activities
- Access to redevelopment powers, such as eminent domain.

TAD risks include:

- Reduction of the net wealth of jurisdictions due to:
 - TAD revenues used to finance projects do not materialize sufficiently to cover the costs of the debt issued or other public sector investments
 - Increased capital costs due to debt risk as perceived by the market
 - Moral obligation of locality due to default on debt issued
- TAD investments may stimulate growth, thereby increasing demand for local services while incremental revenue is used to pay debt obligation and not new service requirements
- TAD resources provided to benefit businesses when the business may have made the necessary improvements or investments without public support

TADs may also come with social equity issues that have been associated with previous redevelopment policies. For instance, TADs may explicitly or inadvertently force low to moderate income families out of neighborhoods as new investment and redevelopment occurs, commonly described as gentrification. These costs and risks are non-trivial, so the State of Georgia and other localities have adopted strategies to address these risks. In Georgia a

jurisdiction can only commit 10 percent of its property tax base to TADs at any given point in time. This limitation allows localities to develop TADs as part of an overall planning and economic development strategy. This provides an opportunity for local governments to identify the areas that should be targeted for redevelopment, identifying the public purpose that will be served by TAD, and the types of projects that are appropriate for TAD backing. Similar to good capital planning and infrastructure construction, local governments need to conduct careful feasibility, fiscal impact, and cost-benefit analysis of proposed TAD projects.

TAD also provides the opportunity for local governments to share risk with the private sector. This should lead to agreed upon annual performance audits or evaluations, as well as financial audits, to determine private sector progress towards agreed upon goals. These audits need to indicate how public funds are being used to support TAD redevelopment plans. Within the public-private partnership brought about through the use of TAD, specification of the sanctions for failure to meet goals should be developed.

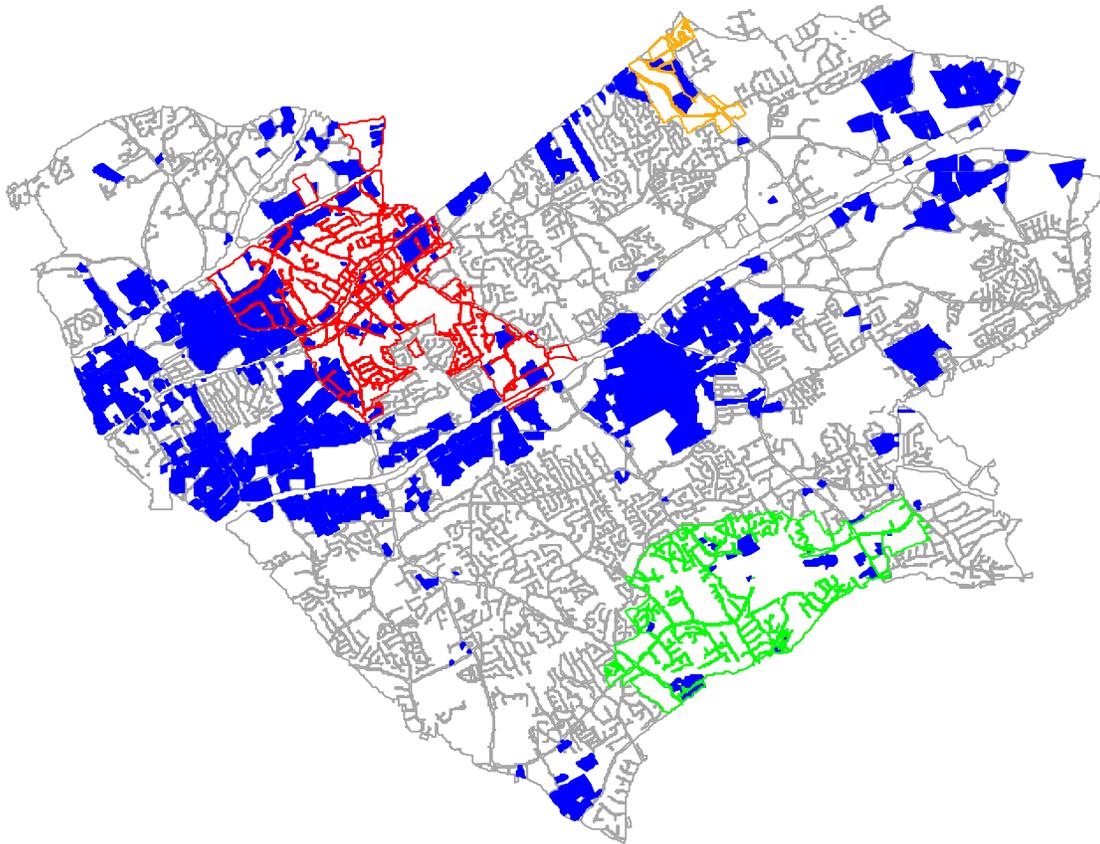
As a concluding measure, TAD debt needs to be assessed in conjunction with the initial review of the project(s) being considered. This should lead to a thorough “worst case” scenario that anticipates a potential shortfall in TAD revenues and how that revenue would be derived external of the TAD. As an example we look at sub-county area 6 which is located on the I-85 corridor. Figure 3 indicates the industrial areas within sub-county area 6. The industrial areas within this sub-county area total about 5,258 acres out of 33,600 or about 15.65% of the land. Industrial uses include:

- Distribution warehouse
- Light manufacturing
- Light warehouse
- Lumber storage
- Mini warehouse
- Truck stop
- Utility storage

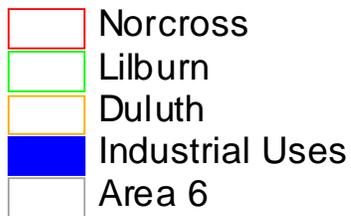
We find that in FY2005 17.5% of total land and building value in sub-county area 6 were contributed by industrial properties. This is about 3% of the entire property tax base in Gwinnett, far below the maximum allowed under Georgia Law. The industrial properties have associated Gwinnett County revenue of approximately \$9.56 million. If we placed these properties within a TAD, holding the millage rate constant, a 1% increase in industrial property value would lead to an increase of tax revenue of about \$95,000. In the TADs, an intergovernmental agreement as required by the State of Georgia, would also allow collection of the Gwinnett County School District incremental revenue raised from the industrial properties. This would raise approximately \$169,000 additional dollars per year. This would allow for a combined incremental revenue increase of \$264,000 annually excluding any additional sources such as municipal or other overlay tax sources. Given this incremental cash flow, we look at a simple issuance of a bond. For example, the Bloomberg posted average rate for FY2005 for a Triple A rated (AAA) municipal issue has an associated interest yield of 4.5%. Using a scenario that includes an issuance cost of 3%, the \$264,000 annual incremental revenue from the sub-county area 6 industrial properties would lead to a potential bond issuance of \$3,434,000. If we

look at the leverage potential, for every \$1 incremental increase in tax collection in the industrial area of sub-county area 6 leads to a potential indebtedness of \$13.

Figure 3: Sub-County Area 6



Cities and Industrial Uses In Gwinnett Study Area #6



Considering the current debt ratios for Gwinnett County Government, the issuance of this debt does not appear to have any adverse affects on the current bond ratings. This debt revenue could then be used within the TAD to provide additional leverage for public-private partnerships or development incentives in the provision of infrastructure. This narrow look at a small area could be expanded and enhanced with a series of potential revenue sources including impact fees to derive an increased leverage ratio or the use of other tax sources as allowed under Georgia Law for TADs.

An option to the TADs is the Community Improvement Districts (CID). Community Improvement Districts are authorized at Section VII of Article IX of the Constitution. Art IX, Sec VII, paragraph (c) limits the tax rate to a maximum of 25 mills (2.5 % of assessed value). This section also specifies the petition requirement – a majority of all property owners and owners representing 75% of the value of all properties must sign the petition requesting creation of the CID (Art IX, Sec VII (b)(2)(A) and (B)). The most limiting aspect of CIDs is the 2.5% of assessed value. This is far more limiting than the TADs limit of 10% of assessed value and the millage in the CID is constrained to 25 mills, however in the TADs there is no limit on the increased value within the TAD.

Fiscal Analysis Conclusion

In this analysis we have offered two estimation techniques for the projected expenditures and revenues in 2030 for Gwinnett County. Using the three land use scenarios, we find that the Slowdown, Middle, and Gateway scenarios in the WebFIT™ simulation are at breakeven. Thus, in these cases, revenues are project to equal expenditures under this modeling technique.

In the Alternative model analysis, we find that both the Slowdown and the Middle scenarios are in deficit. Four options are offered to address these deficits through optional financing mechanisms provided under Georgia Law.

Our projections of Gwinnett County's financial situation in 2030 are based on past history and projected changes in a county that is maturing. Many of the surrounding counties, particularly those north of Gwinnett County, indicate that Gwinnett County is in a maturation cycle. We have estimated the effects of this maturation process on the revenues and expenditures of Gwinnett County in 2030. We provide these forecasted estimates as a potential outcome and assume that the forecasts will be used to enhance Gwinnett County's plan for its future growth.

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Appendix A – Transportation Analysis

One of the key aspects to long range estimations is to look at the impact on transportation. Congestion mitigation, transit allocation, and project costs are common impediments when growth is forecasted in a long range fiscal estimation. A limiting factor for local governments, such as Gwinnett County, is the intergovernmental complexity of surface transportation financing. According to the Georgia Department of Transportation (GDOT), the GDOT assistance for local government streets and roads primarily is provided through two programs, the Local Assistance Road Program (LARP) which is designated exclusively for resurfacing, and State Aid contracts, which cities and counties can use for any type of road or bridge work. Table 32 provides a breakdown for FY2006 and FY2007 LARP funding by type of area for Gwinnett County and the three comparable counties based on size, Cobb, DeKalb, and Fulton counties. The LARP funding for Gwinnett County, with its large population within the unincorporated areas, shows it is receiving a larger amount of funding than its comparable counties and both the state average and median over the 2 year time period.

Table 32: Local Assistance Road Program Funding (LARP) FY2006 and FY2007

FY2006	Unincorporated			Municipal		
	Funding	Miles	Per Mile	Funding	Miles	Per Mile
Cobb	\$ 415,795	6.53	\$ 63,675	\$ 1,334,731	23.34	\$ 57,186
Fulton	138,861	1.87	74,257	255,566	3.84	66,554
DeKalb	356,759	4.00	89,190	272,740	3.57	76,398
Gwinnett	1,938,955	30.85	62,851	430,749	6.72	64,099
State Average	222,821	4.27	52,220	37,467	0.58	64,910
State Median	\$ 84,672	2.98	\$61,970	\$ 18,873	0.30	\$62,911
FY2007						
Cobb	\$2,062,005	26.97	\$ 76,456	\$ 410,243	7.96	\$ 51,538
DeKalb	1,705,769	22.28	76,561	488,986	5.59	87,475
Fulton	732,907	12.48	58,727	2,461,085	27.04	91,016
Gwinnett	2,326,762	31.64	73,539	444,259	5.87	75,683
State Average	217,652	3.80	57,254	37,572	0.52	72,888
State Median	\$ 160,682	2.48	\$64,791	\$ 19,203	0.27	\$71,122

Table 33 provides a similar comparison as that offered in Table 32; however Table 33 indicates the funding through State Aid. The two tables differ in that State Aid funding can be spent on any type of bridge or road work thereby not limiting the funding to resurfacing as found in LARP. As shown in Table 33, funding through state aid is uneven when compared to LARP funding. These two years of funding are important since they represent a change in funding by the GDOT, the two years are under a program entitled “Paving The Way Home” that utilized state motor fuel tax revenues to help Georgia cities and counties repair deteriorating streets and roads. As is shown in the two tables, although these two years were focused on for funding local governments, Gwinnett County’s unincorporated areas received a total of \$4,265,717 for resurfacing and \$2,507,824 for road and bridge for the two year time period. If we assumed that the road and bridge funding would be available continuously in this amount, the Ronald Reagan Parkway extension, at a projected cost of \$48,198,000 will be substantially underfunded. Gwinnett County is not alone in this situation. According to recent Census data, Counties with populations above 100,000 spent \$9.745 billion on highways. Other data shows that local

governments spend about \$28 billion annually on transit, about 300 per cent more than the states and almost 350 per cent more than the federal government.

Table 33: State Aid Funding for Roads and Bridges FY2006 and FY2007

<u>FY2006</u>	Unincorporated			Municipal		
	Funding	Miles	Per Mile	Funding	Miles	Per Mile
Cobb	\$859,135	1.76				
Fulton				\$11,000	0.33	\$33,333
DeKalb	164,384	2.35		1,850,000	0.65	2,846,154
Gwinnett	2,499,994	2.22				
State Average	121,106	3.28	36,871	108,861	0.76	142,421
State Median	\$80,000	1.24	\$64,516	\$37,937	0.36	\$105,380
<u>FY2007</u>						
Cobb	\$299,924	7.88	\$38,061	\$110,302	0.34	\$324,418
DeKalb	1,002,625	13.58	73,831	86,098	1.73	49,768
Fulton				351,533	3.07	114,506
Gwinnett	7,830	0.00		544,221	15.00	36,281
State Average	95,926	2.05	46,793	118,348	0.97	122,371
State Median	\$106,551	1.07	\$100,048	\$56,361	0.56	\$100,645

Gwinnett County, like most local governments, raise highway funds almost entirely from own source revenues, property taxes and the general fund. This is in contrast to state governments which raise about 75 per cent of revenues for highways and transit from gas taxes and vehicle fees. This is a problem for local governments which, unlike their intergovernmental partners, rely primarily on sources of revenue that have nothing to do with usage of the system. From the perspective of a citizen who is caught in congestion or navigating an unsafe road, the connection between increasing property taxes and better roads is not clear. Impeding local governments further is that local government taxing options are somewhat limited by both politics and because local taxing authority is something that must be given to a local government by state action or permission. Even when local officials are willing to take a chance by imposing additional or new taxes for transportation, a state may not allow change.

So what can local governments, like Gwinnett County, do to provide needed infrastructure without changing state law? There are limited resources in federal aid for municipal and county governments, but that makes up only about 2% of the total funds used for road construction. Other sources that have been used are income tax, state aid, property tax, sales tax, and other revenue. Currently, SPLOST, property tax, and other tax revenue sources such as TAD and CIDs are the limited sources local governments have to provide local roads and bridges. As noted earlier, State Aid and LARP are minor sources of revenues for large projects. Debt financing as either pay-as-you-go or general obligation bonds are an additional option. Currently, Georgia law does not allow for a local option gasoline tax as found in Florida. Although there are no simple answers, Georgia law does allow for public private partnerships, however the sale of a road to a private corporation as a basis for revenue as found in toll fees has not yet been accomplished in Georgia. Several states, such as Virginia have used public-private partnerships, such as the Pocahontas Parkway project in 1998. Projects that meet the regional importance criteria can apply to the Transportation Infrastructure Finance and Innovation Act (TIFIA). This federal program makes credit available in the form of

secured loans, loan guarantees, and standby lines of credit for projects; however this program does not alleviate the need to raise revenues.

Transportation Analysis Conclusion

In Georgia, local governments have a limited ability to raise revenues outside of general fund revenues and debt financing. Given that state aid to local roads is limited, choices such as public-private partnerships may provide options under Georgia Law. The use of a local option gasoline tax, currently not allowed under Georgia Law could provide local governments with additional choices for funding projects. This taxation idea, currently in use in Florida, would require passage of state law to allow local governments the opportunity for funding based on road usage, instead of the current revenue structure which does not relate to transportation infrastructure usage.