

**RESOLUTION BY THE ATLANTA REGIONAL COMMISSION
TO TRANSMIT THE PLAN 2040 REGIONAL ASSESSMENT, PLAN 2040 STAKEHOLDER
INVOLVEMENT PROGRAM AND DRAFT REGIONALLY IMPORTANT RESOURCES MAP
FOR REVIEW BY THE GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS**

WHEREAS, since 1952 the Atlanta Regional Commission has developed and adopted regional plans for the Atlanta region; and

WHEREAS, these plans include the Regional Development Plan (RDP) for the ten county area; and the Regional Transportation Plan (RTP) and associated Transportation Improvement Program (TIP) for the eighteen county area, and

WHEREAS, the RDP must be prepared pursuant to the Georgia Planning Act of 1989 and consistent with Minimum Standards and Procedures for Regional Planning developed by the Georgia Department of Community Affairs (DCA); and

WHEREAS, in November 2008, Georgia DCA adopted revisions to Chapter 110-12-6, Standards and Procedures for Regional Planning, "Regional Planning Requirements"; and

WHEREAS, the RTP and TIP must be prepared pursuant to Safety, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the Clean Air Act Amendments of 1990; and

WHEREAS, the RTP and TIP must conform with the applicable State Implementation Plan (SIP) for air quality and ARC should seek to recognize other applicable state policy; and

WHEREAS, ARC proposes to develop a regional unified plan and specify a strategic vision for both the RDP and RTP/TIP, and will seek comprehensive approaches to accommodate economic and population growth sustainably in the Atlanta region during the next 30 years; and

WHEREAS, ARC will seek to conserve and protect critical environmental resources, rural landscapes, critical habitats, greenspaces, water supply, water quality, air quality and other environmental features while meeting the overall regional needs to manage growth sustainably; and

WHEREAS, the regional plan will seek to incorporate and unify both regional and local growth policy as outlined in local government Comprehensive Plans; and

WHEREAS, ARC must submit to Georgia DCA the Regional Assessment document, Stakeholder Involvement Program and Regionally Important Resources Map as the first element under state rules for Plan 2040 process.

NOW, THEREFORE, BE IT RESOLVED that the Commission transmits the Plan 2040 Regional Assessment document, Plan 2040 Stakeholder Involvement Program and Draft Regionally Important Resources Map for review by the Georgia Department of Community Affairs.

I do hereby certify that the foregoing resolution was adopted by the Atlanta Regional Commission on March 24, 2010.



Robin Rutherford, ARC Assistant Secretary

Atlanta Region Plan 2040

REGIONAL ASSESSMENT SUMMARY



ATLANTA REGIONAL COMMISSION

Atlanta Region Plan 2040

REGIONAL ASSESSMENT SUMMARY



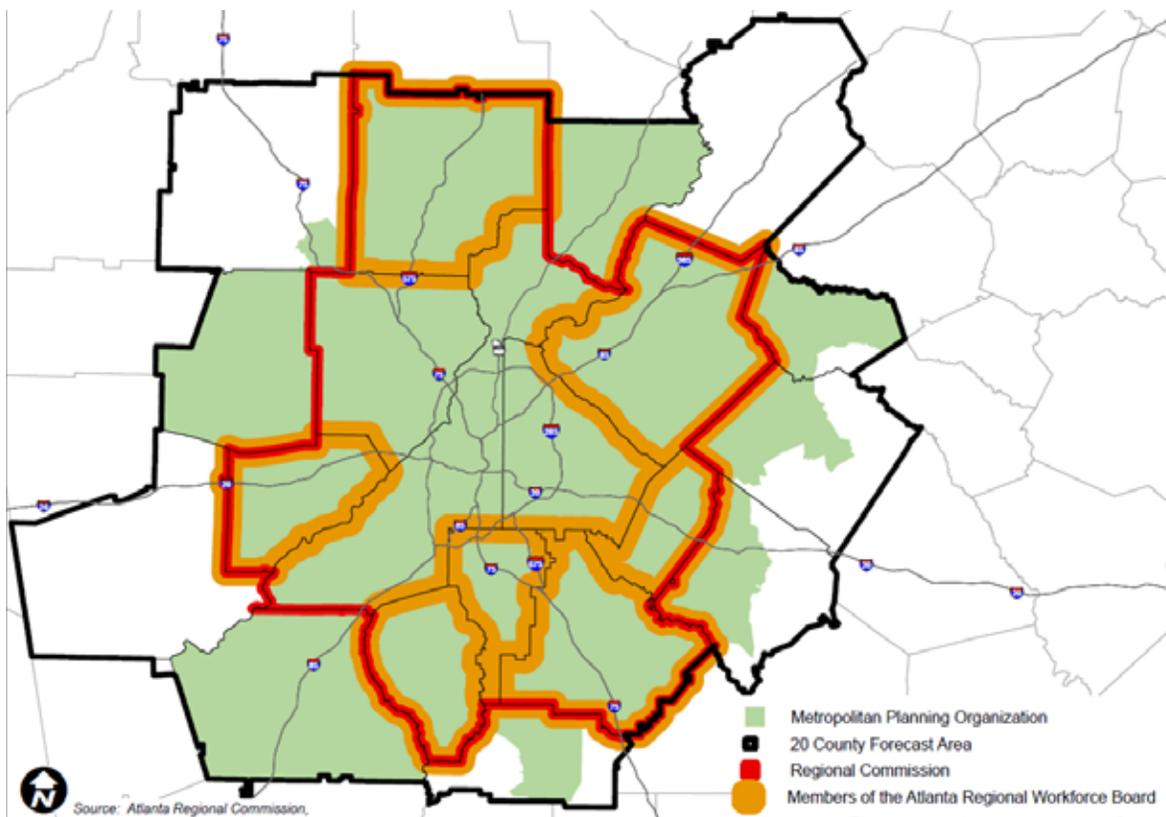
ATLANTA REGIONAL COMMISSION

Atlanta Regional Commission

The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency created by local governments in the 10-county Atlanta region pursuant to legislation passed by the Georgia General Assembly. ARC is not a government, but is the forum through which local governments confer to solve mutual problems and decide region-wide issues.

In addition, ARC is the transportation planning agency for the Atlanta region under federal law as the designated Metropolitan Planning Organization (MPO) for an 18-county area. ARC provides planning staff to the 15-county Metropolitan North Georgia Water Planning District (MNGWPD), serves as the administrative agency for the seven-county Atlanta Regional Workforce Board (ARWB) and provides aging services and policy guidance as the Area Agency on Aging (AAA).

Figure 1: Planning Areas of the Atlanta Regional Commission



Plan 2040

Plan 2040, ARC's new regional planning process, began in February 2009 with the adoption of a resolution by the ARC Board of Directors. The resolution directed ARC staff to develop a plan that would enable the Atlanta region to accommodate future population and employment growth in a sustainable manner.

The Board further directed staff "to incorporate and unify both regional and local growth policy." It is anticipated that a commitment to addressing the challenges outlined in this Plan 2040 Assessment will require ARC to rethink how it addresses regional issues and delivers services to local governments and other stakeholders. The Regional Assessment serves as the beginning of this dialogue.

Plan 2040 is a planning process that links local and regional plans for land development, as well as transportation, land use, water and other issues. While developing Plan 2040, ARC must also meet federal and state regulations for planning. They will do so by creating the required long-range documents within Plan 2040:

- Transportation — As the MPO for transportation planning, ARC must develop a long-range transportation plan (RTP) and short-range transportation improvement program (TIP) that conform with federal guidelines and with the applicable State Implementation Plan (SIP) for air quality.
- Comprehensive Planning — ARC must prepare and adopt a Regional Plan (for land use) pursuant to the Georgia Planning Act of 1989 and consistent with minimum standards and procedures for regional planning developed by the Georgia Department of Community Affairs (DCA).

Regional Assessment

While the recent economic downturn has created much uncertainty, the Atlanta region should be in a strong position during what is expected to be a gradual economic recovery. With its status of a leader among Sunbelt cities and as home of the world's busiest airport, Fortune 500 companies like Coca-Cola, Home Depot, UPS, Newell-Rubbermaid and a large collection of colleges and universities, metro Atlanta should continue to thrive.

However, each resident, both existing and new, places demands on infrastructure, public services and the region's natural systems. Metro Atlanta faces numerous challenges associated with its recent growth, as well as national and global challenges.

It should be noted that this assessment identifies and focuses on the region's needs, not its assets. Its findings will lay the groundwork for policy and program development over the next 30 years to address these needs and challenges, maintaining the Atlanta region's position of economic strength.

This document is a brief summary of the actual Plan 2040 Regional Assessment. The full document can be seen and printed at www.atlantaregional.com/plan2040/documents.

Primary Regional Challenges

The Atlanta region has been one of the fastest-growing regions in the nation in recent years, accommodating large amounts of growth in population and jobs. This growth has brought many benefits to the region, including a shift from a small regional center to a player in the international economy. And, despite this unprecedented growth, residents of metro Atlanta have continued to enjoy a low cost of living and an overall good quality of life.

That quality of life has remained because the Atlanta region's growth has been largely based on:

- National migration trends
- Federal policies encouraging highway construction and home ownership
- Access to Hartsfield-Jackson Atlanta International Airport
- The region's prominence as the economic center of the South
- Inexpensive land
- Low cost of living and doing business

The region has the opportunity to be well-positioned for economic growth in the future. Some of the economic assets in the region include Hartsfield-Jackson Atlanta International Airport, 11 Fortune 500 firms and numerous institutes of higher learning.

However, for the first time in its history, the region is experiencing a challenge to the fundamental conditions that propelled it to prosperity and growth over the last four decades. While a recovery from the national economic crisis is almost certain, the region's current unemployment rate is almost 10 percent. The region needs to leverage its many assets into new investments to attract employment growth, and it's likely that the region will need to find and/or create new avenues for sustainable growth in the future.

Metro Atlanta's infrastructure is under stress. Traffic congestion and a finite water supply threaten the region's status as the hub of the Southeast. There is uncertainty about how the federal government will invest in infrastructure in the future. Major shifts in federal programs and policies could have substantial impacts on how the region grows in the future.

Like the rest of the nation, the Atlanta region's population will soon be much older than it has been in recent memory. Currently, one in every 10 regional residents is over the age of 60. By 2030, that number will be one in five. Between senior citizens and youth under age 20, the Atlanta region will be home to more dependents than workers. How will this demographic shift affect the tax base, infrastructure and economy of the region?

The ARC Board gave clear guidance in its resolution that it wants all policy and planning recommendations from Plan 2040 to be based on the "triple bottom line" theory of economic, environmental and social sustainability, ensuring that the needs of today are not met at the expense of future generations.

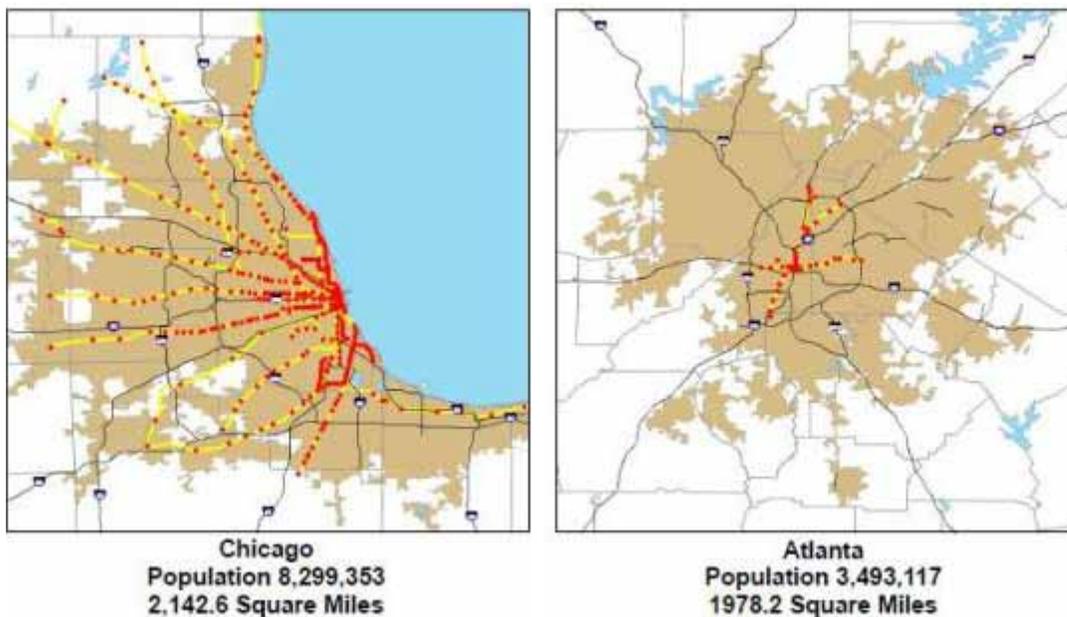
Key Findings from Regional Assessment

Urban Expansion of the Region Strains Infrastructure

Recent ARC population and land-cover analysis indicate that expansion of developed areas may be slowing. However, even minimal expansion can adversely affect the region's ability to meet current and future needs.

As seen in the maps below, metro Atlanta — as defined by the 2000 Census — consumes almost as much land as Chicago. However, the population of the Atlanta region is not close to that of the Windy City. In the unlikely event that the region continues expanding in its current pattern as the population grows, the region's land area would eventually extend into Alabama.

2: Comparison of Atlanta Region and Chicago Region



This development pattern has significant impacts on many services provided by local governments, including drinking water and wastewater systems, parks, libraries, fire and public safety services. The longer commutes also put a strain on the transportation network at both the local and regional level.

Counties on the exurban fringe of the region begin to lose their unique character, while at the same time struggle to generate enough funding to provide the infrastructure required by the new growth. For example, formerly rural two-lane roads see sudden increases in volume as more neighborhoods spring up around them. These new neighborhoods also require water and other utilities, adding stress to local governments and to the area's natural systems.

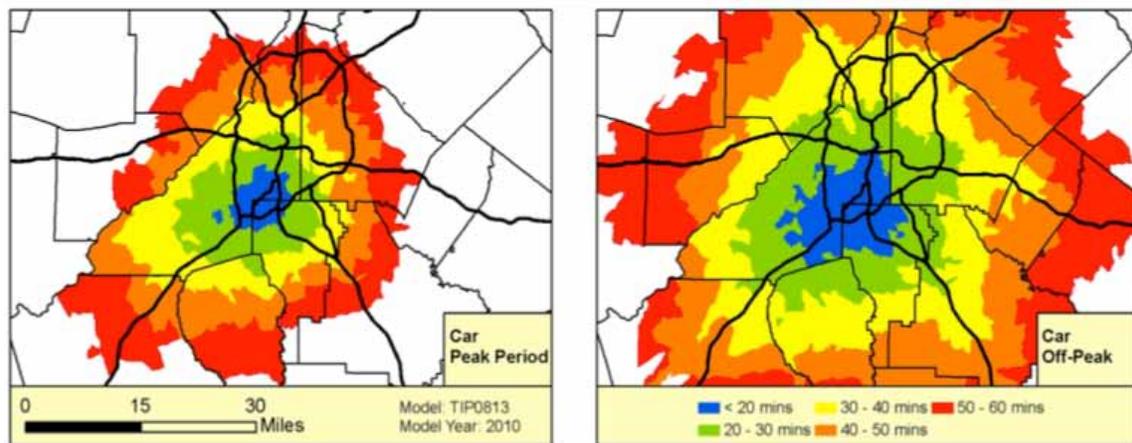
Traffic Congestion

Access to Job Centers Critical

Metro Atlanta has always been known for its busy airport and its southern hospitality. Unfortunately, in recent years, it has become known for its traffic congestion, too. Already, other Southeastern cities use the region's traffic woes against it when recruiting corporations and large manufacturers. If the Atlanta region is to remain the economic hub of the Southeast and maintain its high quality of life, something must be done to help residents get to and from employment centers more quickly.

The maps below are a demonstration of what traffic congestion means for residents of the Atlanta region. Developed through computer modeling programs, they show who can reach Hartsfield-Jackson International airport in one hour during peak traffic periods (left) and off-peak traffic periods. As you can see, in this model, drivers from northern Fulton and Gwinnett counties can reach the airport in an hour or less during off-peak times. During peak times, no one from Gwinnett would reach the airport in less than one hour, based on this model.

Figure 4: Impact of Congestion on Regional Travel to Hartsfield-Jackson



This is true for drivers trying to reach the region's other major job centers, as well. As the population continues to grow and funding for transportation continues to lag, the news is likely to get worse.

The Face of Atlanta Is Changing

The Atlanta region has added more than one million residents in the last eight years alone, making it the second fastest-growing metropolitan area in the nation. As growth continues, at a slower pace, in future years, the region will see a major shift in the age of its residents.

As the graphs below demonstrate, in 2007, a large number of metro Atlanta residents were of working age (ages 20-64). That means they were filling jobs, creating new jobs, investing in their communities and, generally, paying more taxes than those in the older and younger age groups. By 2050, the working population (ages 20-60) will be outnumbered by children and senior citizens. Will the population require more and/or different transportation services? How will this affect education and the types of residential properties desired?

Figure 5: 2007 Age Pyramid

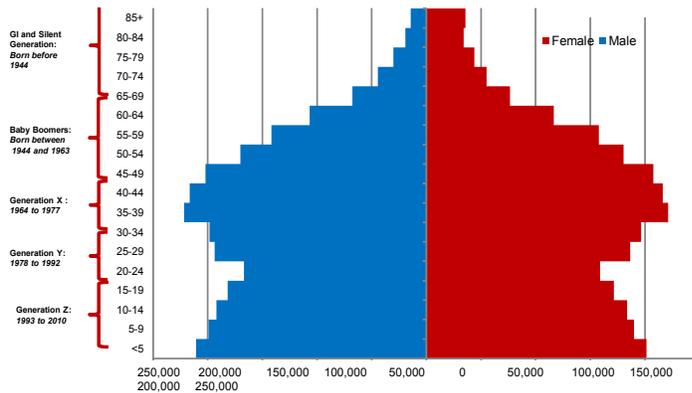
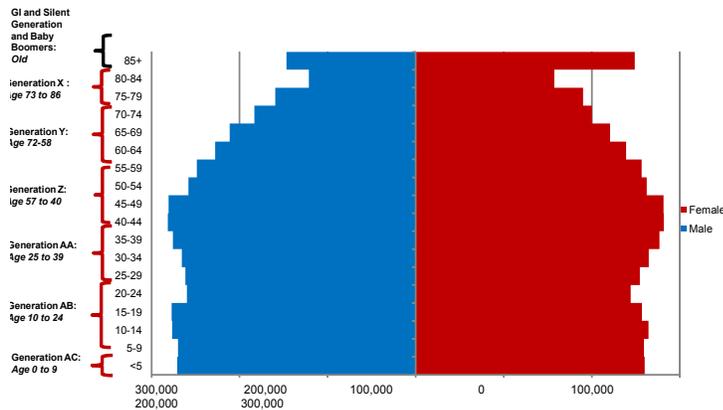


Figure 6: 2050 Age Pyramid



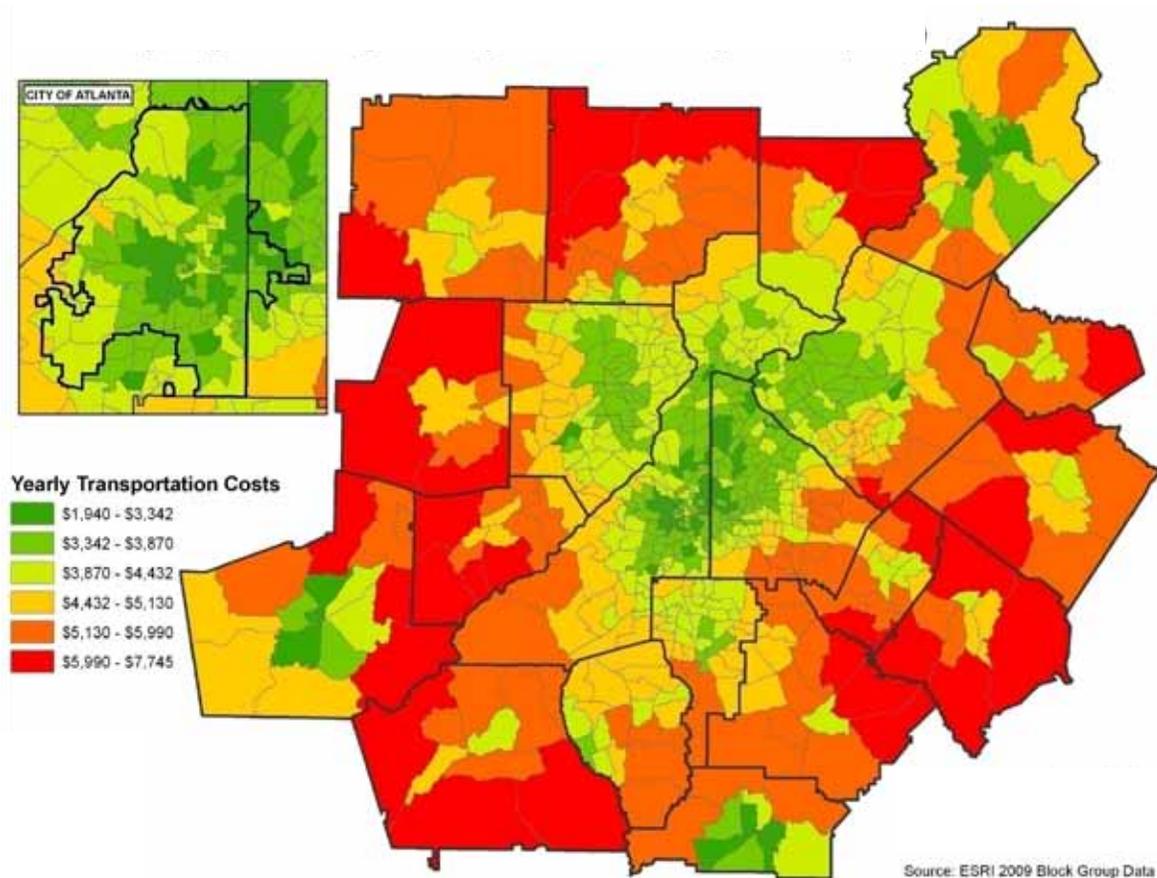
Market Forces May Change Housing Demands

The vast majority of housing available in the Atlanta region has been built in the last 40 years. In fact, more than 20 percent of housing stock in the region was built between 2000 and 2007. It's uncertain, however, if the current supply is in line with what metro Atlanta's future residents will desire.

A majority of the region's households, like those around the nation, are home to two people or fewer. Thirty years ago, approximately half of the nation's households included children. Today, that number is considerably lower, and by 2030, it's expected to fall to 21 percent. With the population aging, the number of single and two-person homes will continue to rise in the near future. Will this population, much of it over the age of 65, still want large homes on large lots and all the maintenance that comes with that?

The aging population and the rising cost of transportation in the Atlanta region, due to congestion and rising fuel prices, suggest that more regional residents might want alternatives to single-family homes on large suburban lots. The map below shows the transportation costs of households from around the region.

Figure 7: 20-county Region Average Transportation Costs per Year, 2008



Most of Region Has Limited Transportation Options

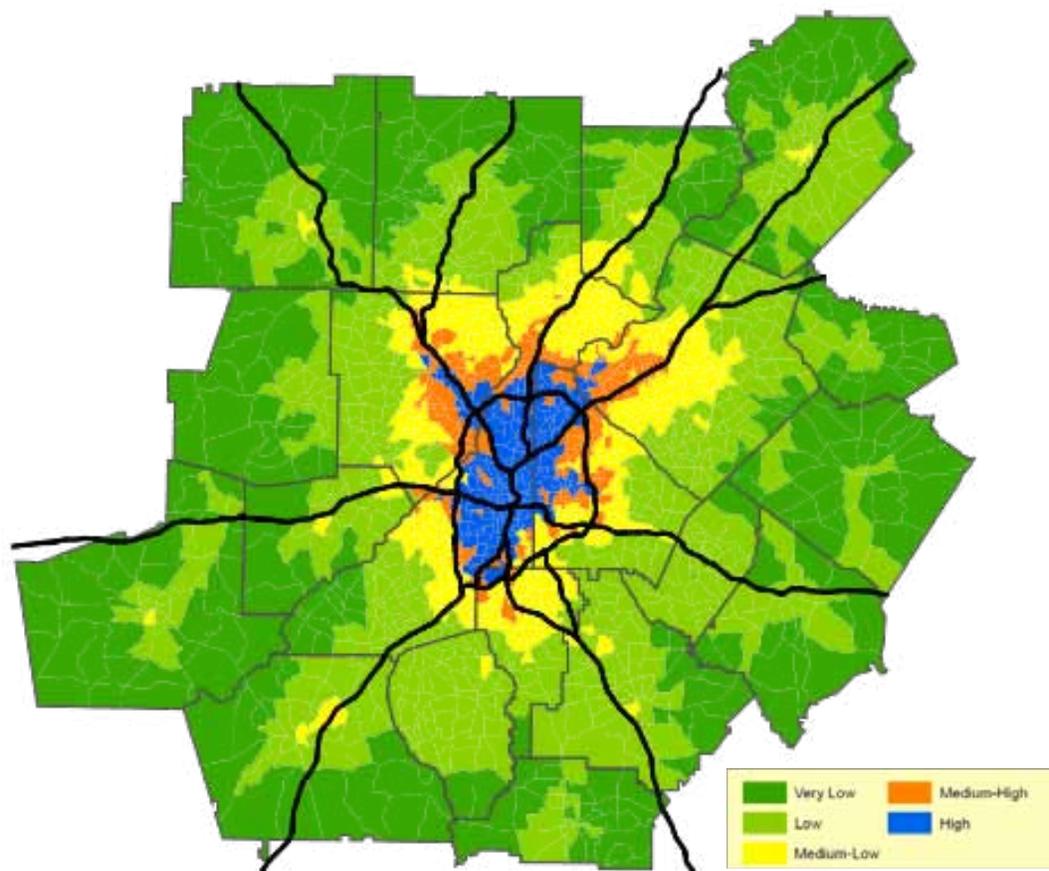
Thanks to a group of elected officials from around the region, metro Atlanta has an ambitious transit plan, commonly known as “Concept 3.” This plan would expand transit options, both rail and bus, in many urban and suburban areas, something most residents say they would support.

However, funding issues and a lack of political will at the state level have slowed the progress of Concept 3 considerably. With federal policy shifting toward more use of rail, some forward movement on transit might unlock funding from Washington, D.C.

The map below shows access to alternative modes of transportation throughout the region. These include transit and bicycle/pedestrian facilities.

Through its Livable Centers Initiative (LCI) program, ARC works with local governments and other bodies to support the design and development of activity centers that contain homes, jobs and amenities. These types of centers not only attract residents and visitors, but are also natural stops for transit services.

Figure 8: Access to Alternative Transportation Modes



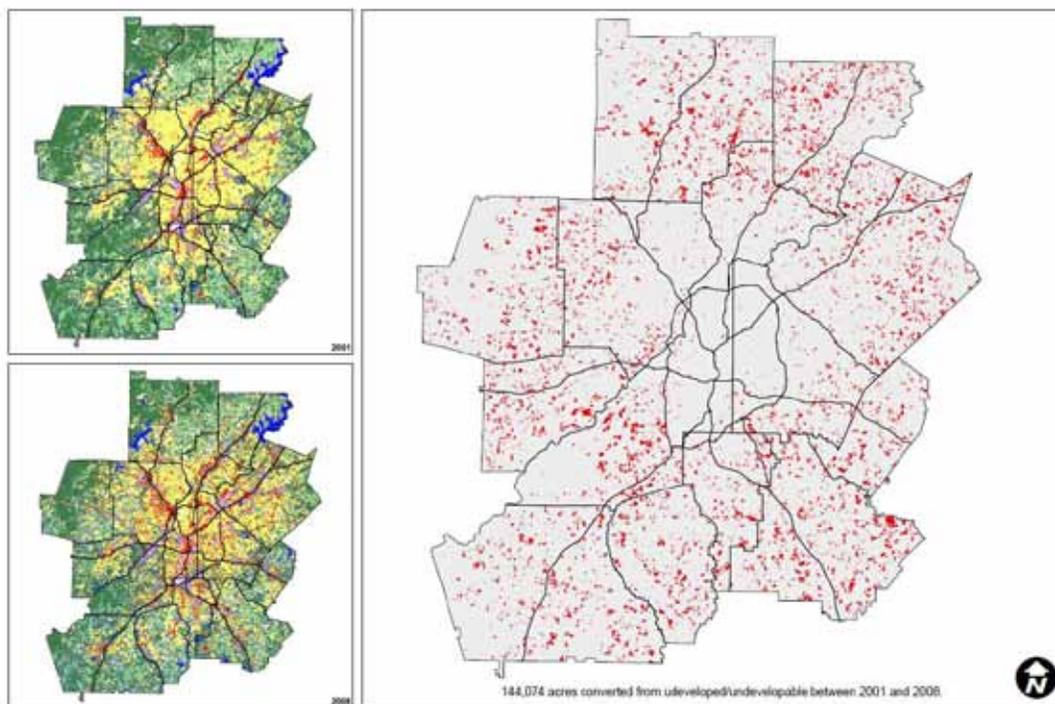
Region Needs More Urbanization and More Conservation

The Atlanta region has experienced a dramatic loss in natural greenspace over the last 40 years as the population swelled and development targeted cheaper land further and further from the core. One way to conserve greenspace is to encourage more businesses and residents to move into existing activity centers and to encourage redevelopment of underutilized areas.

For example, strip shopping centers that are currently empty or near empty could be redeveloped as mixed-use communities with both commercial/office space and residential. Parking garages built above or below ground could also save acreage for more parks and natural areas. Creating urban areas with more people and activity can encourage the development of a transit system by putting more potential riders within walking distance of a stop.

Along with policies that slow the outward expansion of the region, local communities and their governments could also be more proactive in creating and preserving conservation areas. By developing policy to do this, communities could acquire, protect and manage lands that create a network of connected open space, parks and agricultural land.

Figure 9: Atlanta Region Land Conversion Map



The map above shows the land converted from undeveloped to any other development category between 2001 and 2008, illustrating both urban and suburban expansion. The two smaller maps on the left of the figure show existing land use in 2001 and 2008. The larger map displays just those areas that were converted from undeveloped lands. Areas at the central core of the region have also experienced growth, but in many instances the development reused existing development sites and was not converted from undeveloped.

As Transportation Needs Increase, Funding Potential Decreases

The Atlanta region’s ability to build and maintain large-scale transportation projects has decreased significantly in recent years. This is due to funding issues at the local, state and federal levels.

The current economic downturn has been, and will continue to be, deep and prolonged. This has caused local sales tax receipts to decrease dramatically. For example, the real-dollar value of both MARTA sales tax receipts and state motor fuel tax revenues are lower today than in 2000.

Coupled with less funding from state and local sales tax receipts is the challenge presented by the federal government. The federal Highway Trust Fund is depleted. It is temporarily being buoyed by money from the general fund. Obviously, that can’t last forever. When new legislation is passed, it’s possible that the local and state governments will be asked to foot more of the transportation bill.

Below are two charts. The first one shows the recent decline in MARTA sales tax revenues. The second shows the history of transportation funding from state motor fuel taxes.

Figure 10: Tracking MARTA Sales Tax Revenues this Decade

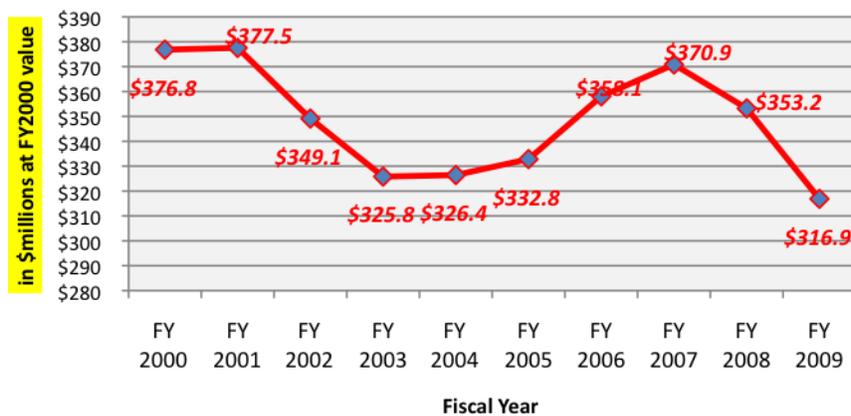
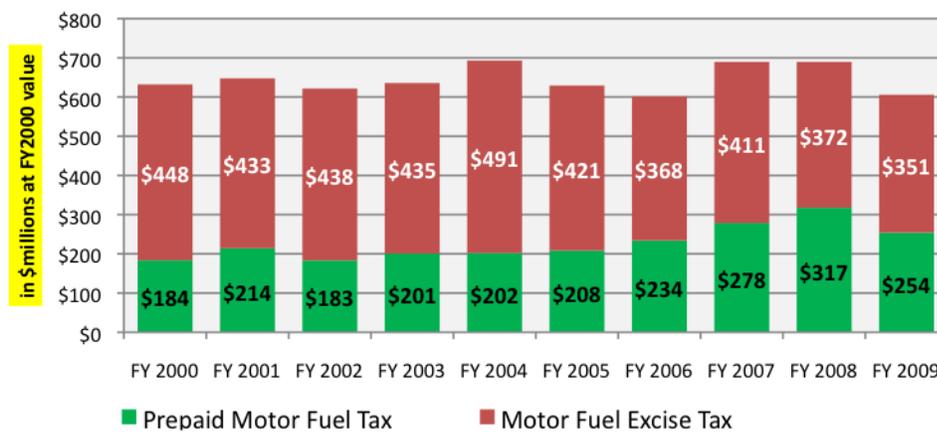


Figure 11: GDOT Motor Fuel Tax Receipts in 2000 \$



Working Together Is Key to Region's Success

During the next 30 years, the Atlanta region will face many changes. Different trends will alter our communities and our region as a whole, including changing demographics; diminishing resources at the federal, state and local levels; and the need to better conserve our natural resources.

At the same time, the Atlanta region possesses many strengths, including a diverse economy and strong communities throughout the 10-county region. While there are no one-size-fits-all approaches to planning for our region's future success, there are some foundational elements that we must all address together. These include a long-term water supply with progressive conservation measures, a transportation system that meets our mobility needs and offers more options and different and more sustainable approaches to how we develop and redevelop our communities.

How does this occur? Through communication and an understanding of the issues we can tackle together and those that each community must face on its own.

One thing is certain. The foundations on which metro Atlanta has grown will shift dramatically in the future. In particular, during the last 15 years the Atlanta region experienced a period of growth that is not likely to be witnessed again. As the region slowly recovers from the recent recession, it is up to regional leaders and residents to determine whether the region follows the same approach it did before, or if it embraces a "new normal" with a growth rate that is more manageable and an economy that is more sustainable.

How To Participate in Plan 2040

Metro Atlanta residents can participate in ARC's Plan 2040 activities in several ways:

- Regularly visit the Plan 2040 Web site at www.atlantaregional.com/plan2040 for the latest information about the planning process.
 - Check the "Get Involved" section of the site for discussions, meetings and other ways to share thoughts and ideas.
- E-mail comments to ARC at plan2040@atlantaregional.com.
- Share ideas at ARC's group page on LENS on Atlanta at www.lensonatlanta.org.
- Call ARC with comments or questions:
 - 404.463.3272
 - TTY number is 404.463.3272



ATLANTA REGIONAL COMMISSION

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Atlanta Regional Commission



Regional Assessment

DRAFT

January 27, 2010

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**RESOLUTION BY THE ATLANTA REGIONAL COMMISSION
TO DEVELOP THE PLAN 2040 - Adopted February 25th 2009**

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WHEREAS, the regional plan should seek to incorporate and unify both regional and local growth policy as outlined in local government Comprehensive Plans; and

WHEREAS, ARC will seek to incorporate strategies and projects outlined in existing plans and programs including the Livable Centers Initiative (LCI), Southern Regional Accessibility Study, Multi-Modal Corridor Plans, County Transportation Plans, Freight Mobility Study and others; and

WHEREAS, ARC will undertake a communication process that provides regular updates on plan development to local government officials and other planning partners and provide opportunities for engagement in key steps in the plan development; and

NOW, THEREFORE, BE IT RESOLVED that the Atlanta Regional Commission commits to undertake and adopt the Plan 2040 unified process for the Atlanta region.

Introduction

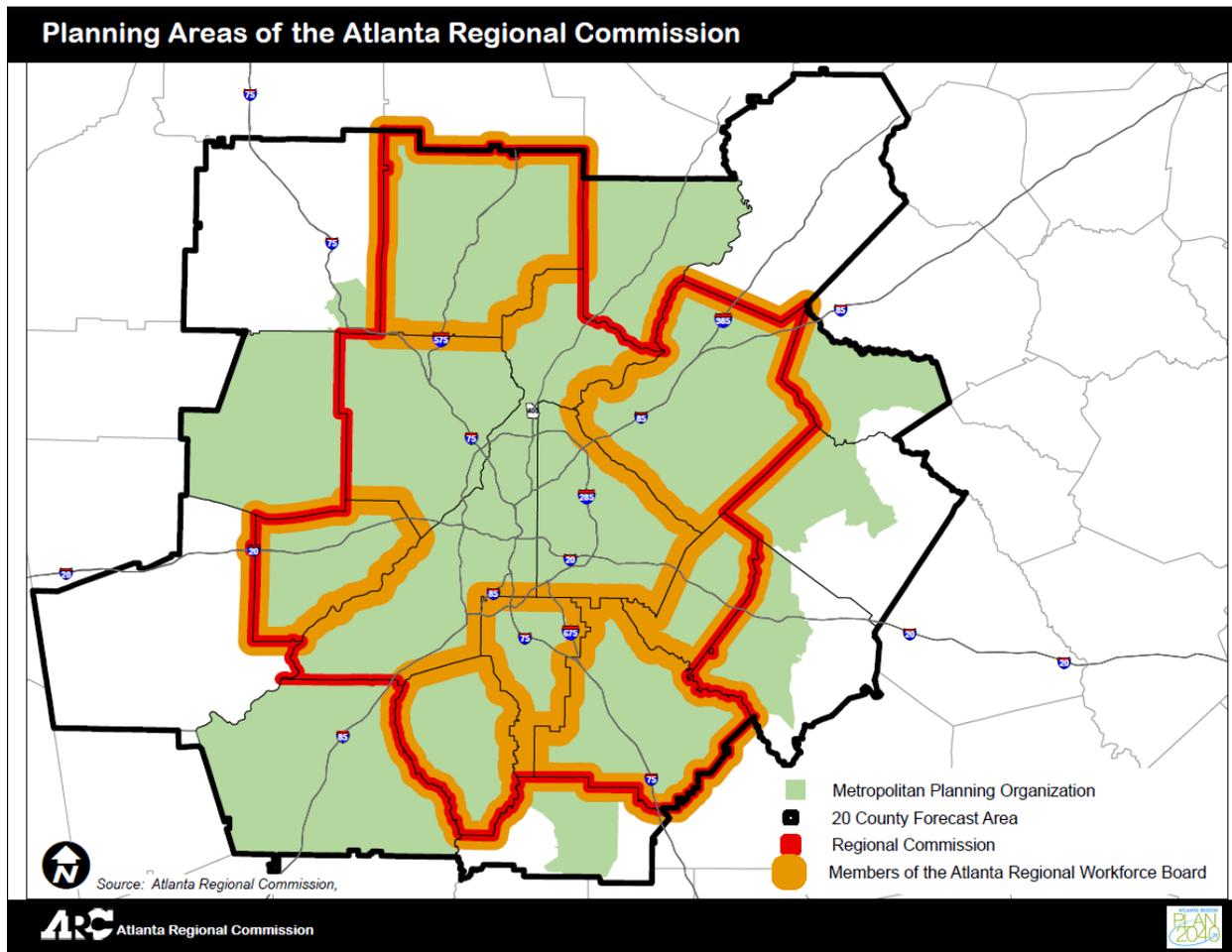
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In addition to being the official planning agency under state law for a 10-county region, ARC is also the transportation planning agency for the Atlanta region under federal law as the designated Metropolitan Planning Organization (MPO) for an 18-county area. In support of planning for transportation, ARC must develop a long-range forecast for population and households for a 20-county area to ensure transportation activities are consistent with efforts to improve air quality in this area. ARC provides planning staff to the 15-county Metropolitan North Georgia Water Planning District (MNGWPD), whose mission is to develop comprehensive regional and watershed-specific water resources plans for implementation by local governments. ARC also serves as the administrative agency for the seven county Atlanta Regional Workforce Board (ARWB). Aging services and policy guidance are provided by ARC as the Area Agency on Aging (AAA). Figure 1 on the following page shows the planning geographies of ARC.

The MPO was expanded in 2004 from 10 to 18 counties. The MPO boundary is based on the extent of urbanization, and Atlanta has the 3rd largest urbanized area in the nation.

ARC provides technical assistance to local governments as well as leadership programs including the Regional Leadership Institute (RLI), the LINK program, Community Planning Academy (CPA) and the MARC (Model Atlanta Regional Commission) youth leadership program.

Figure 1: ARC's Regional Planning Areas



Regional Assessment Purpose

The Regional Assessment identifies and confirms the region's needs. In addition to meeting the requirements of the regional assessment for the Georgia Department of Community Affairs (DCA), the Assessment also identifies critical findings that will lay the groundwork for policy and program development during subsequent steps of the transportation and regional development planning process.

ARC must prepare and adopt a Regional Development Plan (RDP) pursuant to the Georgia Planning Act of 1989 and consistent with minimum standards and procedures for regional planning developed by the Georgia DCA. In 2008, Georgia DCA adopted revisions to Chapter 110-12-6, Standards and Procedures for Regional Planning, "Regional Planning Requirements." The regional plan seeks to anticipate and apply comprehensive approaches to accommodate economic and population growth that will occur in the Atlanta region during the next 25 years.

The *Plan 2040 Regional Assessment* intends to meet all applicable state and federal requirements while integrating elements of formerly separate regional plans. Additionally, the planning process and subsequent documents will seek to understand and reflect local plans and policies. Many local governments in the Atlanta region have recently adopted local comprehensive plans. The Regional Assessment is the first step of the multi-year *Plan 2040* effort.

Plan 2040 is the Atlanta region's long-range plan for land development and transportation needs, scheduled for completion by July 2011. *Plan 2040* will serve as both the Regional Development Plan (RDP) and Regional Transportation Plan (RTP) for the Atlanta region. A collaborative effort among local, state and federal planning partners will be a critical part of the process. *Plan 2040* will guide growth for metro Atlanta through the year 2040 and address not only land use and transportation issues, but environmental, economic, housing and human services challenges as well. It will also meet state and federal guidelines and regulations for regional comprehensive and transportation plans, including financial constraint, federal air quality requirements and an implementation program that defines roles and actions for the many parties in the region that implement regional plans and programs, including local governments. Figure 2 on the following page provides a general overview of the current schedule for *Plan 2040* development



The Regional Assessment helps set the context for future policy discussions. Subsequent steps in the planning process will develop measures, policies, and final plan recommendations.

Figure 2: Overview of Plan 2040 Schedule and Process



Regional Assessment – Key Findings

Plan 2040, ARC's new regional planning process, began in February 2009 with adoption of a resolution by the ARC Board directing staff to develop a unified plan that specifies a vision to comprehensively address the accommodation of future population and employment growth in a sustainable manner. The Board further directed staff "to incorporate and unify both regional and local growth policy." It is anticipated that in the current period a commitment to addressing the challenges outlined in the *Plan 2040 Regional Assessment* will require a rethinking of how ARC addresses regional issues and delivers services to local governments and other stakeholders. The Regional Assessment document should serve as the beginning of this dialogue.

Primary Regional Challenges

The Atlanta region, for perhaps the first time in history, is experiencing a challenge to the fundamental conditions which propelled the region to prosperity and growth for the past four decades. The Atlanta region has grown and expanded largely on the basis of national migration trends to the south; federal policies that enabled highway construction and decentralized growth; access to one of the world's busiest airports and the region's prominence as the economic capital of the south; inexpensive land; low cost of living, business costs and wages. The region also has proximity to major ports, substantial opportunity for higher education, home-grown and new Fortune 500 business headquarters as well as national facilities such as the Center for Disease Control (CDC).

The region is currently dealing with a distressed regional economy as the result of economic struggles at the national level. It is unclear when a sustained economic recovery will occur but it is likely that the conditions that were present during the past 40-plus years that enabled continuous and rapid growth will not return. There is a great deal of uncertainty as to how the federal government will invest in infrastructure in the future. Substantial shifts in federal programs and policies would impact the regional strategies undertaken to support and manage growth in the region.

Atlanta has been one of the fastest-growing regions in the nation in recent years, accommodating large amounts of population and employment growth. This growth has brought many benefits to the region, including a change from a small regional center to a major international player economically. Despite a strong economy and an overall good quality of life, the overall pattern built to accommodate this growth is already strained and does not appear to be sustainable going forward.

The ARC Board provided clear guidance to staff in the February 2009 resolution to initiate the plan development process that regional plans and programs aimed at moving the region toward becoming more sustainable was desired. In its simplest form, sustainability is about balancing 1) environmental responsibility, 2) economic need and 3) social stability while ensuring that the needs of the present are not met at the expense of future generations. ARC intends to use this

framework of a “triple bottom line” as the focus for *Plan 2040*. ARC staff will seek to develop and implement a regional plan that maximizes sustainability through environmental, social and economic strategies.

While the current period has created much uncertainty, it should be anticipated that metropolitan Atlanta will continue to be one the fastest-growing regions in the nation. Each new and existing resident places demands on infrastructure, public services and the region’s natural systems. The region is currently facing numerous challenges associated with growth over the past few decades, as well as national and global challenges that are likely to shape future growth. Existing and future challenges will need to be addressed comprehensively in order to ensure the long-term viability and global competitiveness of the Atlanta region.

Development of “Critical Themes”

A comprehensive look at the current and future trends, challenges and opportunities in a region as large and complex as the Atlanta region could be an unending task. In order to bring structure and organization to the process, ARC began by interviewing regional leaders, including many from organizations that had not been previously consulted in long-range planning efforts and are directly linked to the livability of the region.

Community conversations and input early in the process resulted in the recognition of three “Critical Themes” that were heard and discussed repeatedly. These themes were also echoed in internal working meetings, ARC Board discussions, planning partner surveys and local government discussions.

The critical themes help to focus the Regional Assessment, but are not final plan goals or outcomes. These critical themes were developed in the expectation that the document would be more user-friendly by tying analysis more closely to interest areas expressed by regional policymakers. A holistic reassessment of the current *Envision6 RTP* goals and objectives, and *Envision6 RDP Policies*, including policy development, will occur in follow-up planning activities in 2010. *Envision6* is the existing long-range development and transportation vision for the Atlanta region.

“Critical Themes” were identified in early 2009 to provide input into organizing the Regional Assessment. These will be revisited in 2010 based on feedback from the Regional Assessment

Plan 2040 Critical Themes for Regional Assessment

Solutions should address social, environmental and economic needs of the region while protecting the region's resources and prosperity for future generations.

Provide access to safe, affordable and efficient transportation choices.

Governing collaboratively to address funding issues and effectively implement regional plans.

Key Findings from Regional Assessment

Urban Expansion of Region

Expansion of the Region Is Slowing, but Even Minimal Expansion Will Adversely Impact the Region's Capacity to Meet Current and Future Needs

Recent ARC population and land cover analysis indicates that the urban expansion of the developed areas in the region may be slowing. Suburban areas are still expanding into exurban communities as employment sheds grow. The dynamic of increasing urbanized area size adversely impacts the ability of the region to implement needed transportation programs and projects, in addition to local challenges of meeting service needs in growing communities. Land use and land cover changes have significant impacts on stream conditions, as well as impacting many services provided by local governments, including water and wastewater systems, parks, libraries, fire and public safety services.

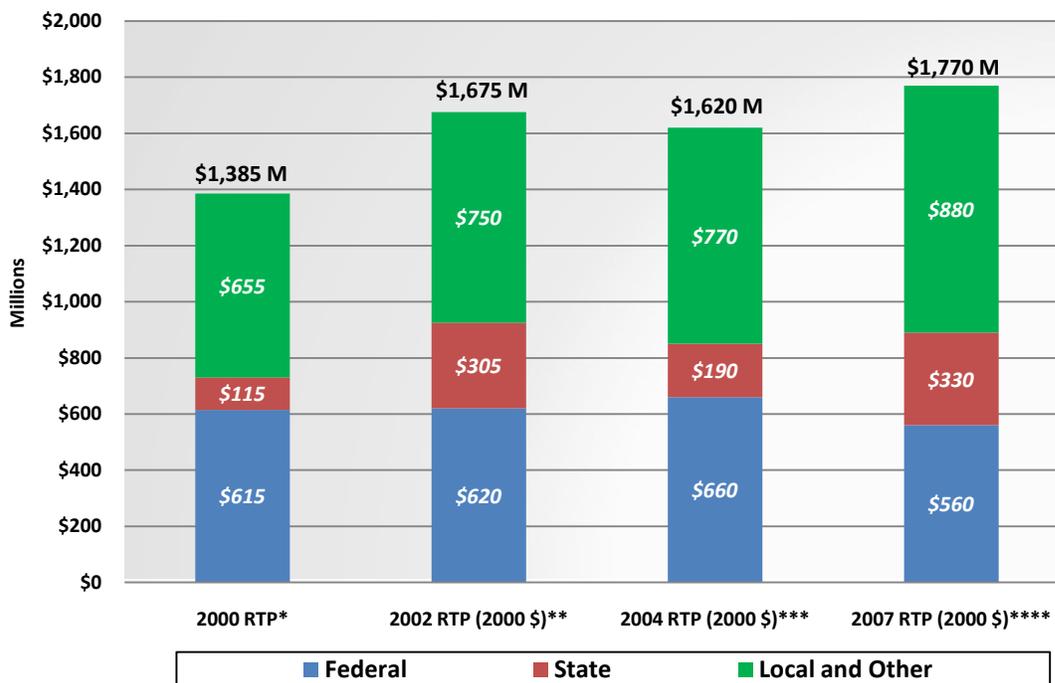
In response to an expanding region, many exurban communities often lose their unique character, while at the same time struggling to generate sufficient funds to provide for needed infrastructure improvements in response to this growth.

Urbanizing counties on the exurban fringe of the region often have large-scale needs for expensive infrastructure projects with costs higher than the revenues generated to fund them. For example, in many cases formerly rural two-lane roads have traffic volumes that exceed 10,000 to 15,000 vehicles per day, with geometrics that create safety problems as traffic increases. Furthermore, transit options are limited because densities have not increased to a

level needed to support transit services, leaving most transportation improvements limited to highway-related capacity and operational projects.

This growth dynamic as related to transportation infrastructure is illustrated by an analysis of growth and revenue patterns within the Atlanta region over this decade (shown in Figure 3 below). Past RTPs are compared using the amount of real revenue generated in each RTP. While the Atlanta region grew from 10 to 18 counties over the decade, real federal revenues dropped from \$615 million per year to \$560 million. This figure is important because federal sources are what most local governments rely on to fund major transportation capital expansion projects, while state and local funding is largely used for matching funds or minor transportation improvements and maintenance. Even minor expansion of the region after the 2010 Census will adversely impact the region’s capacity to fund needed infrastructure throughout the region.

Figure 3: Average Annual Revenues during Prior RTP Periods



*TEA-21 Transportation Bill
10 County MPO
High-level O&M Forecasts
26 Year RTP (2000-2025)

**TEA-21 Transportation Bill
10 County MPO
Updated Funding Forecasts
Gov. Barnes' Transportation
Choices Initiative Bond Program
23 Year RTP (2003-2025)

***TEA-21 Transportation Bill
18 County MPO
Gov. Perdue's Fast
Forward Bond Program
26 Year RTP (2005-2030)

****SAFETEA-LU Transportation Bill
18 County MPO
Fast Forward Bond Program
Emergence of PPP's (I-75/575)
More Accurate Long-Range
O&M Forecasts
23 Year RTP (2008-2030)

Source: ARC

Water Supply and Conservation

The Long Term Economic Success of the Atlanta Region Is Directly Related to the Availability of Water

The Atlanta region relies primarily on surface water from rivers and storage reservoirs as its main source of water supply. In fact, surface water provides more than 99 percent of the water supply in the Metropolitan North Georgia Water Planning District. The Chattahoochee basin accounts for approximately 73 percent of the permitted available water supply in the Metro Water District. Residential water use, including single and multi-family use, accounts for 53 percent of the Metro Water District's total water use.

Lake Lanier and Allatoona Lake have played a key role in assuring an adequate water supply for the Metro Water District since their construction by the U.S. Army Corps of Engineers (Corps) in the 1950s. Current planning assumes that federal reservoirs will continue to operate to meet water supply needs of the region. Recent changes to Corps operations of these lakes beginning in 2006 represent a dramatic change from previous operations. These changes are a significant challenge to the region's water supply and potentially represent significant impacts to the region's economy. The operation of the reservoirs is the subject of litigation of which the outcome is uncertain. These uncertainties represent a significant challenge in planning for the long-term ability of the region to provide adequate water to support the region's existing and forecasted population.

Congestion Continues to Threaten the Health of the Regional Economy

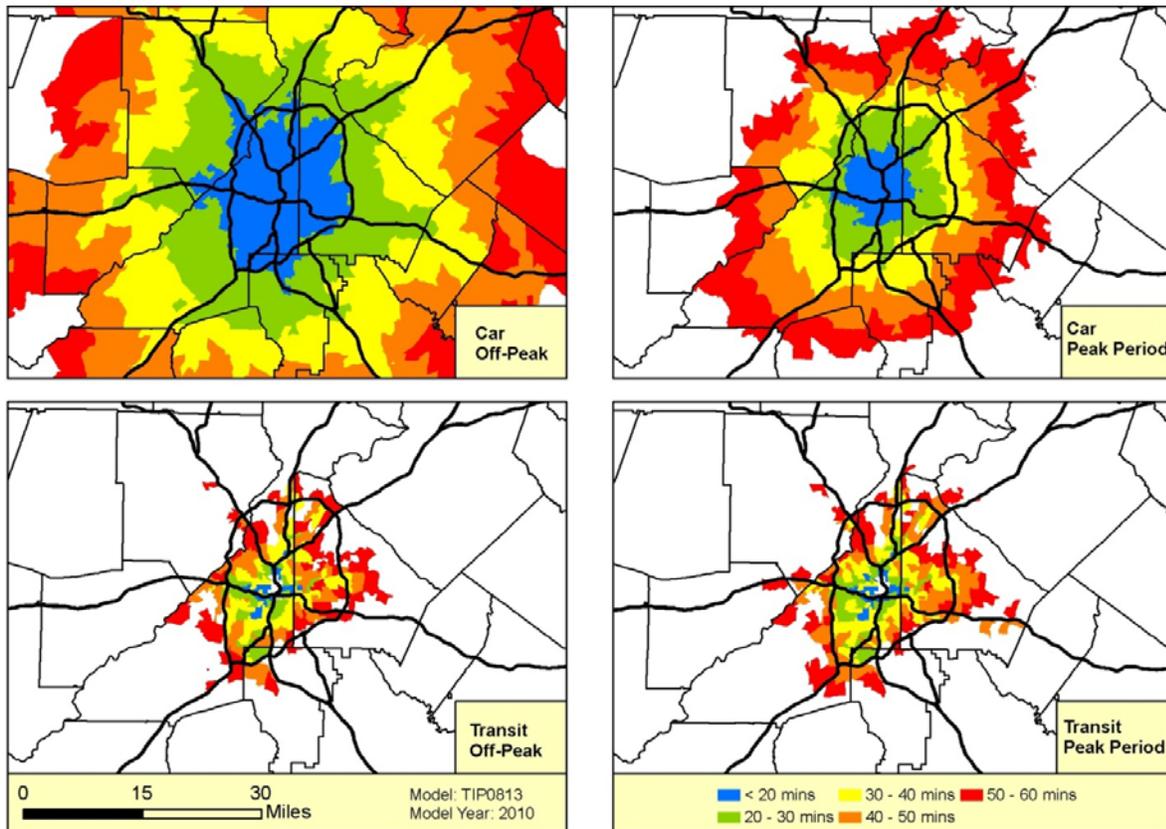
Access to Employment Opportunities in the Region's Most Developed Centers will be Critical

The region has struggled with addressing the challenges of congestion, with varying levels of success over the past decade. This urgency has become more pronounced since the economic downturn of the latter part of this decade. Many regions are using Atlanta's high congestion level as a recruitment tool. Established job centers in the Atlanta region recognize the need to tie economic development and transportation agendas to each other, especially as these areas transition from outlying "edge cities" to more urban-scaled activity centers that support a wide range of land uses and economic activities. In the coming decade, it is important to implement a creative congestion relief strategy that can be implemented within expected funding levels.

Congestion reduces the population able to get to downtown Atlanta, in 40 minutes and less, from 3 million to 1.3 million.

One indicator of the impact of congestion on the regional economy is illustrated by a comparison of peak to off-peak travel times to the Atlanta Central Business District (CBD) in Figure 4 below. More than three million people can access downtown Atlanta, in 40 minutes or less, during off-peak periods. This decreases to 1.3 million people during peak travel periods. This shrinks the peak period travel shed to that of a smaller city, similar to Raleigh-Durham, Nashville and Charlotte. Addressing these mobility needs is critical in the development of Plan 2040.

Figure 4: Impact of Congestion on Regional Travel



Source: ARC

Dynamics of Population Growth Will Greatly Impact Region

The Composition of the Region's Eight Million Residents in 2040 Will be Markedly Different than the Population of Today

The Atlanta region has been one of the fastest-growing metropolitan areas in the nation for decades, reaching a population of four million at the turn of the century in the 10-county region. During the last eight years alone, the Atlanta region has added 1.1 million people, making it the second-fastest growing metro in the country, behind Dallas. The magnitude of growth in the Atlanta region has generated significant economic activity in the region but also has resulted in numerous challenges related to sustaining the economic, environmental and social health of the region in the long-term.

Recent population growth in the region has been unprecedented and future growth will continue to generate economic activity but has the potential to strain resources.

The Atlanta region will undergo a dynamic shift in the racial and ethnic profile of the region over the next 30 years. Additionally, the region will also experience significant shifts related to the age of the population. The ratio of working age individuals to non-working age will change dramatically as the region will have many more non-working aged residents in 2040. The share of population over the age of 65 will increase dramatically, as will the share of children in the region.

Meeting the needs of a changing population does not fall to social and education systems alone, but also to a built environment and supportive infrastructure that allows these individuals to be independent and active.

Current Housing Supply vs. Future Demand

Market Forces that Shape Residential Products Will Change the Types of Housing Demanded

The vast majority of housing available in the Atlanta region has been constructed over the past 40 years. In fact more than 20 percent of the housing stock in the Atlanta region was built between 2000 and 2007. The development community, working within local government regulatory environments, has done a remarkable job of delivering substantial quantities of housing to meet historic and recent demands for housing, but it is uncertain if this supply is aligned with future consumer needs.

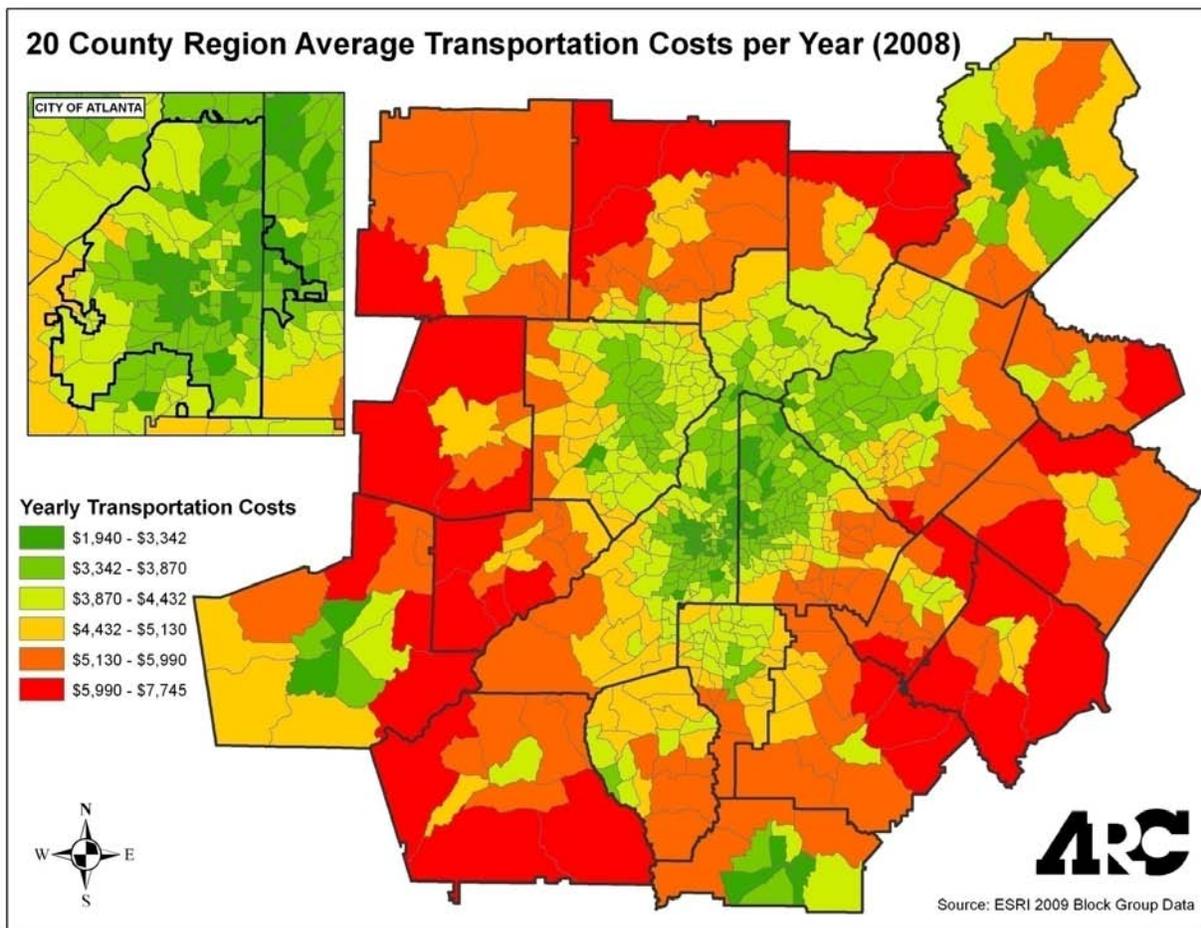
A majority of households in the Atlanta region already consist of families with two persons or fewer. The share of households in the Atlanta region that have more than two people is

expected to continue to decline over the course of the next thirty years. Current household sizes and future trends suggest a mismatch between current housing stock and the needs of current and future households. National research suggests that the nation as a whole is undergoing a fundamental shift in the typical household one would expect. Three decades ago, approximately half of the share of households had children, compared to 21 percent expected nationally in year 2030.

Households in the Atlanta region spend more on transportation each year than any other metropolitan area.

The Atlanta region has experienced tremendous growth over the past several decades. Much of this growth has been fueled by the region’s ability to supply housing affordable to the workforce mostly in the region’s suburban counties. This pattern has been supported by relatively inexpensive travel costs, particularly in terms of the cost of gasoline. Rising fuel costs are likely to place significant strains on household budgets. The region’s housing supply limits options to reduce these costs through household location choices. Figure 5 illustrates the range of transportation costs throughout the region.

Figure 5: Average Transportation Costs



The Region Has Limited Areas That Support Multi-Modal Travel and Transit

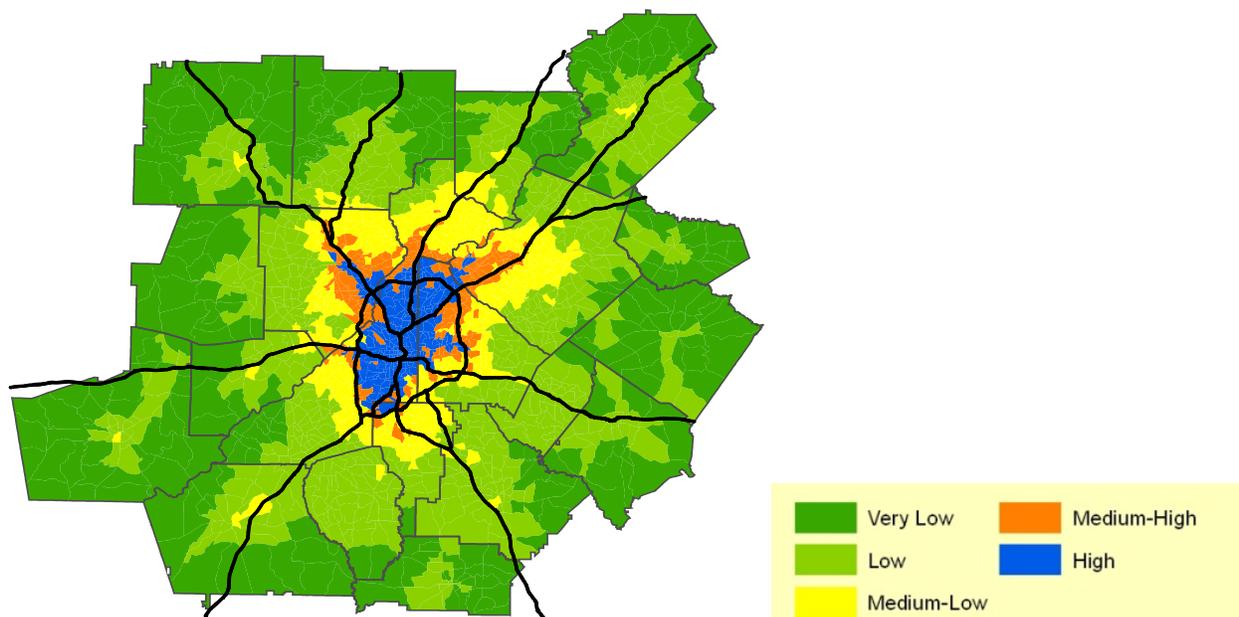
Most of the Region has Very Limited Travel Options Due to both Transportation Availability and Land Use Patterns

The Atlanta region has an extremely ambitious transit concept, commonly known as “Concept 3.” This transformational concept includes expansion of fixed-guideway transit in many urban and suburban locations in the region. Initial analysis indicates that in spite of the major investments in the region’s activity centers through Livable Centers Initiative (LCI) studies and projects, more assertive policies are needed to support the establishment of transit centers in the region.

Most communities seeking fixed-guideway transit stations do not have the minimum densities needed to support successful transit expansion.

Figure 6 below illustrates that few areas outside of the region’s core will have the residential and employment densities and supportive infrastructure by 2040 to support multimodal transportation expansions in many parts of the region. Addressing the need to provide adequate densities and supportive mix of uses to support fixed-guideway transit expansions is an important policy discussion in *Plan 2040*. With currently expected land use patterns, the region will find it challenging to be competitive in receiving federal transit funding for projects outside the core.

Figure 6: Multi-Modal Accessibility



Source: ARC

Over the past 10 years, the LCI program has spurred cities, counties and communities of all sizes to undertake planning and create transportation-efficient land use strategies for activity centers, town centers and corridors. Analysis of these studies support conclusions that land use patterns can reduce per capita VMT even while expanding the population and employment within the study areas. Balancing jobs and housing within LCI areas, increasing the overall diversity of land uses and an improving multi-modal transportation network all work in concert to produce tangible travel and emission benefits. The LCI program provides the framework for transit-supportive communities in the future.

The Region Must Focus On Both Urbanized Areas And Conservation Areas

There Are Significant Challenges Facing ARC and Local Governments on Both Ends of the Development Spectrum – Urban/Urbanizing Areas and Local Communities that Would Like To Conserve Land and Community Character

Research is showing that many urban neighborhoods across the country are experiencing dramatic transformations where higher residential types are replacing parking lots, underutilized commercial sites and former industrial sites. Furthermore, permit data show that in several regions there has been a dramatic increase in new construction in central cities and older suburbs, reflecting a fundamental shift in the real estate market.

Future development trends suggest a residential market near mass transit stops, infill areas in suburban markets with existing traffic problems and mixed use construction in urbanizing suburban nodes. Outer-ring suburbs and exurban areas may experience greater losses as the market demand continues to shift toward infill neighborhoods.

The Atlanta region has developed programs and policies to assist with adding necessary urban amenities to areas in need of these improvements, particularly through the LCI program. In July, 2009, ARC hosted an all-day work session of Urban Land Institute (ULI) to review existing plans and programs. The panel recognized significant progress that had been made by the region in terms of supporting appropriate development in the region's town and activity centers, but they also recognized that future development in these areas may be even more intense than ARC or local governments are currently anticipating. This group also concluded that the region is currently failing to have a proactive approach to development and conservation initiatives in suburban and exurban communities. Many of these areas are looking for alternatives to recent suburban development patterns, but currently do not have adequate support or guidance from ARC on alternative strategies.

During the past decade local governments have generated significant revenue locally for greenspace acquisition.

ARC and local governments should pursue a systematic, strategic and comprehensive planning effort to acquire, protect and manage conservation lands, open space, green space and agricultural/farmlands in perpetuity in order to develop a green infrastructure network. A variety of greenspace types will create a rich, cohesive and sustainable inventory of interconnected natural habitats, open spaces and rural lands that will serve numerous functions, including buffers to development, recreational areas, growth management tools and sources of economic development.

The Region, State, and Nation Have Experienced a Decrease in Financial Capacity to Fund Needed Transportation Improvements

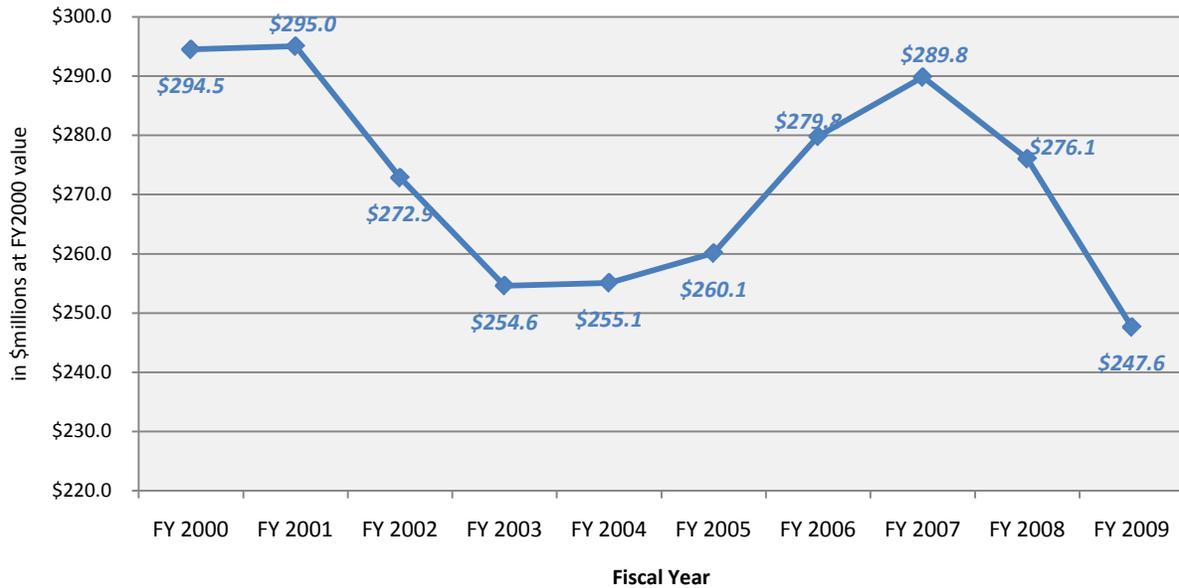
The Need for Transportation Investments in the Region Continues to Trend Upward – But Revenues Are Going in the Wrong Direction

The region has experienced a significant decrease in its capacity to implement large-scale transportation projects. The current economic downturn has been, and will be, deep and prolonged. Many regional partners may not be fully aware of the amount of time required for the region to return to funding levels seen in the mid-part of this decade.

Local sales tax receipts comprise the primary funding source for most transportation projects sponsored by local governments and MARTA. The economic recession has resulted in an unprecedented decrease in funding. An assessment of Fulton and DeKalb county sales tax receipts reveals the depth of the challenge. As shown in Figure 7 below, in year 2000 dollars, MARTA has 16 percent less funding today than in 2000. Forecasts indicate that regional sales tax receipts will not return to pre-recession levels until the mid-part of the next decade, while the region continues to see increased demands for transportation infrastructure associated with growth.

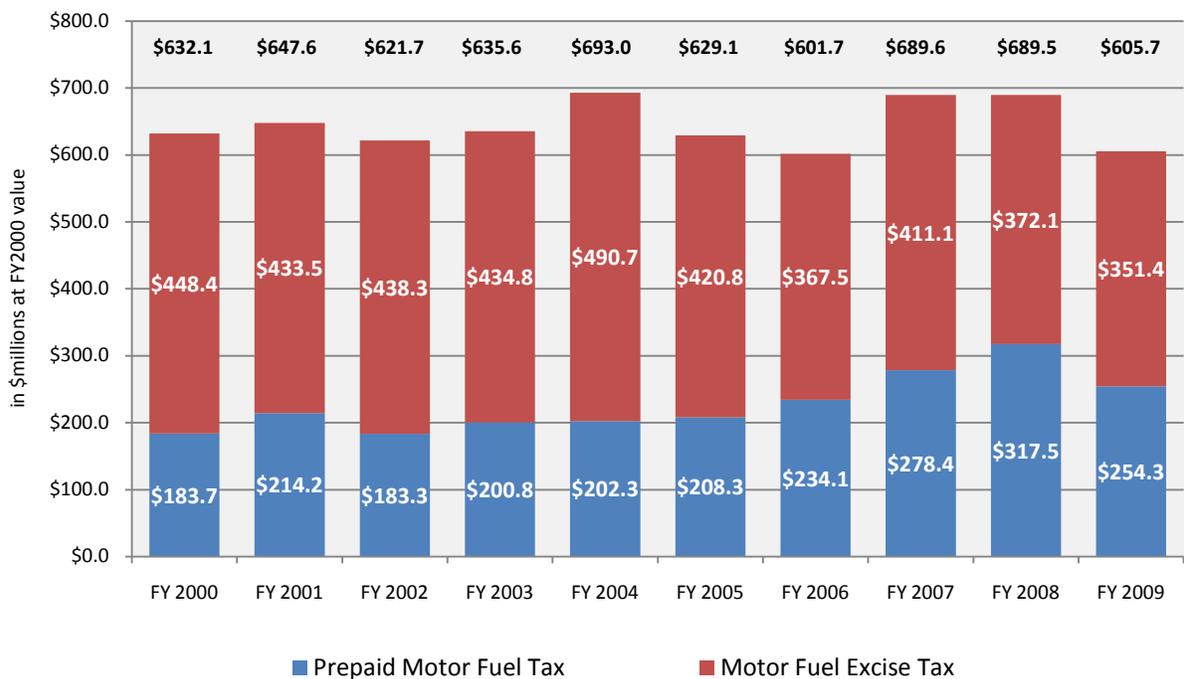
The real dollar value of both MARTA sales tax receipts and state motor fuel revenues are less today than in 2000.

Figure 7: Historical Real Value of MARTA Sales Tax Receipts; FY 2000-FY 2009



Transportation funding at the state level has decreased throughout the decade, in real terms (Year 2000 \$). The current economic recession and the resulting levels of unemployment have contributed to a drop in total motor fuel tax revenue. As illustrated in Figure 8 below, total fuel tax revenue collected by the state has dropped 12.2 percent between the fiscal years 2008 and 2009. Current year funding is lower in real terms than in 2000.

Figure 8: Total State Revenue from Motor Fuel Taxes: FY2000 – FY 2009 (Year 2000 \$)



Sources: Georgia Department of Revenue/Bureau of Labor Statistics Consumer Price Index

Nationally, the funding trends are also ominous. The federal funding crisis is based on declining Vehicle Miles Traveled (VMT) and the increasing fuel efficiency of the overall fleet. Both trends led to decreased funds flowing into the Highway Trust Fund (HTF), the primary source of federal aid for major transportation projects. Current levels of VMT are at year 2003 levels. The impact is reflected in the HTF's funding deficit, with planned expenditures at 30 percent above expected revenue. Without some type of federal policy changes, these trends will lead to less federal funding to Georgia and the Atlanta region in the next decade.

Keys to Implementation and Recovery: Integration, Cooperation and Partnership

The Region Is Well Positioned for an Economic Recovery, but Must Be Able To Seize Opportunities and Recognize Existing Issues that Limit Future Growth

Growth and expansion of the region have resulted in a region that is tremendously complex, making it difficult to provide one-size-fits-all policy solutions. As described previously and throughout the Regional Assessment, the Atlanta region and the State of Georgia are facing significant short- and long-term challenges.

It is unclear when a national economic recovery will begin, but it is likely that the foundations upon which Atlanta grew will not be as prevalent in the future. The last 15 years in the Atlanta region in particular represent a period of growth that is likely to never be seen again. As the region slowly inches toward a recovery, it is uncertain if expectations will begin to approach that of the 1990s and mid-2000s or if the region will embrace a "new normal" represented by continued growth that may be more manageable in terms of magnitude.

The Atlanta region has a long-standing tradition of cooperation among local governments. ARC must build on this record of success and bring together local governments, the private sector, non-governmental organizations and the state to cooperatively address the most pressing issues facing the region. Interviews and conversations with regional leaders in 2009 revealed that ARC's existing coordination mechanisms provide a significant foundation to build on, but there are key opportunities that must be explored, including:

- ARC should explore if there is a role to play in education – The region must improve graduation rates and provide a workforce that can support economic opportunity.
- The region must create a sense of unity among the diverse perspectives around the region, while also recognizing that different areas of the region have different needs.
- Build in accountability and near-term expectations in long-range planning efforts.
- Local buy-in is the key to successful regional programs.
- In order to maintain prosperity and attract new, strong businesses the region must nurture partnerships around the region and the state.
- The region must recognize that many of our present and coming challenges have global influences, innovation will be the key to our long-term success.

Organization of Plan 2040 Regional Assessment

The Plan 2040 Regional Assessment covers a broad array of topic areas. Extensive efforts have been made to streamline this document, but the intent of the development of this assessment is to undertake a comprehensive look at issues and opportunities in the Atlanta region. Therefore, there is significant data and information that must be considered. The Assessment is organized around the three critical themes that were identified by the ARC Board and through interviews with regional leaders early in the plan development process.

Readers should note that the Regional Assessment is a living document and will be subject to updates in calendar year 2010, as minor adjustments are made to forecasts to reflect the latest financial and growth trends. However, these updates are not expected to significantly impact or change findings made in this assessment. This document will be forwarded to the Georgia DCA in early 2010 to meet state planning requirements and shall be subject to stakeholder feedback and input. The major findings of the Regional Assessment will also become a key component of a regional dialogue on potential solutions and responses that will begin in 2010.

Several Appendices are included as part of the document. State and federal planning requirements include significant data gathering efforts in support of assessment development. Some of these data are presented within the text while others are included in the Appendices in order to streamline the document for the reader.

Theme 1: Solutions that Address the Social, Economic, and Environmental Needs

The Atlanta region continues to be one of the fastest-growing regions in the nation, adding more than one million people in the last seven years alone. Each new and existing resident places demands on infrastructure, public services and the region's natural systems. The region is currently facing numerous challenges associated with growth over the past few decades, as well as national and global challenges that are likely to shape future growth. Existing and future challenges will need to be addressed comprehensively in order to ensure the long-term viability and global competitiveness of the Atlanta region.

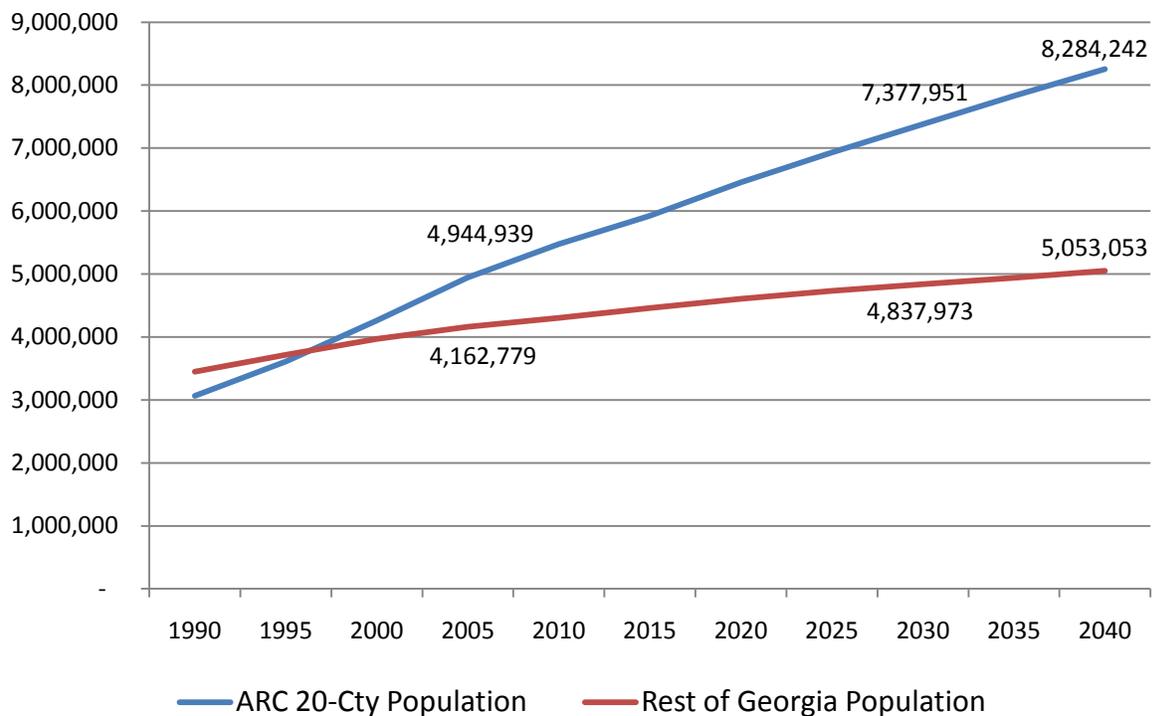
As our world continues to change, leaders in the public, private and civic sectors of the Atlanta region are beginning to recognize the need for – and the vast, untapped potential of – a region capable of sustaining itself over the long-term. Our leaders are also concerned about the future of Atlanta if we do not set a sustainable development agenda for ourselves and start consciously and consistently pursuing it. From green building and energy-efficient construction, to simple conservation and cleaner-burning fuels, there are a variety of choices we can all make to ensure that future generations enjoy the same quality of living we have today.

Reviewing the relationships between demographics and travel behavior is important in understanding the needs of those who live and work within the region. In order to supply adequate transportation services and identify supportive land use policies, an understanding is needed of the complex issues relating to who, what, when, where, how and why transportation choices are made. As the region continues to grow and diversify, maintaining an economic advantage is dependent upon an adequate availability of flexible transportation and land use options.

Dynamics of Population Growth

In 1995 the 20-county Atlanta region had less population than the rest of the state. At the close of the last century the region had pulled ahead of the rest of the state and the disparity in attracting future population growth is anticipated to accelerate over the next 30 years. ARC expects the population of the Atlanta region to increase 71 percent between 2005 and 2040, while the rest of Georgia will only see a 22 percent increase. While population growth in the Atlanta region will continue to be substantial, it may never again approach rates experienced in the past fifteen years. As shown in Figure 9, ARC’s most recent forecast in support of *Plan 2040* development anticipates the 20-county Atlanta region to add roughly three million people, for a 2040 population of 8.3 million.

Figure 9: Population Growth (Atlanta Region and State of Georgia)



Source: ARC Initial Plan 2040 Forecast

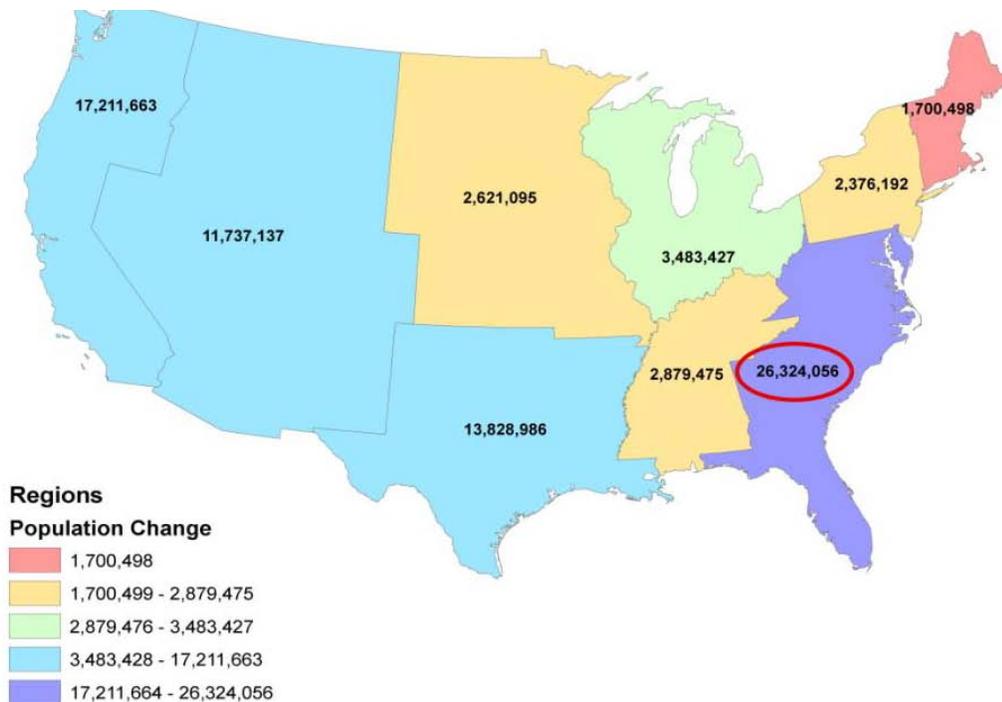
The core 10-county region is anticipated to add more than 2 million people between 2005 and 2040, a 57 percent increase since 2005. The initial forecast for *Plan 2040* predicts that four out of the 10 counties could double their 2005 population by 2040 (Cherokee, Douglas, Henry and Rockdale). Each of these counties is currently among the five least populated counties in the 10-county region, along with Fayette County. While Fayette County may not double its population by 2040, its' population will grow by nearly 85 percent. While these counties are expected to have significant population growth in terms of percentage increases between 2005 and 2040, in total, Fulton and Gwinnett are expected to add more than 900,000 persons between 2005 and 2040. ARC's initial forecast indicates that Fulton and Gwinnett counties will both have populations exceeding one million in 2040.

The core ten counties represent the majority of growth forecasted over the next 30 years, but each of the outer ten counties that are included in the ARC forecast are expected to grow tremendously in that time. In total they will be adding more 1.2 million people in the next 30 years. Seven of the ten are expected to double their population in the next 30 years, with every county expected to grow by at least 85 percent. Forsyth County will add more population than seven out of the ten core counties (250,000), approaching a population of 400,000 by 2040.

Much of the expected population growth can be attributed to the growth momentum of the Atlanta region, but it is also influenced by larger growth trends. The U.S. Census Bureau projects that the Southeastern portion of the United States will experience the greatest change in population of any region in the country. Figure 10 below illustrates the shares of national population growth that regions around the country are anticipated to experience over the next twenty years. The State of Georgia, and the Atlanta region are well positioned within the Southeast to receive a significant share of growth in the Southeastern United States.

Figure 10: Regional Population Projections (U.S.)

Source: US Census Bureau



The dynamics of growth that will impact this region are not just related to magnitude alone. Over the course of the next 30 years, the Atlanta region will transition from a largely bi-racial region to a region with no ethnic or racial majority. The Census Bureau anticipates that by 2027, most U.S. population growth will be driven by immigration rather than by natural increase (more births than deaths). ARC's forecast reflects this estimate, particularly in the White-non Hispanic population. Over the next 30 years, Black and White natural population change will decrease, with White non-Hispanic becoming negative in the latter years of the planning horizon. Population increases in the region that can be attributed to natural increase will be largely dependent on the Hispanic population.

In addition to a dynamic shift in the racial and ethnic profile of the region of the next 30 years, the region will also experience shifts related to the age of the population. Currently the 28-county metro Atlanta is a very young area when compared to other metros in the nation. In fact, Atlanta has the second largest share, behind only Dallas, of those aged 25 to 39, generally referred to as "Generation X," when compared to 26 other metro areas with a population larger than two million. Conversely, the Atlanta MSA currently has the lowest share of population over the age of 65, but this is the fastest-growing age group in the 20-county Atlanta region.

Over the next few decades the region will experience significant changes in its overall age profile. A graph known as a "population pyramid" is used to display the size of age groups. The three population pyramids on the following page show the distribution of age groups in the region over time. It should be noted that because of the overall growth in total population in the region, the X-axis of each graphic was modified to allow for comparison. In the 1970 Pyramid the rise of the Baby Boomers, those born in the middle of the 20th century, can be seen in the base of the pyramid. This generation has significantly shaped the growth and development patterns of the Atlanta region.

The 2007 pyramid shows the region's significant share of the Baby Boom generation, in addition to demonstrating the region's large share of Generation-X (those born a generation after the Boomers). The overrepresentation of Generation X in the Atlanta region means that the region has a very large number of individuals in their working years currently. As the third pyramid demonstrates, over the next forty years, the age profile of the region will undergo another significant transformation. The ratio of working-age individuals to non-working age will change dramatically as the region will have many more non-working aged residents.

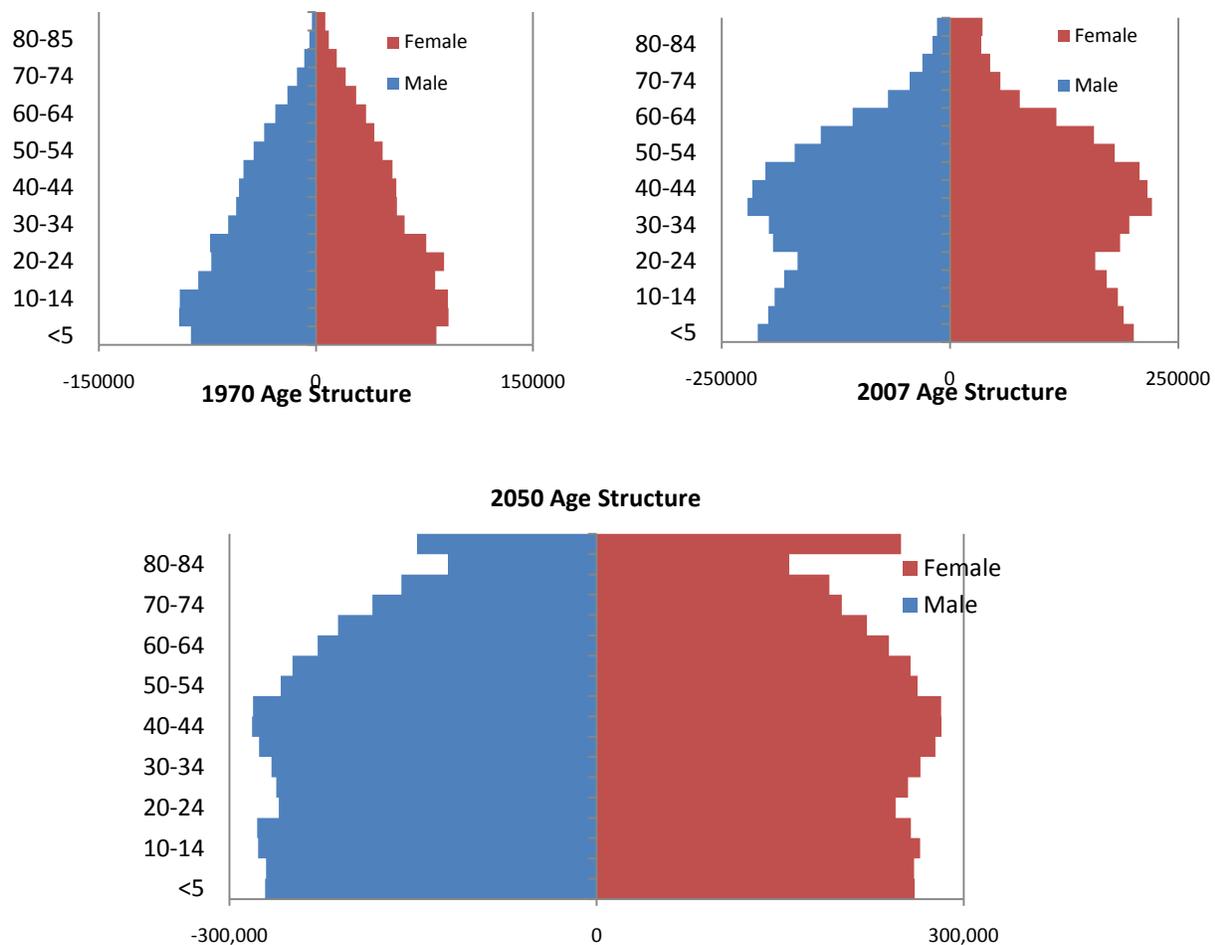
A growing older adult population will occur throughout the planning process. This will be most evident in the early part of the planning horizon as the Baby Boom generation begins to turn 65.

The transition to a region with a larger share of older adults not only impacts long term care services, but will also challenge the built environment and infrastructure in place to serve it. It is

not possible to meet the needs of the growing older adult population with supportive programs or innovations in healthcare alone, but rather, the places where people live will determine whether or not it is possible to lead an independent, active and engaged life. The region will transition from a region of just over 200,000 persons over 65 in 1990 to one with more than 1.6 million older adults in 2040. Any meaningful response to this demographic shift will mean a change to the way the region develops, spends transportation and infrastructure dollars, delivers healthcare, promotes services and trains professionals.

Figure 11 below shows the transformation the region will undergo in terms of age composition in the region. As can be seen, the region is currently populated by many persons in their working years, but this dynamic will change greatly over time as the region becomes home to more equal shares of persons over 65 and under 18.

Figure 11: Population Pyramids (1970, 2007 and 2050)



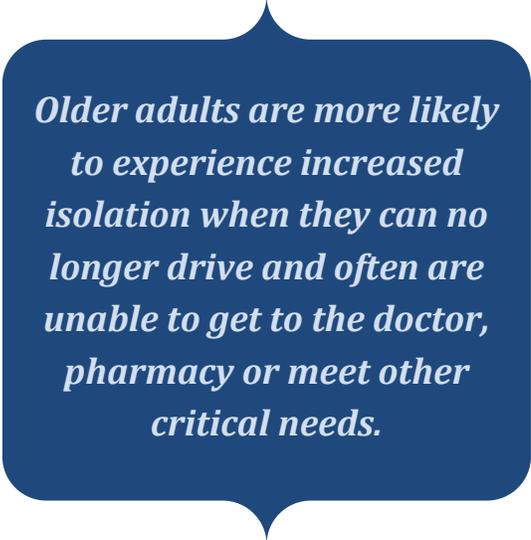
Source: US Census Bureau and REMI

The transportation system affects the way people live at all different stages of life. Much more than simply getting from point A to point B, transportation access determines where and when individuals work, how and where they spend their money and which educational, recreation and vacation opportunities are available.

Transportation for older adults in particular is about mobility, but more importantly, it determines connections to the community, quality of life, health and independence. Older adults hope to age in their communities and plan to do so. Access to transportation gives them the freedom to do so. However, this goal is impossible without an adequate range of transportation options.

Unfortunately, Georgia has invested very little in transportation infrastructure and services that reflect the realities of an aging population. Instead, driving is the only option in the vast majority of communities where current and future older adults live.

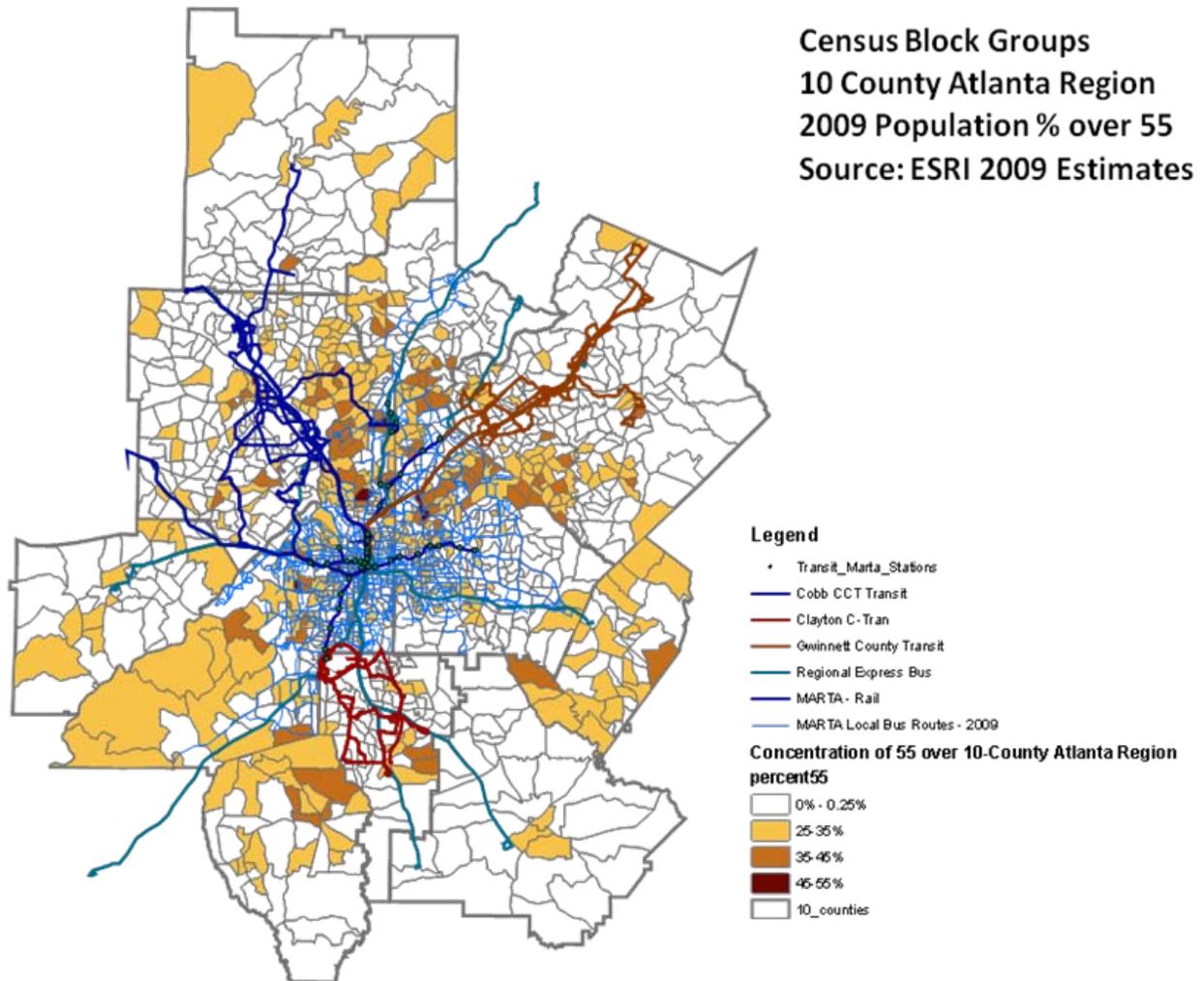
The next decade will see massive growth of the senior population, especially in older suburbs unaccustomed to housing older people. Suburban communities built for the baby boomer generation and their families are not well-equipped to accommodate these individuals. Well-designed neighborhoods are becoming more popular and in demand because of changing demographics and desires for more choices, not only among aging Boomers, but also their children. Unfortunately, the region has a limited number of areas that include the infrastructure and amenities needed by older adults and individuals without regular access to an automobile.



Older adults are more likely to experience increased isolation when they can no longer drive and often are unable to get to the doctor, pharmacy or meet other critical needs.

Figure 12 below illustrates the current and future challenges the region faces in terms of meeting the travel needs of older adults. The region already includes significant concentrations of older adults that have limited access to public transportation. Lack of public transit options throughout the region places significant strain on County Senior Services to provide transportation for older adults to accomplish daily tasks.

Figure 12: Percent Population over 55



ARC’s Aging Division has identified three transportation planning areas that need targeted attention to address the issues raised by a population that is growing older and living longer:

- Developing walkable communities
- Creating safe roads and safe drivers
- Providing a range of alternative modes of transportation for Georgia’s older adults.

Taking a more comprehensive approach to transportation in Georgia will benefit people of all ages who do not drive, either through choice or inability. It can reduce fuel consumption and improve air quality. Investing in transportation options now will better prepare the state to manage an increasingly diverse population with increasingly diverse needs.

The transportation needs and concerns of older adults vary by the type of community in which they live—urban, suburban, and rural. The opportunities and choices available vary by the

concentration of older adults in these communities and the capacity to coordinate among different services.

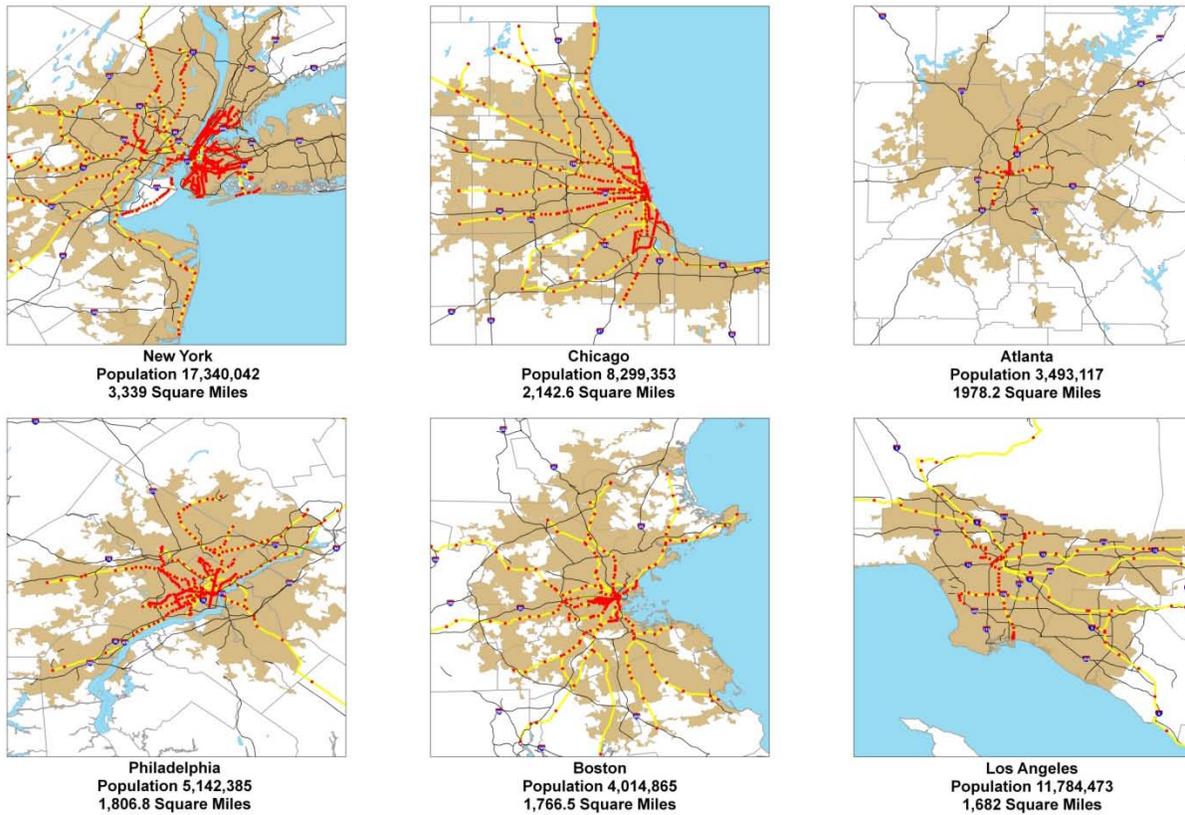
The need to accommodate older drivers and pedestrians in transportation infrastructure design is becoming a traffic safety imperative with the rapid increase in Georgia's aging population. Because the ability to drive safely changes as people grow older, and because older drivers continue to drive until they are well up in years, the time has come to improve road design standards. Doing so will increase driving safety for all drivers, not simply older ones. Additionally, providing transportation alternatives to the automobile and promoting walkable communities will provide a fuller range of options to meet the diverse needs of the state's changing population.

Development Patterns, Housing and Livable Communities

Compared to other regions in the U.S., the Atlanta region has developed an overall footprint that has not been matched with corresponding infrastructure investments. This could be viewed as doing more with less, but realistically it represents perhaps the region's biggest challenge moving forward.

The maps below (Figure 13) are all drawn at the same scale to demonstrate the relative size of key urban areas in the U.S. The darker portion of each map is the urbanized area of each region as defined by the U.S. Census Bureau. Core infrastructure in the form of fixed guideway transit and limited access roadways (as of 2004) are also shown. These images clearly show the Atlanta region is not keeping up in terms of providing urban infrastructure that can adequately serve the region's urban extent. The comparisons illustrate that other region's are significantly ahead of Atlanta in providing transit infrastructure throughout their regions.

Figure 13: Regional Urban Expansion and Infrastructure Comparison



Source: National Transportation Atlas Dataset 2009

Much of the available land for development in the Atlanta region has been used for very low density residential uses. While substantial areas exist in commercial centers or corridors for redevelopment, the fact is that new development on vacant land and redevelopment are not the same. Redevelopment takes longer, requires different strategies and can be more expensive. In addition, many local governments may seek to limit the intensity of development on redevelopment sites.

Many of the region's existing developed areas will continue to face growth pressures over the next 30 years.

Approximately 51 percent of the 10-county region is developed with urban type development or a mature and well-established suburban pattern. Current trends and policies suggest that an additional 16 percent of the 10-county region would be considered developed by 2040. Under current trends, the remaining land area of the region would be in varying states of being actively developed, with a small percentage of the region being undevelopable or in a protected use.

The largest five counties of the region (Cobb, Clayton, DeKalb, Fulton and Gwinnett) have roughly 80 percent of the region's population and jobs. It is anticipated that these counties will become more densely developed over the next 30 years. ARC's initial Plan 2040 forecast anticipates that these counties will grow by 1.4 million people by 2040. Clayton, DeKalb and Cobb counties have the least amount of prime developable land available in 2009. Fulton and Gwinnett Counties each have significant vacant land relative to the other five core counties.

An population increase of 1.4 million people in the five core counties will require increased densities and the introduction of residential uses into primarily commercial areas, including areas that are in need of redevelopment. While ARC's initial forecast indicates that there will be tremendous growth pressure at the center of the region, urban and suburban expansion remains a probability over the course of the Plan 2040 planning horizon.

While conversion of agricultural and forested lands has slowed when compared to earlier in the decade, the region did convert roughly 26,000 acres of primary, developable land into some other use between 2007 and 2008. Most of that land was converted to a commercial or residential use. In 2005, 53 percent of all land in the 20-county area was either agricultural or forested. By 2008, that percentage had dropped to 51 percent. During 2007-2008, the 20-county region added nearly 20,000 acres of residential and an additional 500 acres of land dedicated to multi-family structures.

The region converted more developable land, on an annual basis, in 2007-2008 than in the previous period, 2005-2007. Counties in the "external seven" (Barrow, Bartow, Carroll, Hall, Newton and Walton) counties generally have the most developable land remaining, but Cherokee, Fulton and Henry counties within the ARC's Regional Commission planning area have substantial vacant land available.

The expansion of the Atlanta urbanized area has significantly increased more than other peer regions. Atlanta is significantly larger and less dense than Dallas, the region's closest peer. Phoenix, a region often compared with Atlanta, is actually twice as dense as the Atlanta region. With no natural barriers to restrain where development occurs, the region has seen a philosophy of separating land uses dominate the development pattern through the region. Increasingly it appears this development pattern will put a strain on providing adequate public services, including transportation infrastructure to the citizen of the region.

ARCs most recent population and housing estimates show that the 10-county region has averaged almost 77,000 new residents each year since 2000. Practically all of the new multi-family construction since 2000 has been built in the core 10 counties, accounting for 97 percent of new multi-family units in the 20-county area. In the external 10 counties, a little more than one unit of multi-family housing was added per 100 new residents, meaning that the vast majority of new residential growth is occurring in single-family homes.

Having added an average of 7,600 residents each year this decade, the City of Atlanta saw growth of 3,400 persons in 2009, which accounted for 14 percent of the region's total growth. While the region's central city's growth over the past decade has been substantial, other cities around the region are also seeing substantial growth. Five cities with a population of more than 10,000 in 2007 have doubled their population since 2000 (Canton, McDonough, Stockbridge, Villa Rica and Woodstock). Growth in cities has been remarkable over the past decade, but the majority of 10-county residents live in unincorporated areas.

Single-family detached housing units represent the primary housing product available to consumers in the region, as can be seen in Figure 14. In 2008, 1.14 million of the 1.68 million housing units in the 10-county region were single family (68 percent). This percentage increases for the external 10-counties.

Figure 14: County Housing Totals (Single-Family and Multi-Family only)

County	Single-Family (SF) Units				Multi-Family (MF) Units			
	2008 SF Units	% SF Units	2000 SF Units	SF Change	2008 MF Units	% MF Units	2000 MF Units	MF Change
Cherokee	67,030	83.8%	45,144	21,886	9,393	11.7%	2,733	6,660
Clayton	70,883	66.0%	57,265	13,618	32,769	30.5%	25,327	7,442
Cobb	197,873	71.1%	172,359	25,514	75,653	27.2%	59,986	15,667
DeKalb	185,329	61.6%	170,026	15,303	114,407	38.1%	90,256	24,151
Douglas	41,654	82.0%	27,550	14,104	6,583	13.0%	4,515	2,068
Fayette	35,110	88.7%	28,909	6,201	3,193	8.1%	2,462	731
Fulton	238,692	54.9%	196,508	42,184	193,967	44.7%	150,516	43,451
Gwinnett	220,452	77.4%	161,896	58,556	59,426	20.9%	42,766	16,660
Henry	61,759	86.6%	36,881	24,878	6,716	9.4%	3,148	3,568
Rockdale	26,143	83.7%	20,978	5,165	4,082	13.1%	3,031	1,051
"Core" 10	1,144,925	68.2%	917,516	227,409	506,189	30.2%	384,740	121,449
Barrow	21,106	83.9%	13,586	7,520	864	3.4%	858	6
Bartow	27,844	76.7%	21,101	6,743	2,188	6.0%	2,120	68
Carroll	32,443	73.8%	24,516	7,927	4,896	11.1%	3,377	1,519
Coweta	39,037	87.9%	28,176	10,861	3,118	7.0%	2,773	345
Forsyth	56,761	92.6%	32,102	24,659	717	1.2%	614	103
Hall	50,473	78.3%	37,900	12,573	5,931	9.2%	5,174	757
Newton	32,887	88.4%	19,683	13,204	2,246	6.0%	1,328	918
Paulding	42,264	93.1%	25,752	16,512	601	1.3%	967	(366)
Spalding	20,984	78.3%	17,710	3,274	3,304	12.3%	2,864	440
Walton	25,552	87.1%	18,838	6,714	1,068	3.6%	980	88
"External" 10	349,351	84.3%	239,364	109,987	24,933	6.0%	21,055	3,878
20-County Total	1,494,276	71.4%	1,156,880	337,396	531,122	25.4%	405,795	125,327

Source: ARC

Single-family construction remains the preferred type of housing development encouraged by many local governments. While there are legitimate reasons to encourage single-family construction, over the next thirty years consumers will need choices available due to affordability issues, desire to be closer to work and inability to consistently maintain a single-family home. Consumers that are limited in housing choices include:

- Disabled persons
- Older adults
- Individuals and families on fixed incomes
- Single parents or smaller families
- Individuals seeking to live in mixed-use or transit supported housing
- Employees in low-paying retail, service sector and entry level jobs

A majority of households in the Atlanta region already consist of families with two persons or fewer. The share of households in the Atlanta region that have more than two people is expected to continue to decline over the course of the next thirty years. Current household sizes and future trends suggest a mismatch between current housing stock and the needs of current and future households.

National research suggests that the nation as a whole is undergoing a fundamental shift in the typical household one would expect. Three decades ago approximately half of the share of households had children, compared to 21 percent expected nationally in year 2030. This trend coupled with the tripling of metro retirees, many of whom will look to downsize their homes, speaks to a potential mismatch in current housing stock and future housing stock that will be shaped by local regulations that tend to favor large, detached units.

In the future, the region may not only be facing a mismatch in the types of housing available, but may also see a transformation in the types of communities desired by consumers. Across the country, research shows that many urban neighborhoods are experiencing dramatic transformations where higher residential types are replacing parking lots, underutilized commercial sites and former industrial sites. Future development trends suggest a residential market near mass transit stops, infill areas in suburban markets with traffic problems and mixed use construction in urbanizing suburban nodes. Outer-ring suburban and exurban areas may experience greater losses as the market demand continues to shift toward infill neighborhoods.

One of the Atlanta Regional Commission's (ARC) principal goals is to support local governments in their efforts to create highly livable and vibrant communities. Few of our programs do that as effectively as the Livable Centers Initiative (LCI) program. Seen as a cutting-edge program around the country, the LCI program was awarded the American Planning Association's National Planning Excellence Award for Implementation in 2009, and was awarded the Environmental Protection Agency's 2008 National Award for Smart Growth.

The planning process, project goals and deliverables outlined in the LCI program provide an efficient, realistic and effective method for communities to undertake smart-growth planning

and implementation. In return, this works to achieve more balanced regional growth by concentrating new development away from undeveloped greenfields and into areas with existing infrastructure, reducing vehicle miles traveled and improving air quality. The LCI program has proven enormously successful as the catalyst to major redevelopment efforts taking place in transit station areas and small and large urban centers and corridors. These investments have spurred new housing and development closer to jobs and are helping to promote more efficient transportation nodes.

The 2009 LCI Implementation Report indicated that LCI communities are capturing a growing share of the region's new development, especially office and commercial uses. Since the last implementation report in 2006, the amount of development concentrated into LCI areas compared with the rest of the 10-county region has doubled.

All LCI communities are different and face different challenges and opportunities. As a result, LCI plans vary in response to these specific needs. But, as unique as each community is, all LCI plans demonstrate an understanding of the primary goals and policies of the program:

To connect homes, shops and offices by encouraging a diversity of mixed-income residential neighborhoods, employment and recreational choices at the center/corridor level

To provide access to a range of travel modes including transit, roadways, walking and biking, while emphasizing the pedestrian

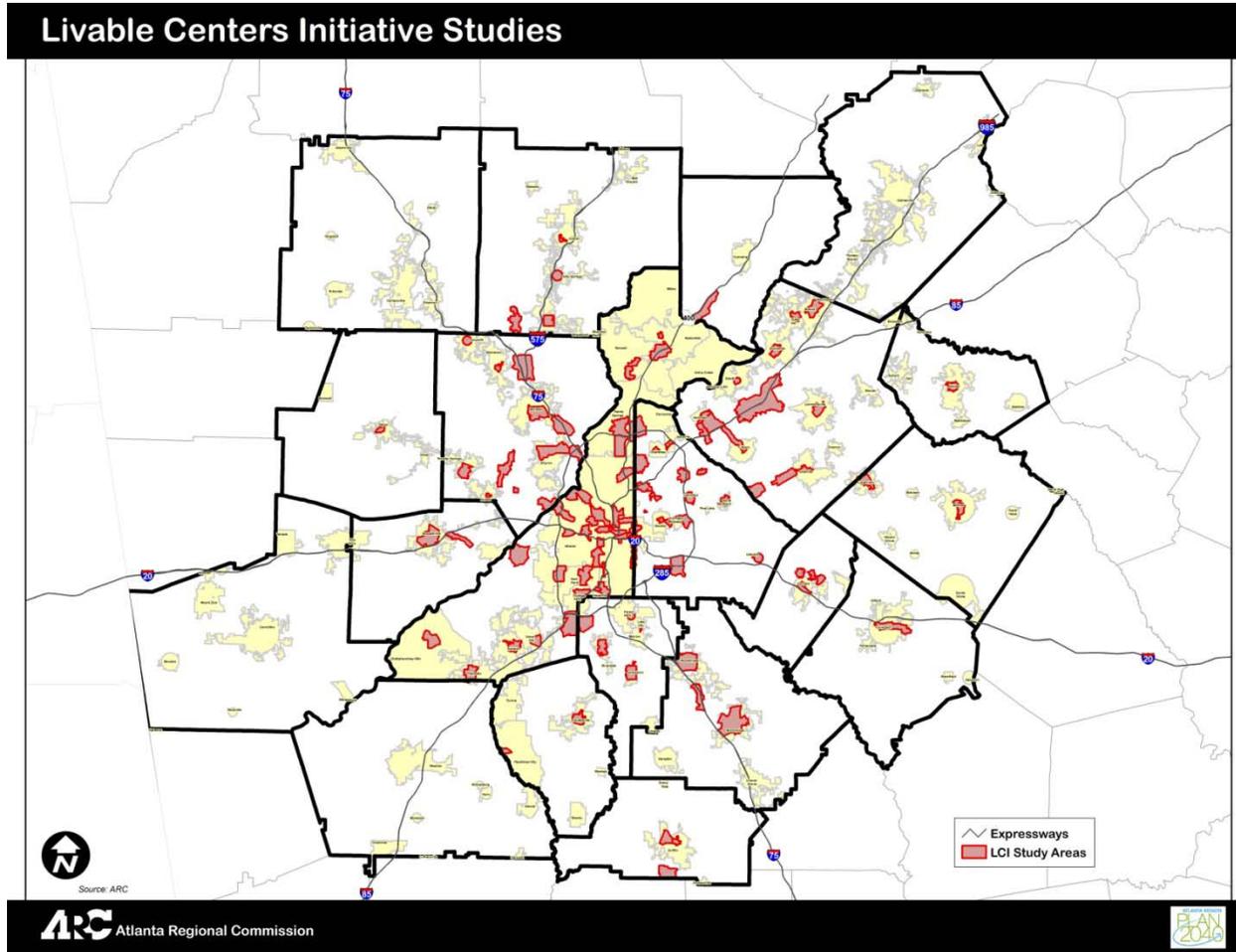
To improve safety and a sense of place in order to increase livability and quality of life for all members of the community

To develop an outreach process that promotes the involvement of all community stakeholders so that the LCI plans created reflect the goals and vision of the community

Over the past 10 years, the LCI program has spurred cities, counties and communities of all sizes to undertake planning and create transportation-efficient land use strategies for activity centers, town centers and corridors. The LCI program has been the primary regional program and resource during the past decade in the Atlanta region to spur redevelopment, foster new urban development and implement transit oriented development (TOD). To date, more than

\$141 million in planning and transportation funds have been allocated to support 102 distinct planning areas in the region (shown in Figure 15 below).

Figure 15: LCI Study Areas (2000 - 2009)



The region has accommodated tremendous growth in the number of housing units over the past decade, and even prior to 2000. Currently the housing market in the Atlanta region and across the nation is as weak and constrained as it has been in recent memory. The Standard & Poors/Case-Shiller Home Price Indices have shown a steep decline in housing prices in their 10- and 20-City Composites since 2006. The Case-Shiller index is used by most media sources as the comparison for major markets, including Atlanta. The composites declined 18 percent in April 2009 compared to the same month in 2008. This follows record annual declines in January 2009 when compared to the previous year. Recent months have indicated that the overall market may be stabilizing in some areas, including the Atlanta region.

Overall the S&P/Case-Shiller Indices suggest a 14.8 percent decrease in the past year of a typical single family home in the Atlanta region. While this represents a significant decrease,

the region, on the whole, has withstood this market correction better than most of the other metro areas included in the Indices.

Falling prices for existing housing units is not the only force constraining and influencing the housing market in the Atlanta region. The region also has significant numbers of new, unsold units (more than a 12-month supply); an excess inventory of approved buildable lots (more than 150,000, or a 200-month supply); foreclosed and/or abandoned dwellings; and new subdivisions in various states of completion, some with developers that have walked away from the project. All of these combine to create a great deal of uncertainty in the Atlanta housing market. A significant number of builders, housing developers and potential consumers have likely been taken out of the market as financing has become restrictive for all parties.



The region's ten core counties have together experienced over a 420 percent increase in the number of foreclosures filed from 2000-2008.

The Atlanta region followed many of the trends of the U.S. economy, which built substantial quantities of single-family homes during the past decade. Home ownership was encouraged through financing tools that have resulted in widespread foreclosures during the current major market correction. Housing values for all residential homes have fallen in the Atlanta region due to the deflated housing bubble fueled by increased access to credit. In 2008, sales of foreclosed properties accounted for nearly 40 percent of all sales of resale properties.

While the rate of foreclosure filings has risen dramatically in many locations throughout the country, the State of Georgia, particularly the Atlanta region, ranks high among the hardest hit locations. According to RealtyTrac's first quarter 2009 news release, one in every 138 Georgia homes have had a foreclosure filing, the seventh highest state foreclosure rate in the nation. The 20-county Atlanta region is responsible for 80 percent of Georgia's foreclosures. The most significant increase at the county level has been seen in Henry County. Between 2000 and 2008 the county saw a 773 percent rise in the number of foreclosures reported.

Foreclosures are having many detrimental effects, for both the families who have been displaced, and the neighborhoods and communities where homes and properties now sit vacant or underutilized. A weak real estate market, coupled with the vacant for sale and foreclosed homes available, is posing an ever increasing dilemma for jurisdiction's who are simultaneously experiencing decreased tax revenues and increased demand for services.

Current market constraints are clearly impacting the ability of many consumers to enter the housing market. There are significant short-term struggles in the housing market impacting both producers and consumers, but long-term forecasts for the Atlanta region suggest that demand for housing will return to pre-recession levels. However, it is likely that the overall

characteristics of what consumers demand will be different, in large part because the average consumer in the Atlanta region will be different than in the 1990s and 2000s.

Economic Opportunity

The State of Georgia's economic viability is directly linked to a strong economy in the Atlanta region. Now more than ever, where residents work and the fields they are working in will drive the region's future growth and prosperity and impact the many services, programs and investments necessary to support economic growth. The challenges of the current economic climate make it very important that the metro Atlanta's economic growth is strategic and inclusive.

The Atlanta region is fortunate to have many essential elements for economic growth. The region has the busiest airport in the world and one of the world's largest airlines (Delta Air Lines) using Hartsfield-Jackson International Airport as a primary hub. The region has a well-connected transportation system with more than 80 percent of the U.S. commercial and consumer market accessible within two truckload days.

The region is not just well-positioned in terms of transportation access, but it also has the ability to provide an educated and prepared workforce. The metro area has 48 accredited degree-granting colleges and universities offering more than 400 fields of study and serving more than 176,000 full time students.

The Atlanta region is often viewed as the capital of the "New South," but the region's success (and challenges) has impacts closer to home too. The Atlanta region is the economic engine of the State of Georgia. Between 2001 and 2006, the Atlanta MSA averaged 68 percent of the state's Gross Domestic Product (GDP). In fact, during that time, the region accounted 25 percent of the GDP for the entire southeast. However, that percentage is decreasing as other states increase their GDP at a much higher rate than the Atlanta MSA.

The economy of the region does not recognize jurisdictional boundaries. People, goods and services flow between cities and counties in the region everyday, contributing to the region's economic success. The region is tied not only to the Southeast, and the country, but also the world. Individual cities and counties lack the necessary infrastructure and resources (including labor) to compete at that level. However, the Atlanta region, as a whole has those resources and infrastructure.

In addition to the aging Baby Boomers, the region's workforce population will double during the next 25 years. As the Baby Boomers leave the workforce they will not only leave vacancies for new residents to fill but

National economic challenges will likely result in older adults staying in the workforce longer. This will likely result in more demand for transportation choices and communities that can support the needs of older adults.

they will also create demands for new services which the region will need workers to provide. The region may not be well prepared to provide the housing and transportation choices to accommodate these workers. Workforce housing and transit availability could be keys to ensuring a larger and well-supported workforce is sustained in the region.

The Atlanta region's recovery from the 2001 recession was realized during 2005 and 2006, when the 20-county region added approximately 87,000 jobs. Yet the job recovery was mostly in sectors that had lower incomes than the high-quality jobs which had been lost early in the decade. Since that point the employment situation in the region, and nationally, has deteriorated significantly.

Since 2000, the 20-county region has added more than 100,000 jobs, or a little fewer than 13,000 jobs per year. As a comparison, during the 1990s, the region added approximately 55,000 jobs per year. Practically all of the job growth between 2006 and 2008 occurred in the "core" 10 counties. This reverses a trend seen earlier this decade, between 2000 and 2006, when some 87 percent of the job growth occurred in the "external" 10 counties.

In 2008, the core 5 counties of the region (Clayton, Cobb, DeKalb, Fulton and Gwinnett) had 77 percent of the 20-county region's total jobs at 1,805,191, compared to a 20-county total of 2,357,835. This large share of jobs reinforces the importance of sustaining access to a functioning and efficient core. This does not diminish the importance of the remaining counties in the region, but it does suggest that future strategies to support employment growth in the region should consider a range of options that are tailored to the needs of the various employment centers around the region.

Fulton County led the region in job growth between 2006 and 2008, adding more than 11,600 jobs during that span. Despite this recent growth, however, Fulton has actually experienced a net decline in jobs this decade, down almost 42,000 jobs. Cobb County was second in job growth during the 2006 – 2008 period, adding 5,800 jobs, followed by DeKalb (+ 3,300) and Henry (+2,600).

For the decade, Gwinnett leads the region in overall growth, adding more than 28,000 jobs. Henry County has also shown strong job growth since 2000, adding almost 20,000 jobs. Hall County remains a dynamic employment center outside the 10-county region. Clayton, DeKalb, Fulton, Rockdale and Spalding counties each posted job losses between 2000 and 2008.

The Atlanta Region is currently in a period of job contraction. Between May and June 2009, the Atlanta MSA lost 12,000 jobs. Nationally, construction, retail trade and professional and business services are all experiencing declines in employment. The Atlanta region is not

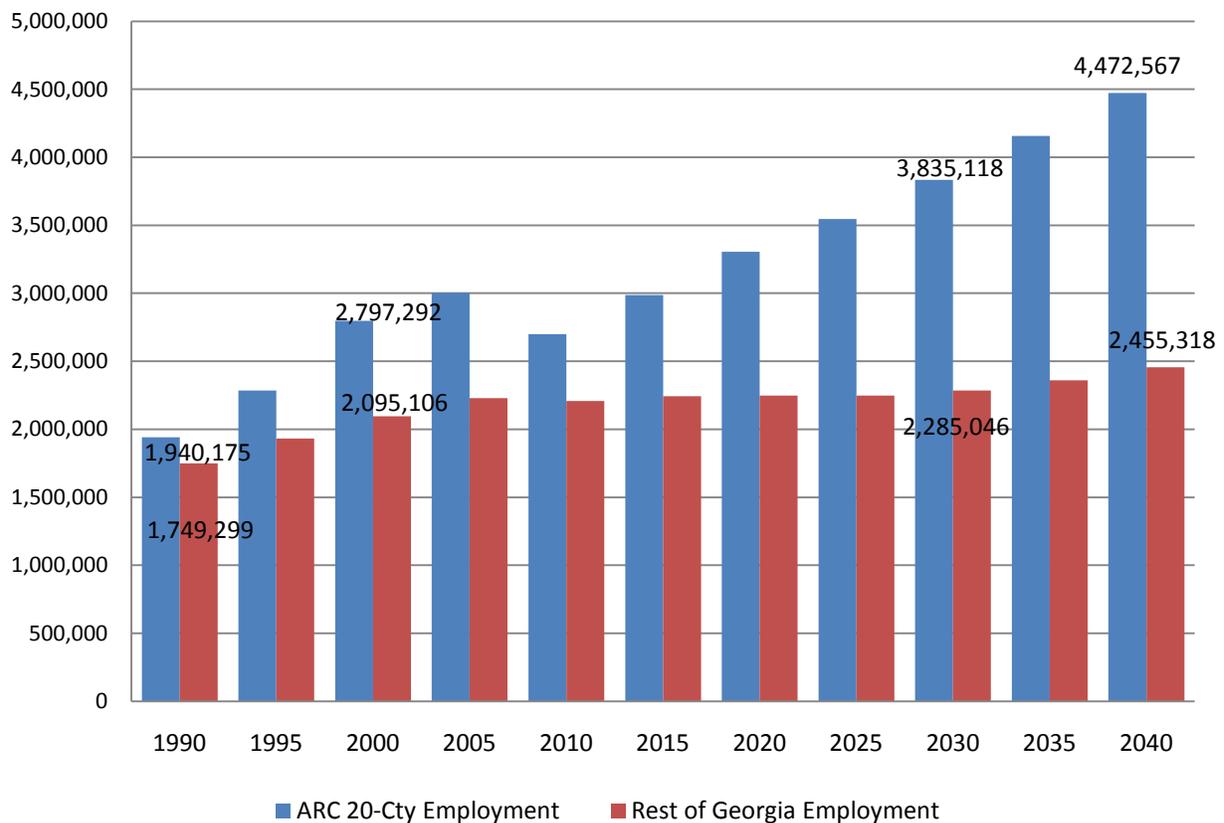


The region is in the midst of a lost decade of job growth - The current recession will result total employment in 2015 being equal to regional employment figures for 2005.

insulated from this recession. Currently the unemployment rate for the 10-county RC planning area is 8.9 percent which was a 4 percent increase from April 2008. With this employment contraction, ARC forecasts that it will take until 2015 for the metro region to regain employment at its 2005 levels.

Employment growth will continue to 2040, but at a slower rate than what the region experienced in the 1990s. ARC forecasts that the 20-county region will continue to be the main job center within Georgia, with state employment growth increasing slightly outside the 20-county region. ARC forecasts that total employment in the region will be less in 2010 than it was in 2000. Importantly, the forecast also calls for an eventual, but slow recovery for the Atlanta region. ARC’s forecasting tools also include the remaining counties in Georgia. Between now and 2040, statewide growth in employment (outside the Atlanta region) is anticipated to be very modest. Figure 16 below illustrates both the significant dip in total employment in the region as the result of the current recession and anticipated job growth in the region and state through 2040.

Figure 16: Employment Growth - 1990 to 2040



Source: ARC Initial Plan 2040 Forecast

Many high-paying jobs were lost in the early part of the decade following the “dot com” bubble, but as mentioned, the recovery of the mid-2000’s did not replace many of these jobs.

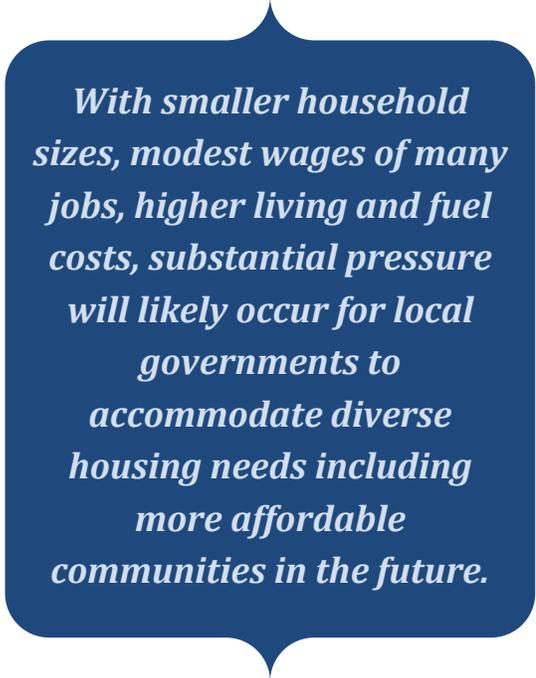
Overall, when the region was adding employment, it was fueled by low-paying jobs. Based on the average wage reported in these low paying job sectors (average yearly incomes below \$35,000 in 2007), individuals in these sectors have limited housing options that can be comfortably afforded.

In 2008, the Urban Land Institute's (ULI) Terwilliger Center for Workforce Housing in Atlanta analyze and evaluated many of the central issues related to workforce housing in the Atlanta region. The Atlanta region's median household income was \$62,100 in 2006. Workforce households typically include those households that earn between \$37,260 and \$74,521 annually. Nearly two-thirds of households with the 10-county region fall within this income range.

Higher development costs in the region's core counties present significant challenges in bringing new workforce housing products to the market. These counties are a particularly important market for workforce products because there are opportunities to provide housing near the region's most developed employment centers and also provide the broadest range of transportation options.

Based on current industry norms for housing costs, workforce households in the Atlanta region can afford housing in a price band from \$112,000 to \$224,000 for for-sale housing and from \$832 to \$1,763 per month in rent. New for-sale housing is not affordable to many workforce households. Data on recent home sales in the Atlanta region shows that there was an annual average of 24,116 new homes sold in the four counties over the period from 2005 to 2007. The average price of homes sold in the four counties was approximately \$252,000. Thus, at the most basic level of comparison, the recent average price of new, for-sale housing is above what workforce households in the four counties can afford.

The rental market does provide a better opportunity to house workforce households. The majority of new rental units constructed between 2005 and 2007 are affordable to households earning between 60 – 80 percent of Area Median Income (AMI). There are, however, limited options as to where new rental products can be built as many of the local zoning regulations around the region strongly favor detached housing.

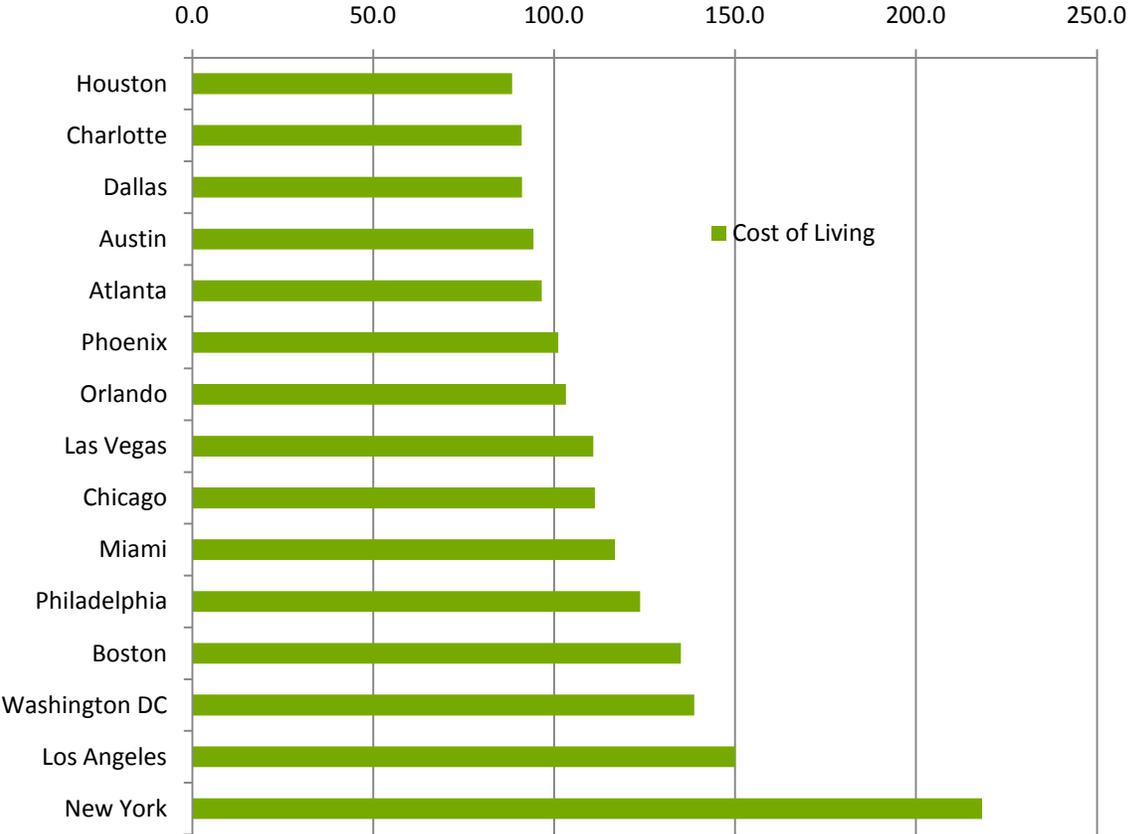


With smaller household sizes, modest wages of many jobs, higher living and fuel costs, substantial pressure will likely occur for local governments to accommodate diverse housing needs including more affordable communities in the future.

In general, the Atlanta region has a low cost of living, which has been a primary driver of the explosive growth the region has experienced. At the same time, however, metro Atlanta lags behind many of its peers in key income measures. The chart below compares the Cost of Living

Index, as well as the broad, weighted categories that comprise the index, for the 15 largest and fastest-growing metro areas in the nation. The average index across all metro areas is equal to 100. Atlanta’s cost of living index, for example, is 96.6, meaning that it is 3.4 percent less expensive than the average metro area. As can be seen in Figure 17, the Atlanta region and many of its Sunbelt peers offer a lower cost of living than other regions around the country.

Figure 17: Cost of Living - Metro Comparisons



Source: Cost of Living Index – Council for Community and Economic Research

While cost of living in the Atlanta region is comparable to many of the regions in the Sunbelt, the region is actually losing ground relative to these same regions in terms of per capita income. Several areas lagged behind the metro Atlanta area in 2001, but have since passed the region. Dallas has seen a 16 percent increase in per capita income between 2000 and 2006 versus the eight percent for the Atlanta region. The Atlanta region was the only region to show a less than 10 percent increase over that six-year period (2001 – 2006). A recent study by the Metro Chamber of Commerce found that the region had the least amount of growth in per capita income among the nation’s 25 largest regions over the last decade.

The Atlanta region is fortunate to have 48 universities and technical schools within the region that offer a wide variety of programs and research. More than 220,000 students are enrolled at

four year institutions in Atlanta, ranking the region as the seventh in student enrollment among US urban areas. The Atlanta Regional Council for Higher Education estimates that these institutions create a \$10.8 billion dollar economic impact and 130,000 jobs in Georgia.

However, even with the large contribution of higher education to the Atlanta region, the region still has issues with an educated workforce (13.5 percent of the population has not completed high school or a GED). Even with the large number of universities and technical schools a large portion of our population does not have a bachelor's degree or advanced degree.

Education is the primary means through which individuals increase incomes. The skills and level of education of the region's and state's residents impact the type of jobs that the region attracts and the incomes of the regions residents. The EPE Research Center calculates graduation rates using data from the Common Core of Data (CCD), an annual census of public schools and school districts in the United States conducted by the U.S. Department of Education. For the 2005-06 school year, Georgia's graduation rate was 55.9 percent compared to the national average of 69.2 percent. Georgia's rank among states was among the worst at 49th in the nation. The graduation rate improvement over time from 1996 to 2006 was +0.7, compared to the national average of +2.8.

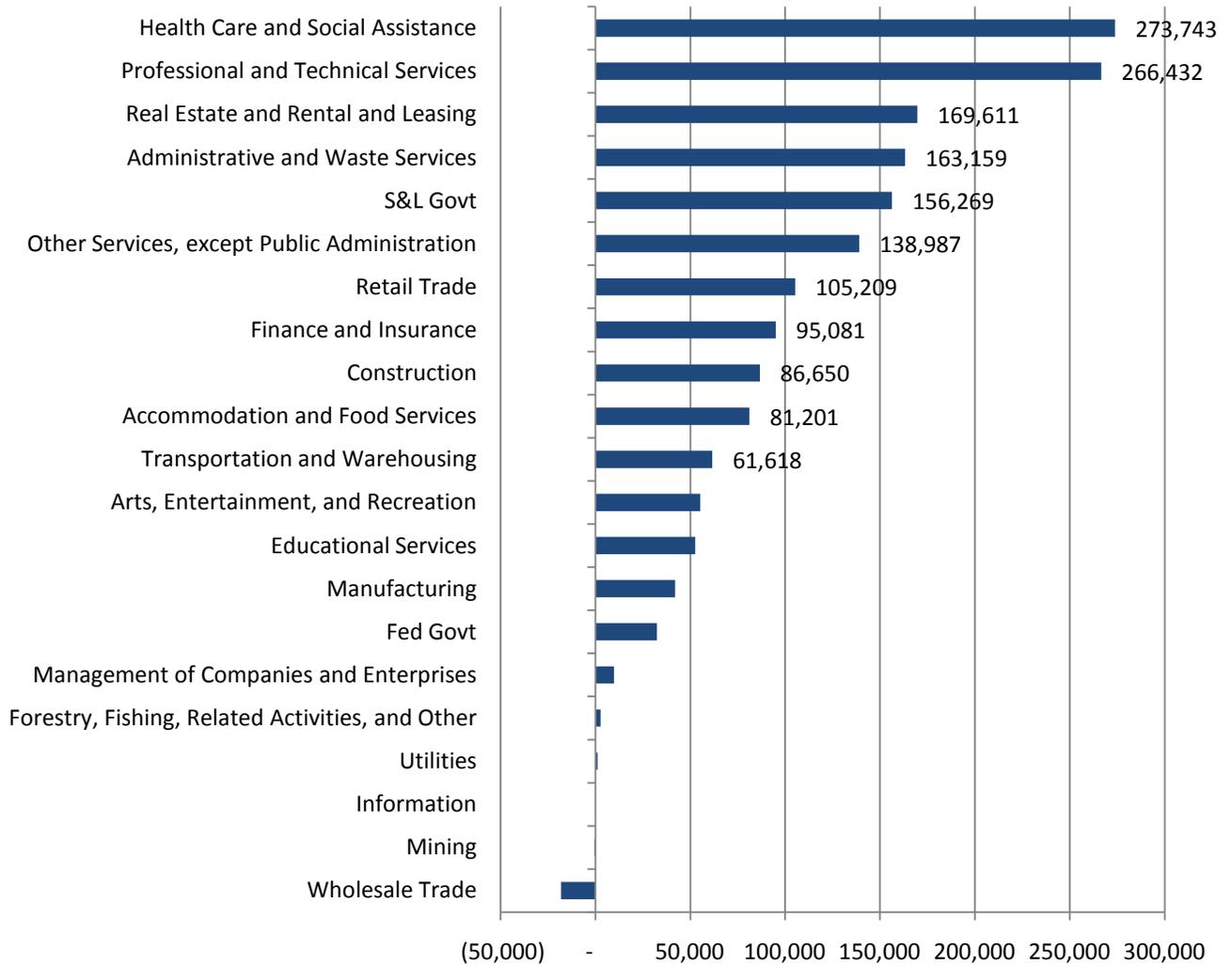
The educational system in Georgia is likely a factor in the overall level of income of the region's residents. While the region has large and diverse colleges, the share of the region and state's residents who are not college educated creates downward pressure on incomes, particularly as technology and global competition create increased need for skills and knowledge.

Undereducated and less-skilled job seekers exist across the region and may be left out of the push toward a technology and information based economy. The region's diversified economy offers a great deal of options to job seekers. The strong growth of the service and retail sectors of the economy provide job opportunities to many of these residents and may mitigate the harshest effects of a transition to a more technological economy.

Figure 18 on the following page illustrates the expected sectors that will be responsible for fueling employment growth in the Atlanta region over the next 30 years. Despite currently not having any distinct advantage in competing for jobs in the Health Care sector, the initial regional forecast for employment indicates this sector will add the most jobs. This is in large part due to the magnitude of overall population growth in the region and specifically the region's transition to a region with a greater share of older adults.

Attracting high-wage industries is dependent on having an educated workforce capable of providing the knowledge and experience needed.

Figure 18: Employment Growth by Sector (2005 to 2040)



Source: ARC Initial Plan 2040 Forecast

In 2009, the region’s strongest sectors were Transportation, Trade and Utilities, Wholesale Trade, Information Services and Professional Business. Unlike many other metro regions throughout the US, the Atlanta region’s economic base is diverse with strong levels of employment in a variety of fields. The region currently has relatively low levels of employment opportunities in Education and Health Care fields. As the chart above illustrates, the Health Care field in particular will become a major sector of the Atlanta region’s economy. This sector has been one of the few sectors that have added jobs in the current recession.

Currently, ARC has a very limited role in traditional economic development efforts. The region has many chambers of commerce, county development authorities and is also impacted by state initiatives. The majority of these organizations have some level of marketing, planning and outreach capabilities. There is likely a need for municipalities and counties to be more proactive

in developing and implementing programs that recognize circumstances unique to their submarket or shared interests across the region. ARC's role in an overall regional economic development effort will need to be determined during the Regional Agenda. Guidance from regional leaders during early interviews associated with the Regional Assessment suggested that ARC should consider increasing its current role of supporting initiatives of existing economic development groups.

ARC should work with member local governments to ensure they understand state economic development strategies such that they can leverage local efforts to build on state initiatives.

ARC is the administrator for the Atlanta Regional Workforce Board (ARWB) and is responsible for providing policy guidance for the Workforce Investment Service Area as designated by the Governor. This area includes seven counties: Cherokee, Clayton, Douglas, Fayette, Gwinnett, Henry and Rockdale. Separate boards serve the City of Atlanta, DeKalb County, Fulton County and Cobb County. The Workforce board provides workforce solutions for dislocated workers, low-income adults and youth and for businesses seeking qualified applicants.

A key example of regional collaboration is the Innovation Crescent Regional Partnership. The Innovation Crescent Regional Partnership is a geographic area and a coalition of more than a dozen counties and entities focused on life sciences and economic development. Unlike other economic development strategies this program includes many jurisdictions and agencies with representatives from the state, regions, and local governments.

The State of Georgia has identified six key industries and four supporting industries for a strategic approach to economic development. These industries offer the most growth potential and opportunities for near-term success:

Strategic Industry Clusters

- ***Aerospace***
- ***Agribusiness***
- ***Energy & Environmental***
- ***Healthcare & Eldercare***
- ***Life Sciences***
- ***Logistics & Transportation***

Supporting Industry Clusters

- ***Advanced Telecommunications***
- ***Business & Financial Services***
- ***Multimedia***
- ***Software Development***

These industries employ 1.7 million residents, or approximately 34 percent of the current Georgia workforce. The region is well-positioned to build upon those strategic industries. The state of Georgia concluded during the Commission for a New Georgia process that many of Georgia's counties do not possess the resources needed for comprehensive economic development efforts. Working together as regions will be fundamental for the overall success of local governments and the state of Georgia. The Atlanta region currently dominates the concentration of employment in many of these clusters. As a result, state initiatives must be recognized at the local level in order to fully realize the potential of each cluster.

One economic strength of the Atlanta region is its convenient access to many major U.S. markets. The region is roughly equidistant from New York and Dallas, Detroit and Miami. Atlanta is slightly farther west than Detroit and lies closer to the Chicago market than Washington DC, Baltimore or Philadelphia. Atlanta's central location allows truckload shipments to reach 82 percent of the US industrial markets, 79 percent of the largest consumer markets and 77 percent of the nation's metropolitan buying power in two days or fewer.

Hartsfield-Jackson Atlanta International Airport, located 10 miles southwest of Atlanta's Central Business District, is one of the world's premier gateways to U.S. and international destinations. With the merger of Delta Air Lines and Northwest Air Lines, Hartsfield-Jackson Atlanta International Airport now has non-stop service to 165 cities within the U.S. and 95 international cities.

On average, there are more than 2,700 arrivals and departures daily, making Hartsfield-Jackson the busiest airport in the world.

The Atlanta region is the logistics hub serving the southeast United States. The region was identified as twelfth in the nation in 1990 by total employment statistics, but its increased level of importance as a logistics hub has elevated the region to fifth as of 2004. This increase in freight has supported the region well, with continuous employment growth within the transportation field.

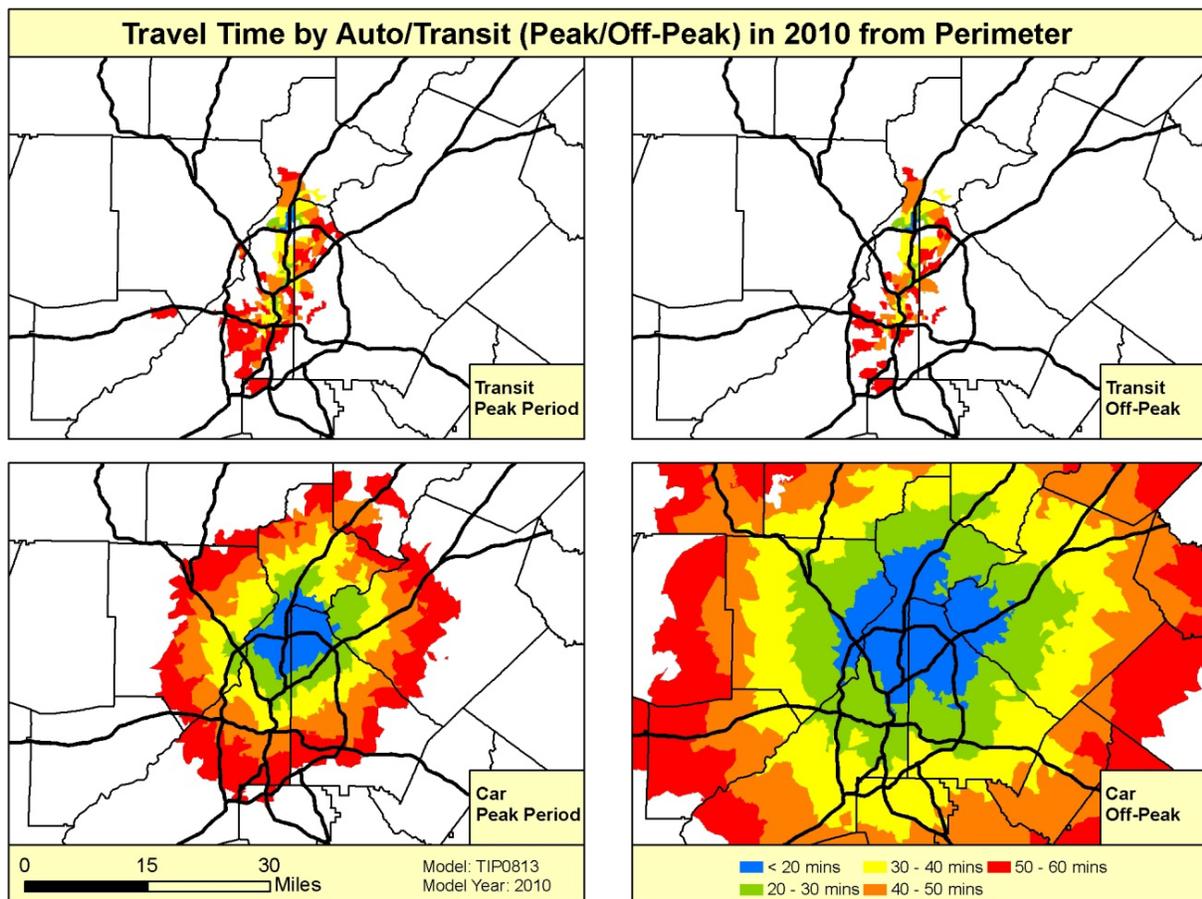
The Atlanta region's freight transportation system consists of highways, railroads, Atlanta Hartsfield Jackson International Airport and numerous intermodal facilities. In addition, east coast ports significantly impact the region. The region is one of the strongest and fastest growing logistics clusters in the nation. Because of the strategic role the region plays in the nation's freight system, identifying and programming effective improvements to accommodate increasing freight, goods and services movement in the Atlanta area is critical to the economic vitality and quality of life of the region.

The *Regional Freight Mobility Plan*, completed by ARC in February 2008, establishes an effective set of strategies and recommendations to maintain and improve the existing area transportation facilities, encourage appropriate land use, ensure the safety and security of the regional system and address environmental concerns.

With this growth of truck-related movement, the supporting transportation system must grow to meet the challenges of existing traffic volumes and face the opportunities of the future. The lack of planned enhancements may have dire consequences on the future ability of the region to successfully serve as a leading transportation hub. Regional competitors for industry and transportation services from other metropolitan areas may benefit from greater delays and congestion in Atlanta. Additional information on issues related to transportation and logistics is found later in the Regional Assessment.

Roadway congestion is impacting both regional employment centers and the employees from around the region that must access these areas. As illustrated in Figure 19, a significant portion of the region can reach the Perimeter Center area, the largest office center in the region, within 40 minutes by car during off-peak hours. Roughly 3.2 million people in the region have access to this area by automobile in less than 40 minutes in off-peak conditions. However this number drops to only 980,000 in peak travel periods due to congested roadway conditions.

Figure 19: Perimeter Area Commute Sheds



Source: ARC

Figure 19 also illustrates the difficulty of accessing the largest office center in the region via transit in a timely fashion. Perimeter Center has three heavy rail stations, but the limitations of the overall transit system significantly limit the number of potential persons that can reach this job market in less than an hour on transit.

Similar declines in travel time impact the region's other major regional activity centers. Downtown experiences a similar decrease in its travel shed accessible in 40 minutes or less by car, decreasing from 3 million to 1.3 million. Hartsfield-Jackson International Airport, a critical element in the region's overall economic viability, experiences a decrease in population able to get to the airport in 40 minutes by car from 2.07 million to 863,000. A critical objective of Plan 2040 is to improve accessibility to these activity centers to further economic development opportunities for the region.

Multi-faceted strategies and investments are necessary to support the long-term economic viability of the region's most critical employment centers.

Environment

Many of the issues ARC seeks to address are directly related to protecting the natural and human environment. The overall reach of ARC's impact is furthered when you consider the significant impact of local governments around the region. Local governments are continuously working to develop more sustainable communities and government operations. ARC is well-positioned to work with them and other partners to provide assistance and guidance in implementing more sustainable practices across the region.

As the region continues to develop, more and more effort has been put into finding a balance between the environmental needs of clean air and water, the availability of water, retaining areas of natural significance for animal and plant habitats and those of a growing population and economy. Moving forward, the region will need to recognize the competitive advantages that come with valuing natural assets as a means to growing the economy and meeting the needs of the region's growing population. Continuing education of the general public and developers will bring about increased awareness of the importance of maintaining a proper balance between people and their environment.

Over the past two decades, a primary challenge that faced the region was the reliance on 'greenfields,' or previously undeveloped lands, as the areas that were needed to accommodate growth. Many of the region's current environmental and growth challenges include air quality and water quality and supply. These challenges are in fact substantially related to the dominant trend of low-density, single-purpose development on undeveloped areas within and beyond the 10-county region.

Some greenfield development will be necessary to accommodate future needs, but it must be done more wisely than in the past by including a variety of housing opportunities along with neighborhood and community-based commercial activities. Connectivity and linkages between commercial and residential land use, and an emphasis on alternative modes of transportation are all necessary to create sustainable land use patterns that can accommodate projected growth.

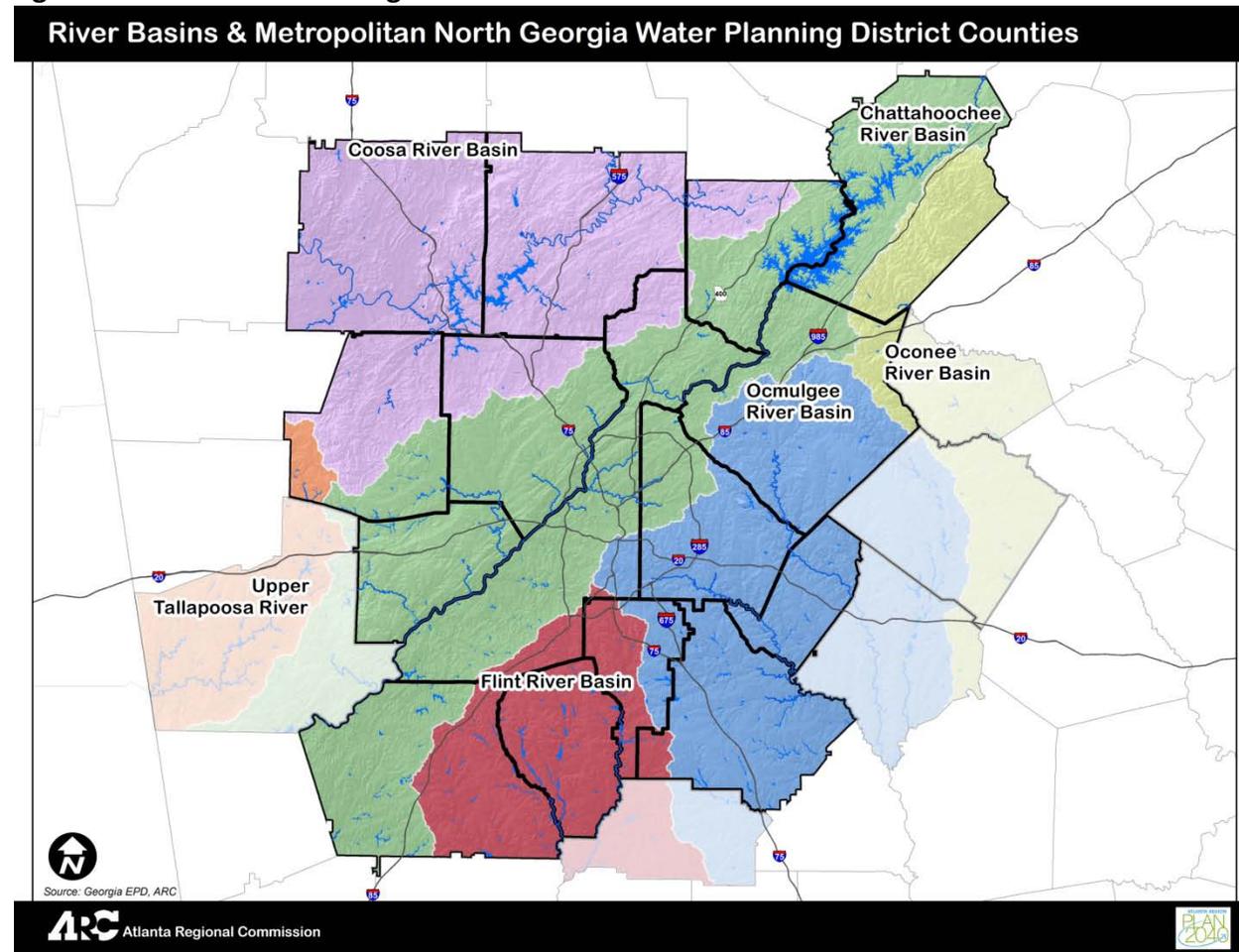
Throughout its history, ARC has been involved in efforts to increase the amount of protected greenspace in the Atlanta region. As the region grew, along with ARC's planning area, some areas targeted for protection were saved while others were lost to development. The Atlanta region has varied supply of major parks and recreation areas, wildlife management areas, conservation areas, nature preserves and water resources. Currently, however, there is no consistent, coordinated mechanism to ensure the region's inventory of protected lands increases as the region grows through 2040.

Water resources are critically important to the Atlanta region's economic vitality and quality of life. The region, however, lies at the headwaters of several major river basins, increasing the need for protection of water resources. In addition, rapid population growth has resulted in the need for additional water supplies while increasing the amount of both treated wastewater and stormwater pollution discharged to the region's rivers, lakes and streams.

The Metropolitan North Georgia Water Planning District (Metro Water District) was created by the Georgia General Assembly in 2001 (O.C.G.A. §12-5-571) to serve as the water planning organization for the greater metropolitan Atlanta area. The Metro Water District's purpose is to establish policy, create plans and promote intergovernmental coordination of water issues in the District from a regional perspective. ARC provides planning staff for the Metro District.

The Metro District includes 15 counties (shown in Figure 20), including all 10 ARC counties: Bartow, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Forsyth, Gwinnett, Hall, Henry, Paulding, and Rockdale counties as well as, the cities partially or fully within these counties. The Metro Water District also has seven authorities which provide water, sewer and/or stormwater services. The Metro Water District's plans and policies work to protect water resources in the Chattahoochee, Coosa, Flint, Ocmulgee, Oconee and Tallapoosa river basins.

Figure 20: MNGWPD Planning Area



With the adoption of the Georgia State-wide Water Management Plan by the Georgia General Assembly in 2008, the Metro Water District is now one of eleven regional water planning councils in the state, and will continue to work within the integrated framework of state water resources planning.

The Metro Water District enabling legislation mandated the development of three long-term regional plans to address the water resources challenges. All three plans were originally adopted in 2003 and were updated in 2008:

- Water Supply and Water Conservation Management Plan
- Wastewater Management Plan

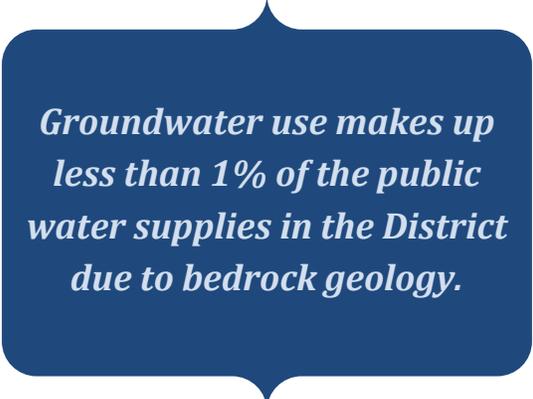
- Watershed Management Plan

The Atlanta region relies primarily on surface water from rivers and storage reservoirs as its main source of water supply. In fact, surface water provides more than 99 percent of the water supply in the Metro District. The Chattahoochee basin accounts for approximately 73 percent of the permitted available water supply in the Metro District. Residential water use, including single and multi-family use, accounts for 53 percent of the total water use.

Lake Lanier and Allatoona Lake have played a key role in assuring an adequate water supply for the Metro Water District since their construction by the U.S. Army Corps of Engineers (Corps) in the 1950s. These federal reservoirs are multi-purpose projects that store water for multiple purposes: hydropower production, flood control, navigation, water supply, water quality, recreation and navigation. Although the Corps controls the storage in these reservoirs, the water in the State of Georgia is allocated and managed among users by the State of Georgia.

Current planning assumes that federal reservoirs will continue to operate to meet water supply needs within the District. Recent changes in Corps operations of these Lakes beginning in 2006 represent a significant challenge to the region's water supply. The operation of the reservoirs is the subject of litigation of which the outcome is uncertain. These uncertainties represent a significant challenge in planning for the long-term ability of the region to provide adequate water to end users.

Recent drought conditions resulted in dangerously low reservoir levels in some communities. These conditions indicate that future reservoirs should be sized larger. Reliability of existing and future reservoirs will be an on-going challenge, particularly as future demands increase and global climate change potentially increases in the severity and length of drought condition. Recent drought conditions also resulted in an increase in small surface water withdrawals to avoid drought irrigation restrictions. In aggregate these withdrawals can have significant impacts on water supply, particularly during times when conditions dictate that supply must be more closely monitored and controlled to protect the needs of downstream users.



Groundwater use makes up less than 1% of the public water supplies in the District due to bedrock geology.

The Metro District forecasts that with even aggressive water conservation measures the region will need additional water supply sources. In addition to the existing reservoirs, there are three reservoirs planned for the Metro District in the near future that require 404 permits. These planned reservoirs are far enough along in the permitting process that state and federal permits are being sought for these projects. Three additional reservoirs are in early planning stages but anticipated to be constructed in the next 25 years.

An aggressive water conservation program was developed for the 2003 Water Supply and Water Conservation Management Plan. The Metro Water District is the only major metropolitan area in the country with more than 100 jurisdictions implementing a long-term comprehensive water conservation program that is required and enforced. The water conservation program is essential for meeting future water supply demands in the Metro Water District and were reinforced and expanded in the 2008 Management Plan.

An important consideration for the jurisdictions within the Metro Water District is the effect of consumptive use. Consumptive use, as defined in the Georgia Comprehensive State-wide Water Management Plan, is the difference between the total amount of water withdrawn from a defined hydrologic system of surface water or groundwater and the total amount of the withdrawn water that is returned to that same hydrologic system over a specified period of time. Water use is consumptive when water is removed from a specified hydrologic system of surface water or groundwater and is not returned to that same system within a time frame that allows contemporary users to avail themselves of the benefits of that quantity of water.

Consumptive uses of water can be appropriate measures of water management, but in total these practices must be managed in a sustainable manner. Interbasin transfers, considered a consumptive use, are a key element in supplying water throughout the Metro District. The Chattahoochee River basin is the major donor basin within the district. Residents in the Ocmulgee River Basin currently rely heavily on the Chattahoochee River Basin for water supply.

The Atlanta region is dominated by headwater streams and reservoirs and includes surface waters that are used for multiple purposes including drinking water, recreation, fisheries and discharge points for wastewater treatment plants. Wastewater issues facing the region include:

- Waterbodies that have limited capacity to receive wastewater without deleterious effects which in turn requires higher levels of treatment.
- On-site sewage management and land application systems are considered consumptive.

With the challenges associated with permitting surface water and the limited availability of groundwater, water reuse may be a viable option to extend limited, local water supply sources.

- Increasing numbers of private facilities that provide less reliable performance.
- Lack of septic system planning, maintenance and management.
- The need to reuse water in areas with limited future water supply.

Currently the Metro District is home to 16,000 miles of sewers. These facilities range from being new to more than 100 years old. As the collective regional system continues to age, proper inspections and maintenance are critical. Inspections and maintenance not only maintain a high level of customer service, but also protect water quality.

Septic systems and decentralized systems will continue to be used as wastewater discharge options in areas not served by sewer. Local county boards of health are responsible for the siting, design and construction of onsite wastewater management systems, the region must focus on the planning and policy frameworks to be established by the local governments and local wastewater providers in the Metro Water District in coordination with the county board of health.

The Metro District is committed to working closely with local governments and service providers in its 15-county area to ensure the implementation of best practices in wastewater management. All local jurisdictions within the District are required to comply with District plans in order to obtain new or expanded withdrawals or wastewater discharges, municipal stormwater permits or any funds through the Georgia Environmental Facilities Authority (GEFA).

Population and employment growth and the land development to support that growth have resulted in significant land use and land cover changes in the Atlanta region. Within the last several decades there has been a dramatic shift of forest and agricultural lands to residential, commercial, industrial and other urbanized land uses greatly impacting watershed hydrology and stream conditions around the region.

The District, the State of Georgia and local governments all play important roles in implementing water resource plans.

These stream and watershed impacts can have dramatic physical, economic and aesthetic consequences to communities in the Atlanta region. The key focus of the 2008 Watershed Management Plan is to provide watershed management measures, strategies to help local communities protect their watersheds from future impacts and to help effectively mitigate existing problems to the maximum extent practicable.

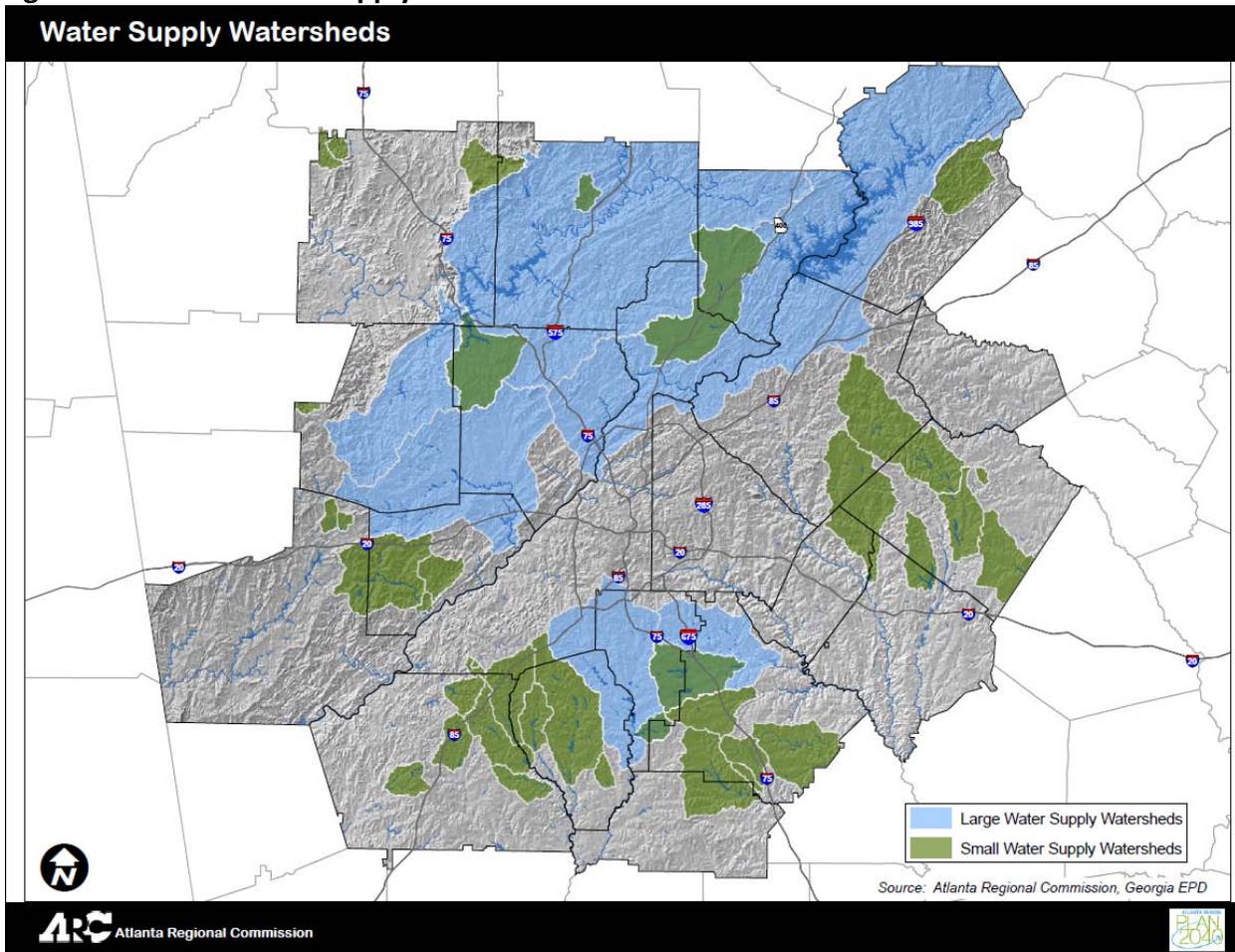
The protection of source water (drinking water supply) watersheds is vitally important to the region, as almost all of the Metro District's public drinking water supply comes from surface water sources, which include streams, rivers and man-made reservoirs. Water quality

degradation of these surface waters can potentially pose human health threats, and often increases water treatment costs for local communities.

Source water watersheds are classified by drainage area size in the state of Georgia: small water supply watersheds have less than 100 square miles of land within the drainage basin upstream of the water intake, while large water supply watersheds are 100 square miles or greater in size. Smaller drainage basins are more vulnerable to contamination by land use development and spills than larger watersheds, therefore more intensive watershed protection is needed. Source water watersheds are shown in Figure 21.

Implementation of watershed management strategies as outlined by the North Georgia Water Planning District are primarily performed by the local governments. The local management measures form a comprehensive program for addressing watershed management issues consistently across the region. Through an audit process of the Ga. EPD local jurisdictions are held accountable for implementation of the measures.

Figure 21: Source Water Supply Watersheds



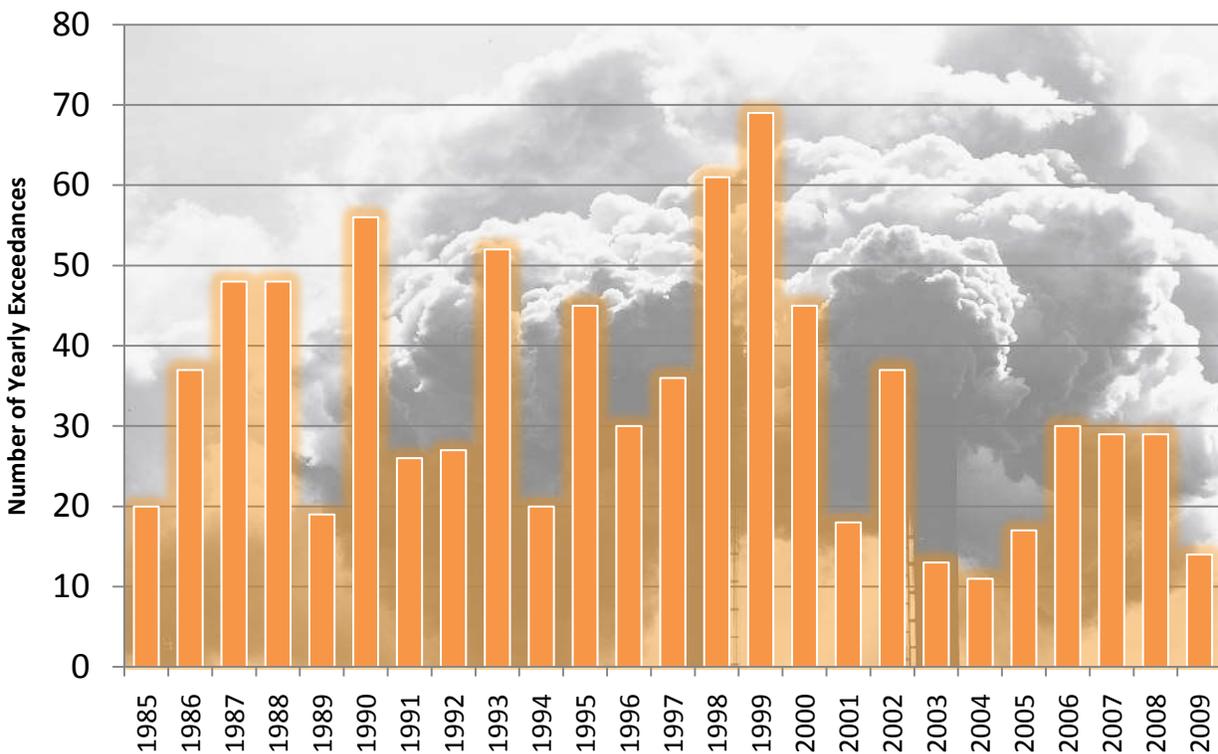
Air Quality

The Atlanta region does not meet the federal standards for ozone and fine particulate matter, two of the six pollutants regulated under the Clean Air Act. Natural weather conditions, geography, mobile sources, power plants, and industries all contribute to air quality.

In April 2008, the region (20-county area) was reclassified from a Marginal to a Moderate eight-hour ozone nonattainment area. The Atlanta region must attain the 1997 ozone standard no later than June 15, 2010. The Georgia Environmental Protection Division is developing a State Implementation Plan (SIP) outlining a plan to bring the region into attainment of the current eight-hour ozone standard by 2010. In March 2008, the EPA tightened the standard for ozone to 0.075 parts per million, the first update since its creation.

As shown in Figure 23, the number of days exceeding the eight-hour ozone standard dropped dramatically from a high of 69 days in 1999 to fewer than 20 days in 2005. While the overall trend in number of days in exceedance of the standard from 1999 — 2007 is downward, 2006 and 2007 saw increases compared to 2003–2005.

Figure 23: Yearly Exceedances of the Federal Ozone Standard



Source: GA EPD

Several factors explain the decrease in exceedances this decade. Atlanta experienced a hot, dry summer in 1999, a cool, wet summer in 2004 and a very hot and dry summer in 2007. Advanced technology, such as cleaner fuel standards, fleet turnover and particle capturing devices at power plants, have all contributed to improved air quality. Enhanced tools and models also help make more accurate measurements.

Unlike the ozone standard, there is no classification system for fine particulate matter. An area either meets the standard (attainment) or exceeds the standard (non-attainment). Most monitoring stations in the region do not attain the annual PM2.5 standard. In April 2005, the USEPA designated a 20-county metro-Atlanta non-attainment area for failing to meet the fine particulate matter standard.

ARC is responsible for managing the process that ensures transportation plans and programs within the Atlanta nonattainment area when implemented do not cause or contribute to degraded air quality. This process is referred to as transportation conformity. Mobile (transportation-related) emissions, as estimated by ARC, must conform to established limits, or Motor Vehicle Emissions Budgets (MVEB), for nonattainment pollutants and/or their precursors. MVEB are set by the state air agency, the Georgia Environmental Protection Division, in the State Implementation Plan (SIP), and are approved by the USEPA as adequate for use in the transportation conformity process.

Significant reductions in the level of ozone precursor emissions have been realized - Additional focus must now be placed on particulate matter pollution as new federal standards are implemented.

ARC currently utilizes air quality performance measures as a means of determining how well the RTP enhances and protects the quality of life for the region's citizens. ARC's air quality measures offer a quantitative measurement to analyze this success. At this time, ARC has identified other potential quality of life measures, but has not developed a quantitative measurement.

The key performance measures for this goal are tons per day of transportation-related pollutants (VOC, NOx, and PM 2.5). *Envision6*, the Atlanta region's current long-range transportation and development plan, received a positive conformity determination under the eight-hour ozone standard and under the PM2.5 standard on October 10, 2007 and again in June 2009. These determinations were made for the entire 20-county nonattainment area, and demonstrate that the RTP complies with all air quality requirements associated with the eight-hour ozone and PM2.5 standards, and with the ozone SIP currently in place.

The Atlanta region is facing many factors that drive a rise in greenhouse gas emissions at a time when national policies are considering strategies for reducing all Greenhouse Gas (GHG) emissions. ARC has begun to look at reductions of transportation-based GHG emissions.

Regional planning for climate change is gaining more attention. Hundreds of local governments across the country have taken steps to reduce their greenhouse gas emissions. *Envision6*, the current RTP, contains strategies that lead to reductions of primary pollutants as well as CO₂ emissions. The Metropolitan North Georgia Water Planning District long-range management plans have identified climate change as key factor that must be monitored in order to ensure adequate water supply in the future.

The transportation sector is responsible for roughly one-third of domestic CO₂-equivalent (CO₂e) emissions, the predominant greenhouse gas contributing to global climate change. In Georgia, power and transportation are the leading sources of CO₂e emissions. Most transportation sector CO₂ is emitted from tailpipes. Between 1990 and 2004, mobile-source CO₂ emissions in Georgia increased 36%. This increase in CO₂ can be attributed to four factors:

Increase in vehicle miles traveled (VMT)

The Atlanta region has experienced significant growth in population and consequently VMT from 1990 to the present. Population exploded and communities developed further and further from the city center, causing a 60% increase in VMT and a 62% increase in population between 1990 and 2005. Based on *Envision6*, VMT is forecast to increase 54% by 2030.

Fleet inefficiency

Fleet efficiency is considered by most experts to be the most critical factor in influencing CO₂ emissions. Although fuel economy has a slightly improving trend, this is completely offset by the increasing number of fuel-inefficient vehicles in the fleet. The number of sport utility vehicles and pick-up trucks, the least fuel-efficient vehicles in the fleet, registered in Georgia has increased dramatically over the last two decades.

Increase in freight volume

Trucks are the primary mode of freight transportation in the region, accounting for approximately 84% of all freight movement. Truck VMT in the Atlanta region is expected to increase 55% between 2005 and 2030.

Congestion

Congestion and its associated impacts such as, wasted time and fuel, decreased regional economic competitiveness and air quality are among the most significant problems facing the Atlanta region. Low travel speeds and idling lead to decreased vehicle efficiency and results in increased ozone precursor and CO₂ emissions.

Climate change is a highly debated topic at the national level. While the exact resolution of the issue into federal policy is uncertain, any type of federal climate change legislation will likely involve a “cap and trade” mechanism that will increase the cost of carbon-based fossil fuels. Any strategy aimed at reducing GHG emissions is likely to have substantial impacts on the transportation sector. Many legislative proposals at the federal level have emphasized infrastructure funding programs that focus on limiting single-occupancy vehicle travel in favor of transit projects and transit-supportive land use programs. The region must closely monitor the evolution of these programs, as federal policy will likely change in the coming decade.

Theme 2: Providing Access to Safe, Affordable, and Efficient Transportation Choices

Overview of Recent Challenges and Successes

For residents living in the region since 2000, the decade has been one of many changes – both positive and negative. This mixed bag also applies to transportation planning. “Looking back” helps the region apply important lessons learned. While many of today’s challenges are unique in the region’s history, many of these are not. The region began this decade attempting find solutions to worsening congestion while managing significant air quality challenges. There are many lessons learned that will help the region better understand the challenges ahead – a central purpose of this Regional Assessment.

Residents new to the Atlanta region may not understand the level of debate that occurred in the late 1990s regarding suburban transit. The debate centered on the wisdom of focusing on transit expansion as a foundation of the 2000 RTP.

Only two major regional transit systems operated at the beginning of this decade – MARTA and Cobb County Transit (CCT). In the *2025 RTP*, the first major expansion of regional transit was included in the RTP since the original MARTA concept of the 1970s.

The *2025 RTP* and TIP recommended implementation of major transit services between 2000 and 2005. Early years of this decade focused on rapid development of a multi-county express bus system, using interstate High-Occupancy Vehicle (HOV) lanes, to provide reliable travel times to the Atlanta Central Business District (CBD).

Expanded local bus systems are important in providing a means for the region’s transit-dependent to access employment and services in one the nation’s largest regions. Since 2000, six of the region’s twelve transit systems began operations. These six new systems have increased the regional fleet by over 400 buses and vans, increasing the number of regional transit miles traveled from 780 million in 2000 to over 911 million in 2007.

While many challenges remain in implementing a financially viable regional system, the region should recognize the significant progress made during this decade. Regional residents, including households without access to private automobiles, have significantly more options than before. The success of expanded regional transit this decade should reassure citizens and policymakers that residents will use quality services in the coming decades.

The *2025 RTP* placed emphasis on constructing HOV lanes, on heavily congested interstates corridors, as a core strategy to provide congestion relief and support expanded transit services

One of this decade’s most impressive accomplishments has been the success of expanded regional transit services, now covering parts of 12 counties.

this decade. The region succeeded expanding HOV lanes for nine miles on I-85 North in DeKalb and Gwinnett counties this decade. Where implemented, HOV lanes have provided reliable trip times for express bus transit services - such as those in Gwinnett County.

However, the inability to construct the 2025 RTP HOV concept has limited the region’s ability to take advantage of the large investments in regional express bus services this decade. AS shown in Figure 24, significant elements of the HOV network planned for this decade were not constructed, including segments on I-20 E/W, I-75 North, I-575, I-285, and SR 400.

Figure 24: Unconstructed Elements in the HOV Network Planned for Implementation by 2010

Interstate	From	To
I-20 E	Columbia Dr	Evans Mill Dr.
I-20 W	SR 280 (Holmes Drive)	SR 6 (Thornton Rd)
I-285	I-75 N	I-85 N
I-575	I-75 N	Sixes Road
I-75 N	I-285 / Kennedy Interchange	Wade Green Road
I-75 S	Aviation Blvd	SR 54
SR 400	I-285	McFarland Rd

Source: ARC

Lack of implementation success with the regional HOV network has also impacted transit expansion in the region, particularly Bus Rapid Transit (BRT) and express bus. The inability to provide more reliable transit travel times, in comparison to those found in the general purpose interstate lanes, has reduced the incentive for regional residents to change travel behavior. In the coming decade, an important need is to improve the timing of managed lanes expansions to coincide with expanded express bus services.

In conjunction with the planned expansion of regional transit and HOV lanes, the 2025 RTP emphasized expansion of TDM programs and vanpool services. These services were critical to an overall congestion relief, transit expansion, and land use strategy to create a more livable region.

Since 2002, total vanpool services have increased from a total 178 to 553 in 2008, or more than tripling in during the period. This strategy was supported by incentives such as those from the Guaranteed Ride Home Program. These programs are an important element in providing synergy among various strategies to reduce congestion and expand transit use

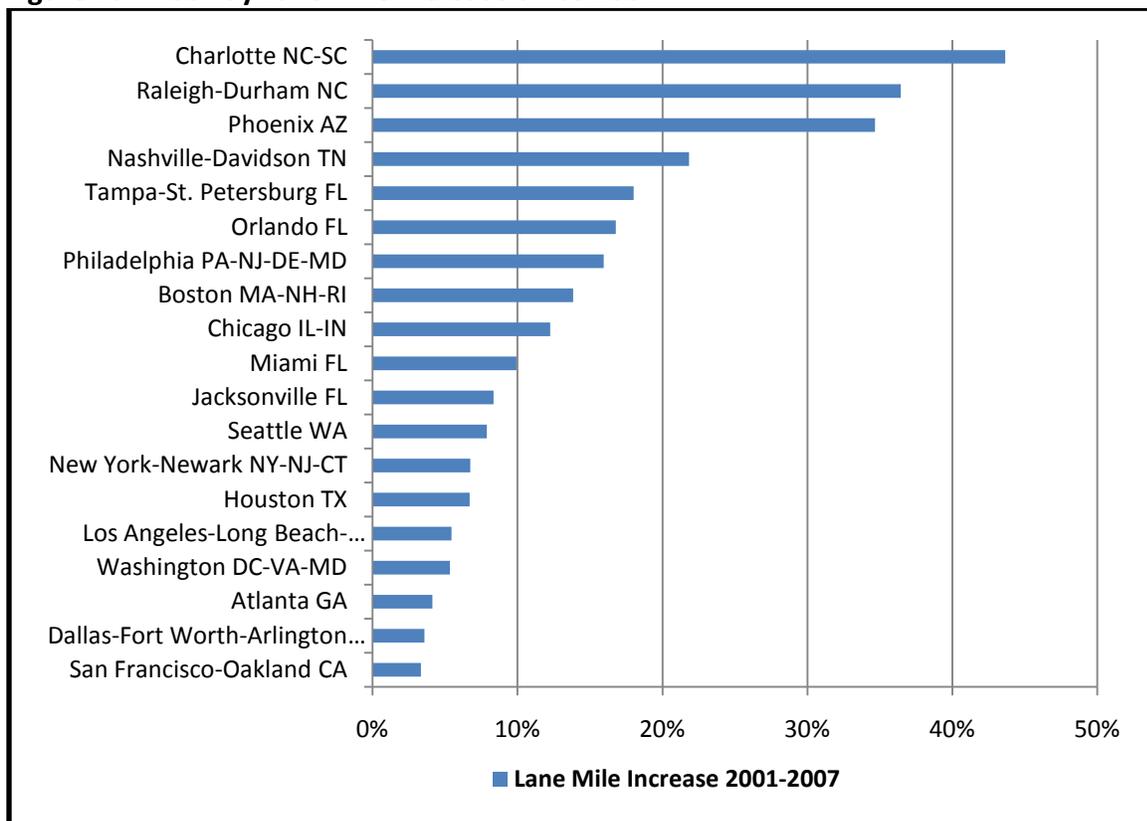
When compared to the freeway expansion programs in other peer regions in the nation, including economic competitors in the southeast, the Atlanta region has implemented limited freeway expansion this decade. It must be noted, however, that the Atlanta region is a highly developed urbanized area with significant constraints on right-of-way, greatly limiting its ability to expand interstate freeways and expressways.

Many smaller regions have aggressively constructed freeway capacity this decade, an option difficult in the Atlanta region due to urban densities along many corridors.

Charlotte, Raleigh-Durham, Phoenix, and Nashville, have increased freeway lane miles in excess of 20% this decade while Atlanta has only increased freeway capacity by 4.1%. Figure 25 notes freeway land miles added since 2001 for the Atlanta region and other regions around the country.

There are several additional reasons for relatively limited increase in freeway capacity, including inadequate funding and changing design concepts. At the time of the adoption of the 2000 RTP, major freeway expansions were assumed as a partial solution for critical congestion bottlenecks.

Figure 25: Freeway Lane Mile Increase Since 2001



Delays with the implementation of the *2000-2003 TIP* became apparent early in the decade. In response to direction among policy officials, ARC began monitoring the implementation rate of TIP commitments each year. This review confirmed what many policy makers suspected; regional projects were not meeting project delivery expectations.

While implementation is important for the obvious reason of being responsive to promises made to the public, project delays impact other areas as well. The inability to implement a project within promised timeframes increases costs due to inflation. Delays in one project often leads to delay in other projects, as the financial impact of delay forces other projects to be delayed so adequate funding resources can be made available.

Funding shortfalls, over-optimistic scheduling, and changing priorities have contributed to delays in delivering projects.

A major lesson learned by policy makers and planners was that the region must be more conservative in project implementation assumptions in the coming decade. The dissatisfaction with low implementation rates among state officials has led to major restructuring of state departments and new legislation such as Senate Bill 200.

The *2000 RTP* focused funding on stimulating change to existing land use and transportation patterns through what was then a new program: the Livable Centers Initiative (LCI). In March 2000, ARC approved an allocation of \$5 million over 5 years to fund the study portion of the program. ARC also approved \$350 million for priority funding of transportation projects resulting from the LCI studies. The ARC Board, in December 2004, extended the LCI program to include another \$5 million for 5 additional years of planning studies and added \$150 million for priority funding of transportation projects (for a total commitment of over \$500 million).

The Atlanta region has made remarkable progress this decade in addressing air quality challenges. The *2025 RTP*, and the accompanying updates to the air quality State Implementation Plan (SIP), resulted in many of the tough policy decisions that led to air quality conformity.

In the *2025 RTP*, ARC gave strong policy support for policy measures that, while not popular at the time, brought the region back from air quality conformity lapse:

- Stronger inspections and maintenance programs to reduce harmful tailpipe emissions
- Cleaner fuels to reduce NOx and VOC emissions
- Cleaner technologies in coal burning power plants in the region
- Expansion of funding for clean fuel vehicle purchases and bus stop electrification
- Funding for clean fuel infrastructure to fuel vehicles

Several challenges are ahead, discussed in detail in the air quality section of the Regional Assessment. The region will find that meeting tightening ozone and PM standards will prove to be challenging. New analysis tools, such as EPA's MOVES model, will also increase the region's measured emissions. These factors point to a continued emphasis on improving air quality in *Plan 2040*.

The region faces similar air quality challenges in the coming decade as existed in the late 1990s with more stringent federal standards.

Regional policy makers initiated several transit-related initiatives to determine opportunities to improve transit delivery and planning. The *Regional Transit Institutional Analysis* (RTIA) examined how the Atlanta region should organize to plan, build, fund, and operate public transit services. This study laid the foundation for a follow-up organization named the Transit Planning Board (TPB).

The TPB completed a multi-year process in 2008 to review organizational structures and development of comprehensive update of the region's transit concept. The updated regional transit concept, Concept 3, this new regional transit concept pushes regional transit cooperation further than previous efforts.

The cooperative spirit among regional stakeholders at the end of this decade contrasts with the tension present ten years ago as the *2025 RTP* was developed. All regional counties recognize the importance of pursuing a unified solution to the region's pressing transit challenges, and pursuing an aggressive policy of seeking opportunities to collaborate in transit is one of the region's biggest achievements this decade.

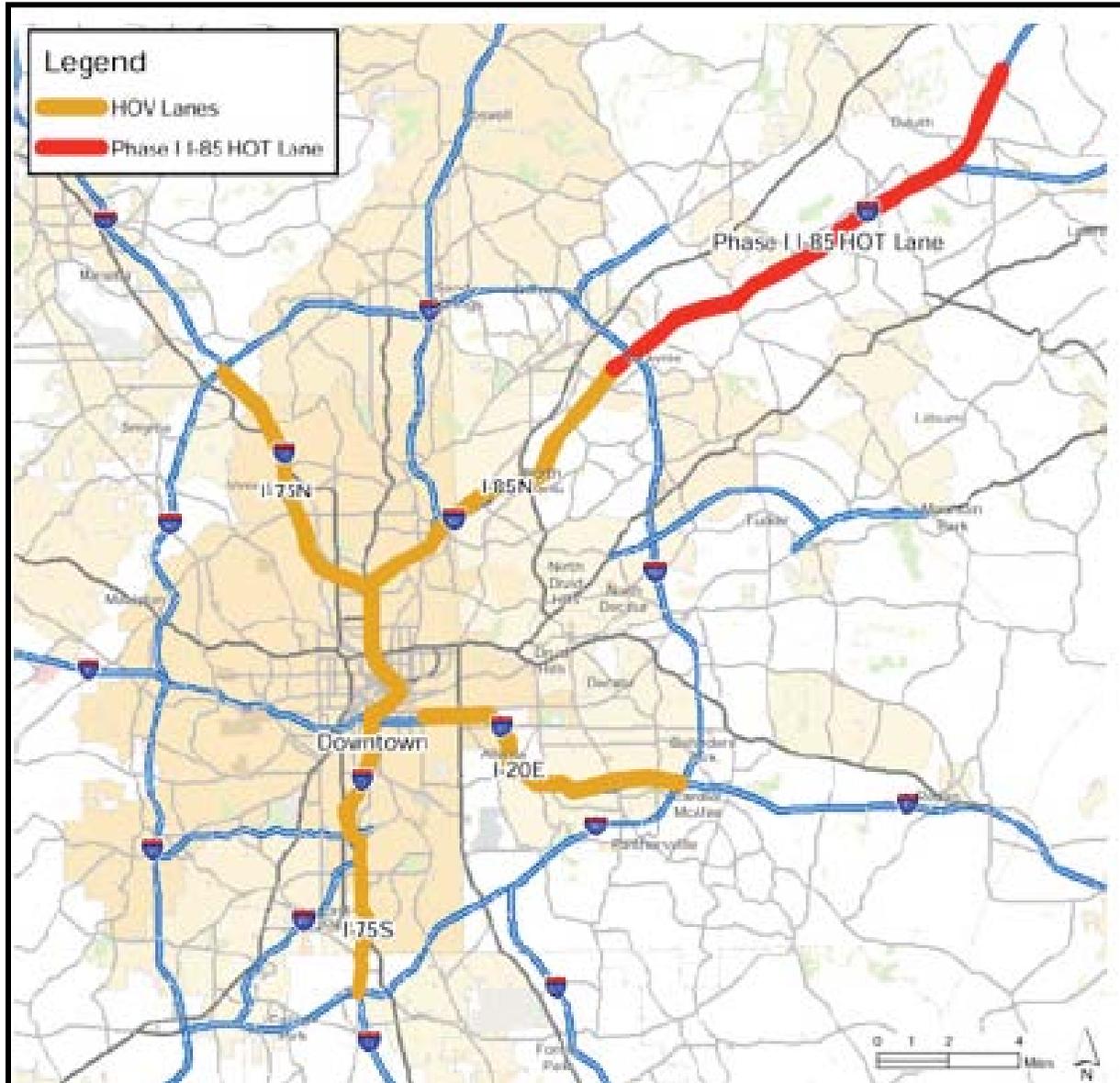
Developed in a collaborative manner among regional stakeholders, Concept 3 is a visionary \$40 billion investment in regional transit.

ARC was one of the first MPOs in the nation to plan for the potential conversion of HOV lanes to "managed lanes" in the *Envision6 RTP*, adopted in 2007. This strategy was in response to the high cost of interstate mainline capacity increases and the increasing difficulty in expanding the interstate systems' right-of-way footprint in the region. Furthermore, this option was expected to provide a shorter delivery time in implementing a congestion-relief alternative for residents. The *Envision6 RTP* also included the first set of managed lanes policies in the region's history, laying the foundation for future successful initiatives.

On November 25, 2008, previous USDOT Transportation Secretary Mary Peters and Georgia Governor Sonny Perdue announced the state of Georgia was awarded \$110 million in federal

funds to support a \$147 million pilot project through the USDOT Congestion Reduction Demonstration Program. The project converts 14.3 miles of High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes on I-85 between Chamblee-Tucker Road (DeKalb County) and Old Peachtree Road (Gwinnett County); enhances transit service; and implements innovative technologies. Areas impacted are shown in Figure 26. This section is planned to be the first phase of an expanded HOT network in the State. The state and region's focus in implementing managed lanes directly led to successful award of competitive funding to address regional mobility needs.

Figure 26: Segment of I-85 Proposed for Conversion to High-Occupancy Toll Lanes (HOT)



Source: TIB, 2008

Regional Travel Options

Many transportation options are available in the Atlanta region, including the use of single occupancy vehicles (SOVs), carpools, transit, vanpools, bicycling and walking. Although these transportation options are available, development patterns limit the efficiency of many of these options. SOVs make up the vast majority of trips in the Atlanta MPO area.

Regional Vehicle Miles Traveled (VMT) is increasing, in large part due to population growth. The VMT per capita has been decreasing since its peak in the late 1990's. This steady decrease reflects the shortening of trip lengths associated with a more dense land use pattern – a major policy initiative of the ARC since the 2025 RTP adopted in 2000. Expanded regional transit use also contributes to the reductions in this important statistic.

Figure 27 details regional VMT trends. In 2008, the outer eight counties had a higher VMT per capita (29.5) when compared to the inner ten counties (27.9).

Figure 27: Average Daily Vehicle Miles Traveled in the Atlanta MPO Area, 1995-2008

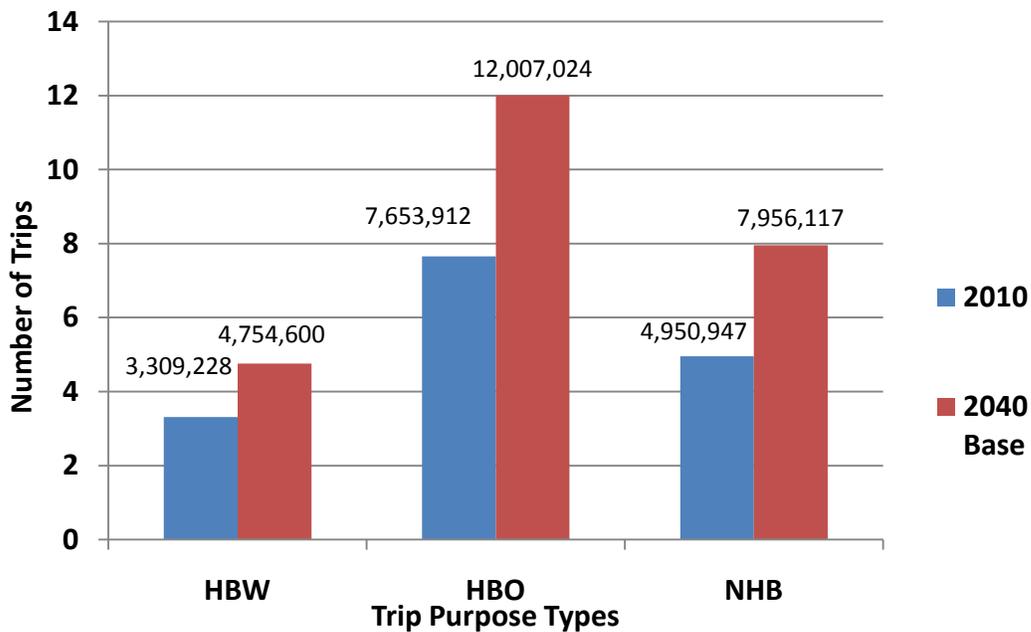
Year	18-County Atlanta MPO Area	Percent Change from Previous Year	VMT per Capita
1995	108,730,647	n/a	32.60
1996	114,462,547	5.27%	33.33
1997	120,142,338	4.96%	34.01
1998	125,864,531	4.76%	34.57
1999	126,223,823	0.29%	33.65
2000	129,486,176	2.58%	32.10
2001	132,887,292	2.63%	31.81
2002	134,124,420	0.93%	31.25
2003	135,215,454	0.81%	30.72
2004	141,346,238	4.53%	31.23
2005	141,720,605	0.26%	30.39
2006	140,981,999	-0.52%	29.23
2007	141,520,280	0.38%	28.51
2008	142,289,456	0.54%	28.05

Source: GDOT Office of Transportation Data; U.S. Census Bureau Population

Travel patterns are driven by trip purpose. There are three major trip purposes useful in estimating and forecasting regional travel demand: home-based work (HBW), home-based

other (HBO), and non-home based (NHB). Because most congestion is created in the morning and afternoon travel periods by commuter-oriented travelers, the home-based work trip is more closely studied relative to other trip purposes. As shown in Figure 28, the percentage of trips that are home-based-work trips (HBW) is stable between 2010 and 2040, only decreasing a small amount from 20.8% of current total trips to 19.2% by 2040.

Figure 28: Trips by Purpose Type (2010 - 2040)



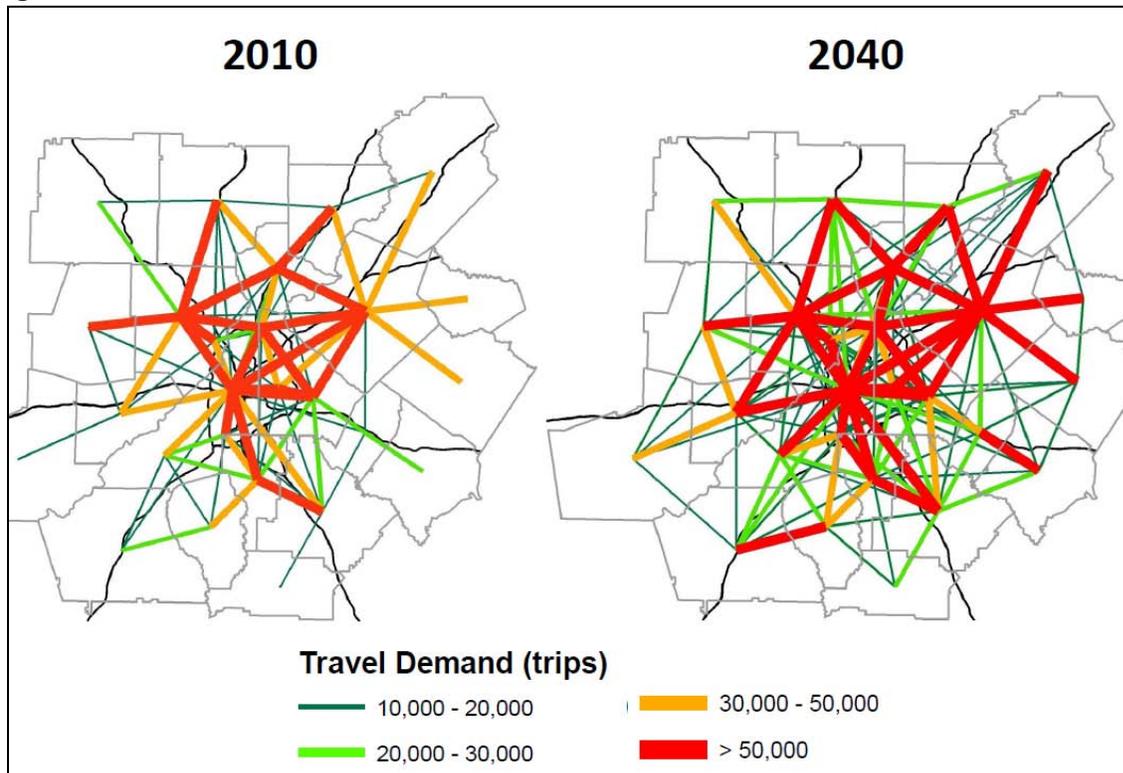
Source: ARC

Due to population growth, however, by 2040 there will be a 1.4 million increase in home-based work trips. From a planning perspective, this increase will be a challenge to accommodate if commuters chose to primarily travel in SOV vehicles during the morning and afternoon peak travel periods.

The bulk of the total increase in travel (7.4 million) between 2010 and 2040 is in other trip purposes of HBO and NHB. This increase is positive in the sense that these trips largely occur outside of the most congested peak travel periods. However, these trips by nature are more difficult to accommodate via long-haul transit, typically being local or business related trips.

Regional travel demand patterns, both existing and forecast to the year 2040, are illustrated in Figure 29. The thickest red lines represent the highest volumes of travel demand. The five core counties of Fulton, DeKalb, Gwinnett, Cobb, and Clayton accommodate most trips both now and in the future.

Figure 29: Total Travel Demand in 2010 and 2040



Source: ARC, 2009

However, significant changes are illustrated and reflect the complexity of travel patterns by the year 2040. Several counties on the edge of the region, such as Bartow, Carroll, and Hall, experience relatively few external trips to other destinations within the 20 county region. These counties are less interconnected with the core of the region, producing more internal trips to local employment centers.

However, many of the areas close to major employment centers experience a large number of external trips from suburban communities. Counties such as Clayton, Douglas, Paulding, eastern DeKalb, Rockdale, and Newton see a large percent of their total workforce leave the county each day. Many factors help predict how residents in the Atlanta region travel. Some of these factors include determining types of trips, travel time, cost, and mode of travel. ARC updates this information every 10 years through surveys and census data. ARC uses the survey information to make calculation on who, where, when and how much people will travel. In general, home based work trips remain predominately SOV in nature. Even the CBD, which has one of the highest transit mode splits in the region, sees nearly 64% of its home based work

By 2040, major centers emerge on the south side of the Atlanta region, generating trip movements similar to those existing today Gwinnett and Cobb.

trips arrive via SOV. Regional transit usage remains a small share of the total trips, accounting for roughly 5% of the total. The CBD sees approximately 25% of its home based work trips utilize transit.

Other trips purposes (trips that are not linked directly from home to work) experience a larger variation in mode split. Nearly half of these trips are accounted for by HOV vehicles. These trips are influenced by the household size of areas in the region. Many trips to shop, eat, and attend events are undertaken with other members of a household. Transit shares decrease during these trips relative to work trips. Only about 1.5% of regional other trips are undertaken via transit.

Regional Congestion Issues

Most of the analysis needed to understand current and future needs use statistics from the ARC regional travel model. Three “scenarios” are studied to provide near- and long-term comparisons:

- 2010 – This network scenario provides a point of comparison against which to evaluate future conditions. This network reflects the region’s current transportation network and its performance - based on today’s population and employment levels.
- 2040 No-Build – This scenario assumes today’s current transportation network is still in place by the year 2040, but tests it against expected population and employment levels assumed by the year 2040. This is not a realistic “scenario” per se, since transportation improvements will be made between now and 2040. A 2040 No-Build assessment, however, is useful in that it can provide a point of comparison to assess the level that recommended strategies address needs or “move the needle.”
- 2040 (*Envision6* RTP Projects) – This scenario examines growth to the year 2040 and assumes projects included in the financially constrained *Envision6* RTP are constructed. The financially constrained *Envision6* RTP includes only projects planned for implementation through the year 2030 – not through the year 2040. This network scenario is tested to evaluate the impact of 10 years of additional growth on the existing RTP and identify challenges ahead in crafting an updated RTP that addresses regional needs.

As mandated by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: Legacy for Users (SAFETEA-LU) passed by Congress in 2005, ARC oversees the Atlanta region’s Congestion Management Process (CMP) for the 18-county MPO area. The CMP identifies congested locations and facilities and is a key

Congestion will continue to be a major future challenge. A region of 8 million people by 2040 will led to significant increases in per capita congestion levels.

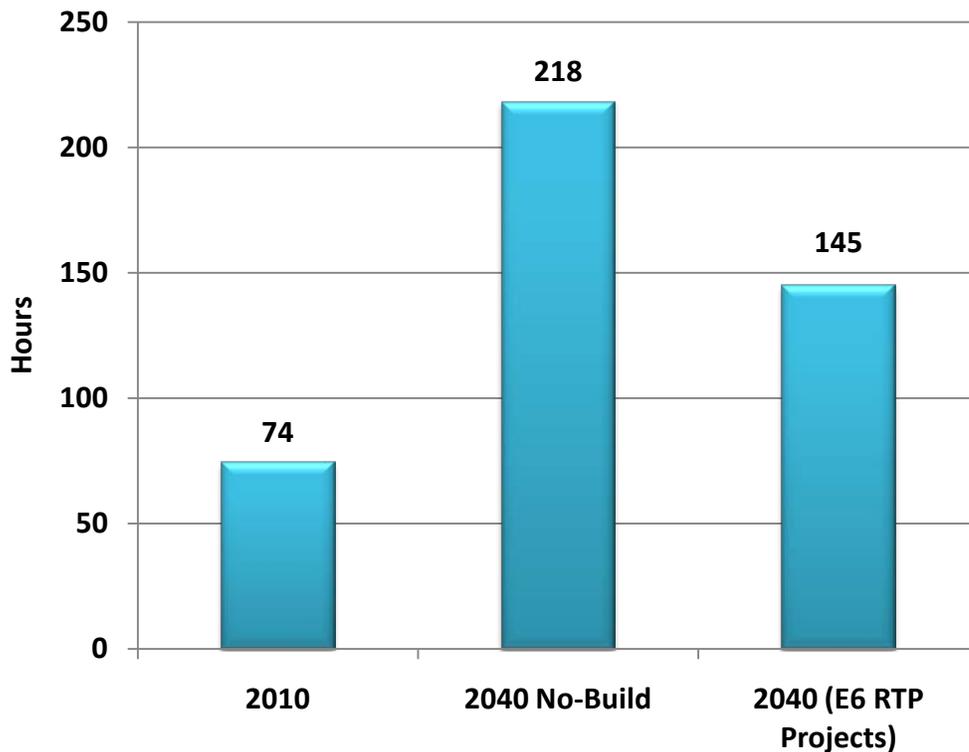
tool used to define and implement strategies for improving congested locations.

A key factor in assessing the impact of transportation congestion on households is the annual delay per capita. This measure considers the delay a typical person faces as a result of congestion on regional roadways.

In 2010 the annual delay per capita is 74 hours per year. By 2040, even assuming projects in the *Envision6 RTP* are constructed, delay per capita is expected to nearly double to 145 hours.

As shown in Figure 30, *Envision6 RTP* does result in significant improvements in comparison to the 2040 NB which has 218 hours of delay per capita. This increase in delay will adversely impact many regional residents and businesses, suggesting continued attention to identifying effective congestion relief strategies by *Plan 2040*.

Figure 30: Annual Hours of Delay per Person



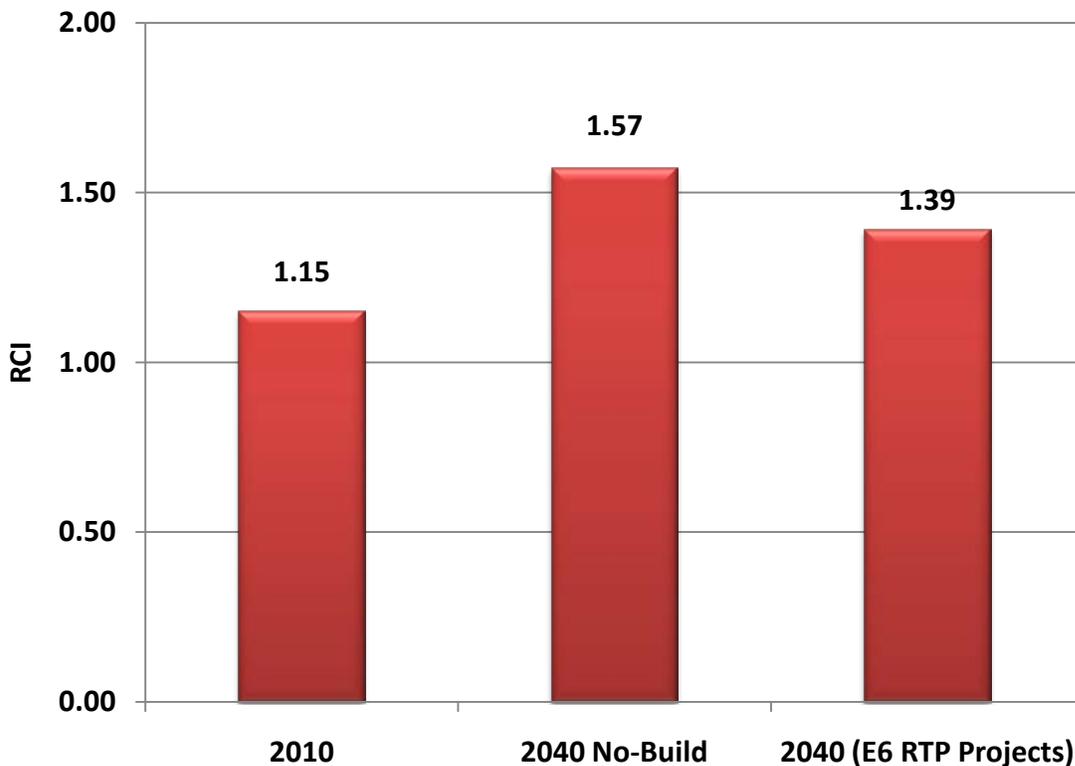
Source: ARC, 2009

The level of congestion on regional facilities is illustrated by Regional Congestion Index (RCI) statistics comparing 2010 to 2040. The RCI compares the increase in travel times when compared to free-flow travel conditions. A score of 1.5 indicates that it takes transportation users 50% longer to travel in peak travel period compared to off peak periods.

The region's current congestion index of 1.15 is well below previously adopted goals of 1.35, leading to questions about the viability of this measure as a useful tool.

As shown in Figure 31, RCI is forecast to increase from 1.15 in 2010 to 1.39 in 2040. The effectiveness of planned projects is by the RCI, with the E6 RTP lowering the RCI from a 1.57 in the No-Build Scenario. This statistic reinforces the challenges ahead in addressing congestion in Plan 2040.

Figure 31: Regional Congestion Index



Source: ARC, 2009

The cost impact of congestion on households and businesses is significant. In 2010, the annual cost of congestion is \$874 per person. By 2040, this figure increases to \$1,955 under the existing *Envision6* RTP.

The impact of congestion on economic development and regional businesses is also a key challenge going forward. The region's job centers all see a reduction in accessibility during congested periods. Providing safe, reliable, and affordable commutes into and from the region's activity centers must be a key focus for *Plan 2040*, and any other effort designed to continue the past economic success of the Atlanta region.

Congestion reduces the population able to access the Perimeter Center office market, in 40 minutes and less, from 3.2 million to 980,000.

Strategies to increase reliable access to job centers around the region must go beyond stand-alone transportation investments. Managing demand and emphasizing the role of land use and development patterns is crucial. Severe jobs-housing imbalances throughout the region result in overall pattern that is dominated by jobs-rich areas supported by a large footprint of areas that must 'export' workers.

Figure 32 below shows the areas with the largest concentrations of households that have a high degree of access to jobs (blue and orange) in both 2010 and 2040. Significant imbalances exist within the SR 400 corridor that leads to severe congestion on SR 400 and other cross-regional arterials on the north side of the region. Areas in the darkest green have limited employment opportunities and often "export" workers to employment centers.

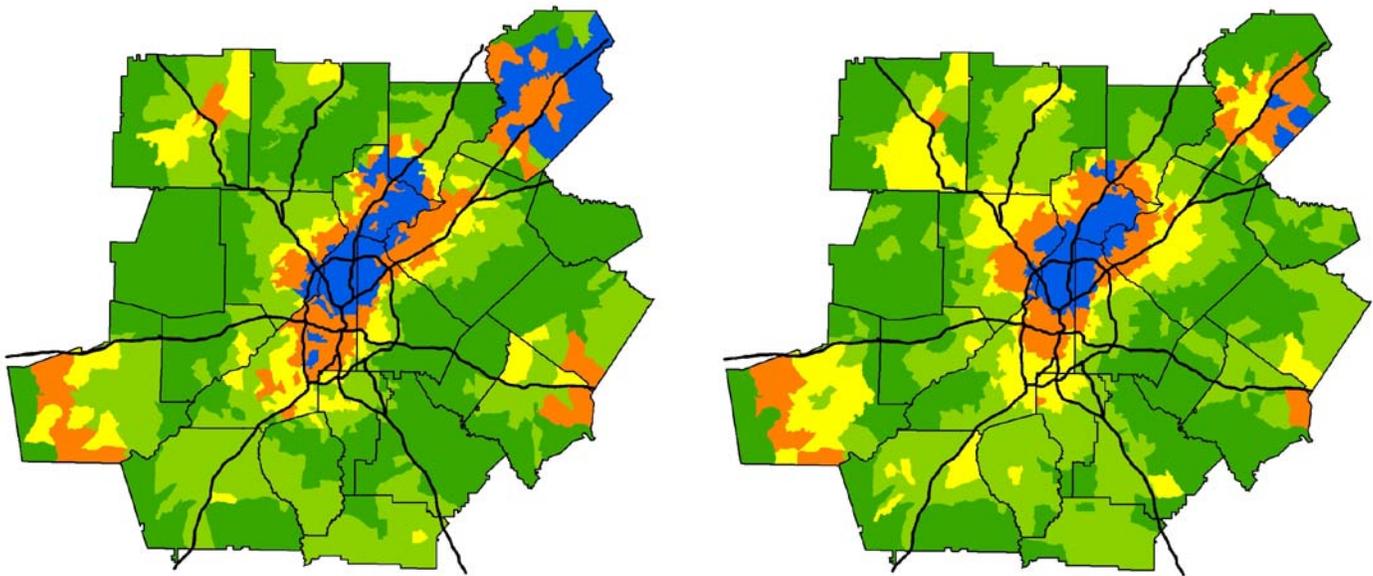


Figure 32: 2010 (L) and 2040 (R) Jobs-Housing Accessibility (30 minute Peak)

Source: ARC

ARC uses a variety of measures to assess congestion levels for the region's major roadway facilities. There are various perspectives for defining and quantifying congestion. ARC has adopted the following three dimensions to define and quantify congestion, pursuant to guidance from the Federal Highway Administration (FHWA):

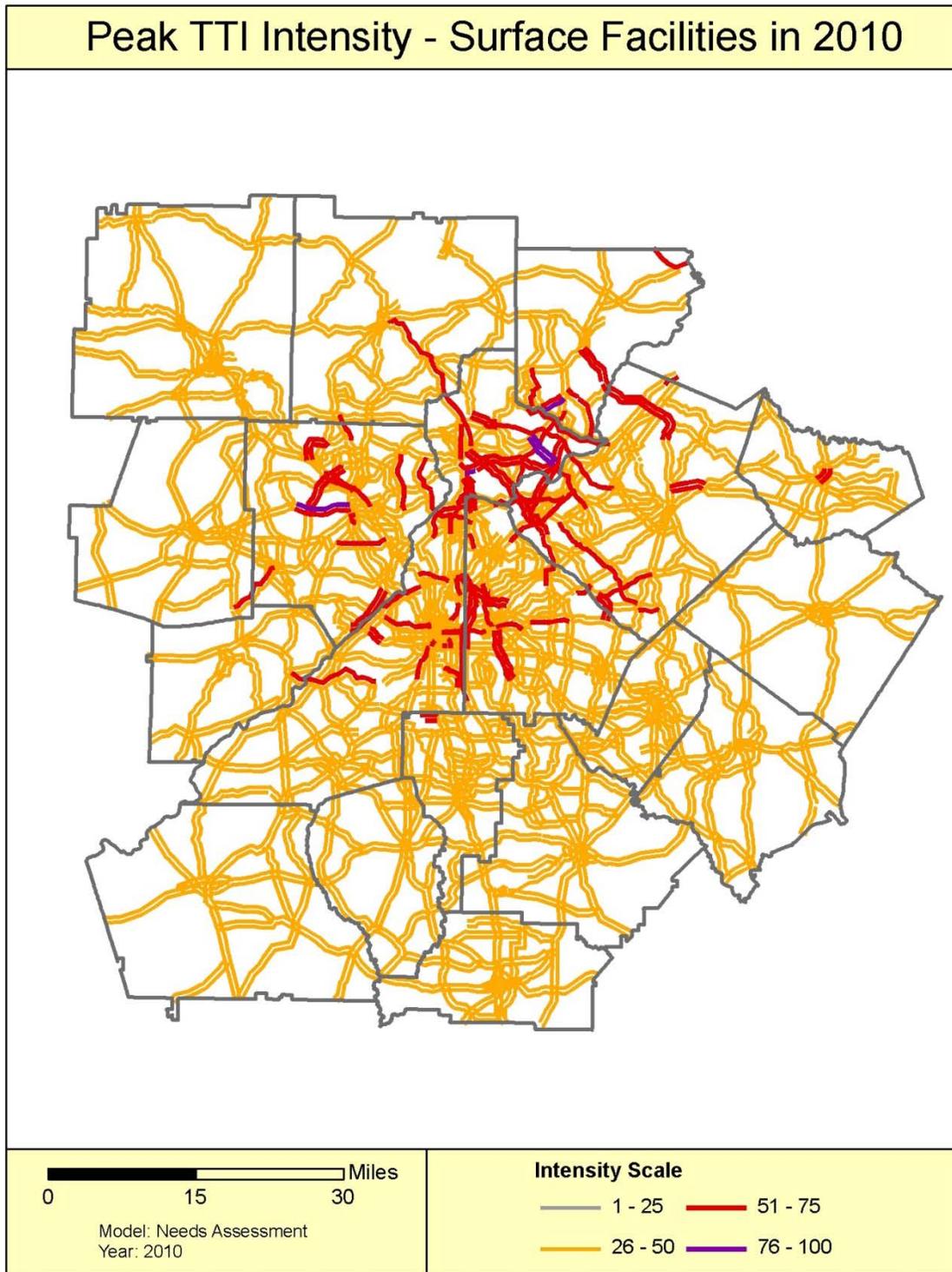
1. **Intensity** is represented by using the Travel Time Index (TTI) performance measure. TTI is calculated by comparing the congested travel time along a given corridor to the off-peak or free-flow travel time. Shown in Figures 33 and 34.
2. **Duration** is a representation of how many hours per day that the volume on the facility exceeds the designed capacity (volume-to-capacity ratio). Shown in Figures 35 and 36.
3. **Extent** represents the percent of delay experienced by the vehicles traveling a specific roadway segment compared to the total vehicular delay experienced by the entire network. Shown in Figure 37 and 38.

Using the results from the regional travel demand model, all three dimensions were separately calculated for surface roads, freeways/expressways, and high-occupancy vehicle (HOV) lanes. Freeway examples are GA 400, I-285, and Lakewood Freeway. Examples of non-freeway facilities include Peachtree Street, Cobb Parkway, and Panola Road. The result of the analysis formed an intensity, duration, and extent value for each facility, by direction. The facilities were then ranked separately for each dimension, and then compositely (representing the values of all three dimensions). The following figures show the severity of congestion based on each dimension as well as the composite (all three dimension scores combined and weighted equally).

The major finding of this analysis is that most of the region's congestion for surface roads and expressways occurs in the northern half of the region, no matter which dimension is analyzed. This is likely due to the higher ratio of households and jobs in these areas compared to other parts of the region. Many of the most intensely congested roadways are east-west orientated, suggesting that these facilities support a significant amount of traffic to and from GA 400 and I-85 (Northeast Expressway).

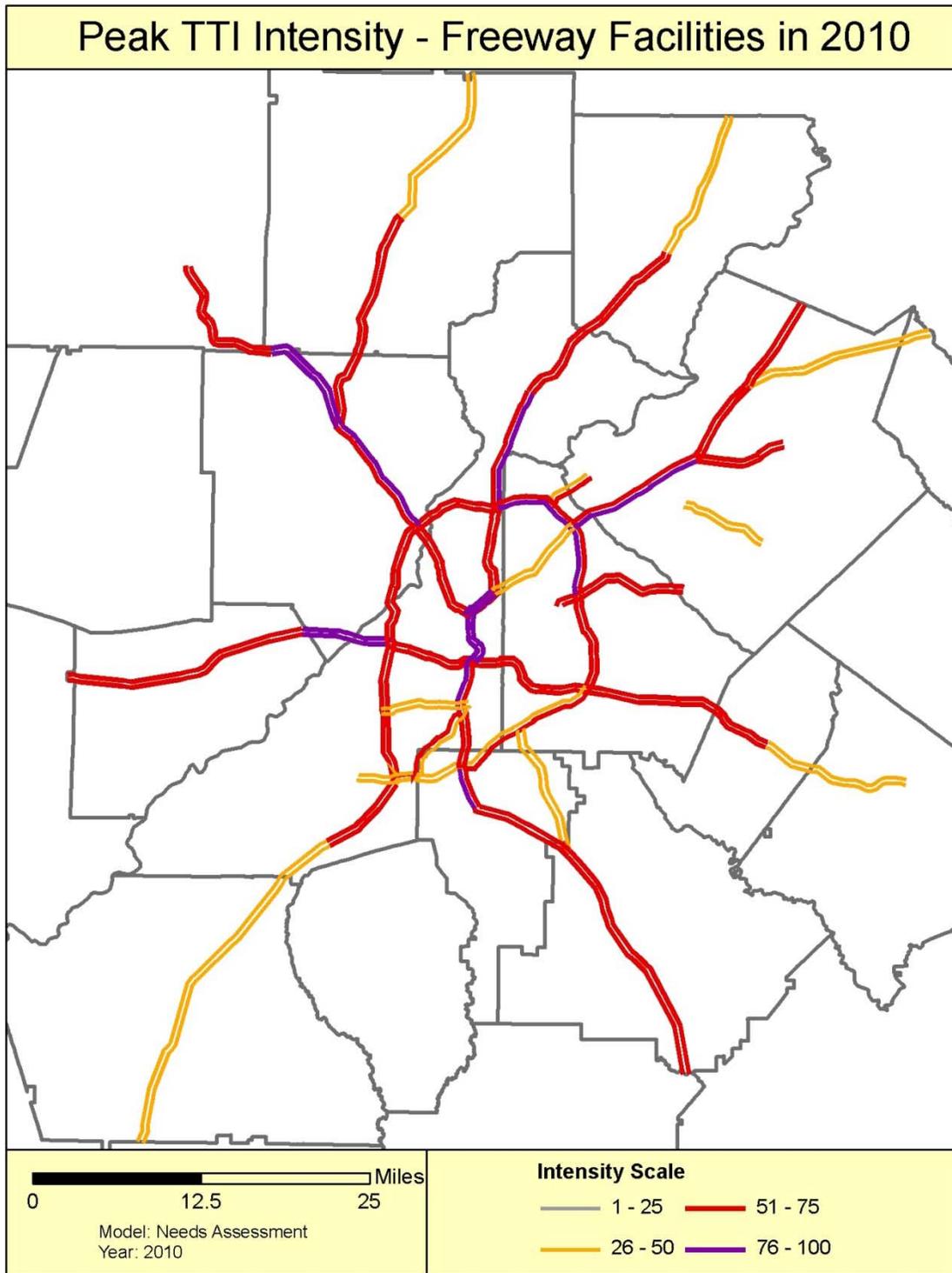
It is important to note that the results of this exercise merely capture the severity of congestion due to roadway capacity constraints. This does not reflect non-recurring congestion effects such as accidents, bad weather, construction, or intersection signal timing. For a more detailed explanation on the characteristics of congestion, as well as an illustration of the three aforementioned dimensions, please refer to Appendix T3.

Figure 33: Travel Time Index (Intensity) - Non-Freeways



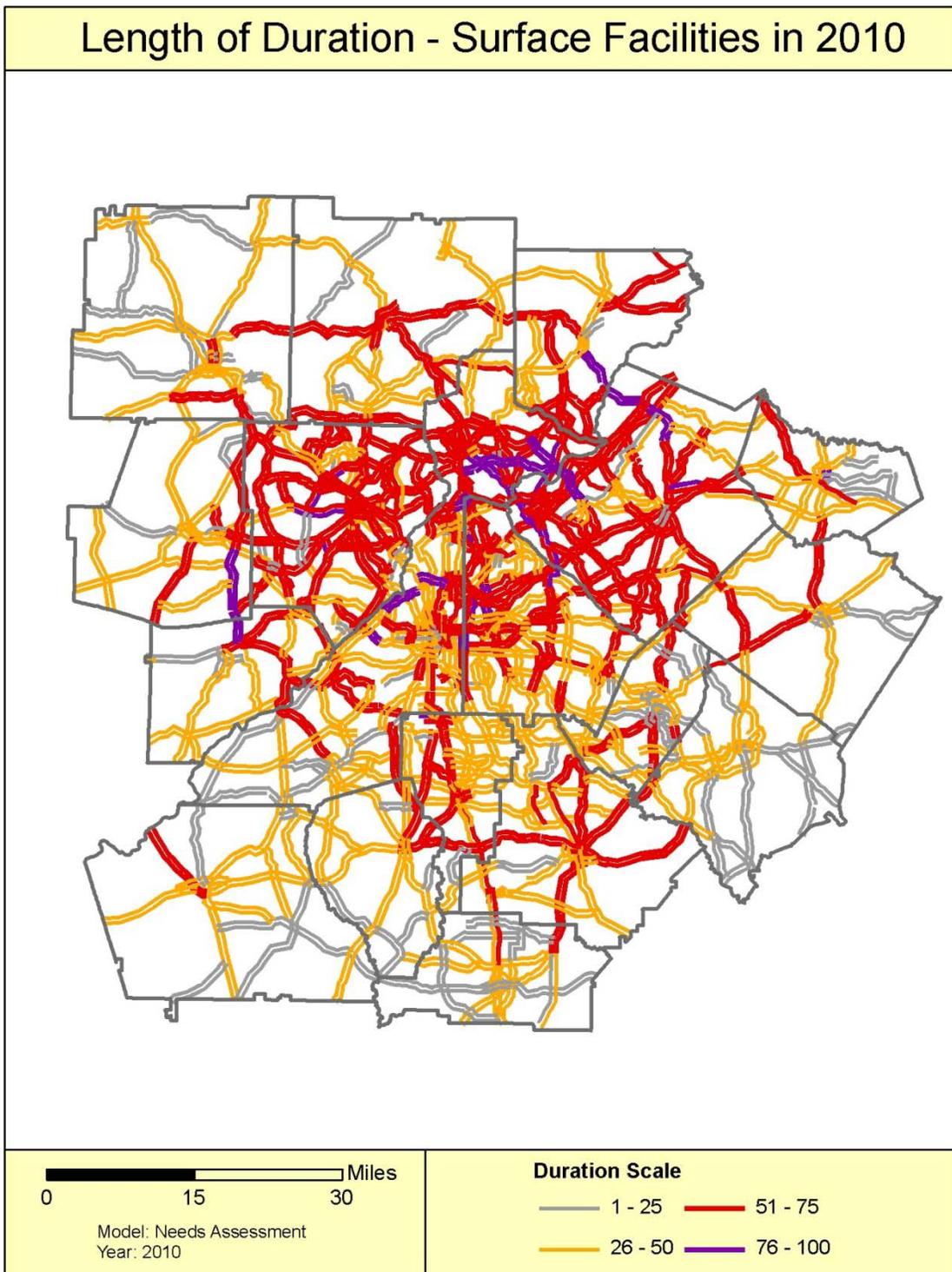
Source: ARC, 2009

Figure 34: Travel Time Index (Intensity) – Freeways



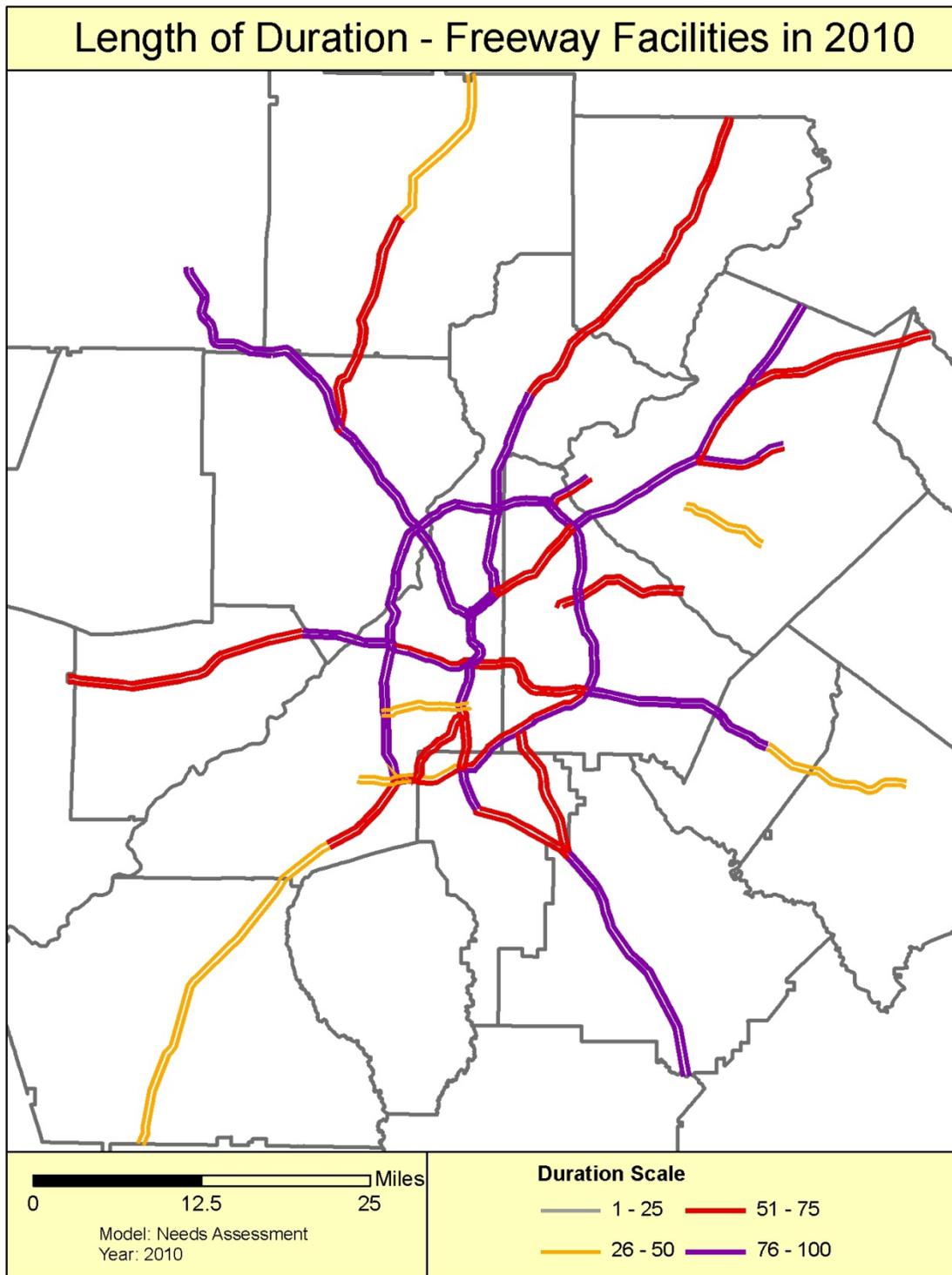
Source: ARC, 2009

Figure 35: Congestion Duration – Non-Freeways



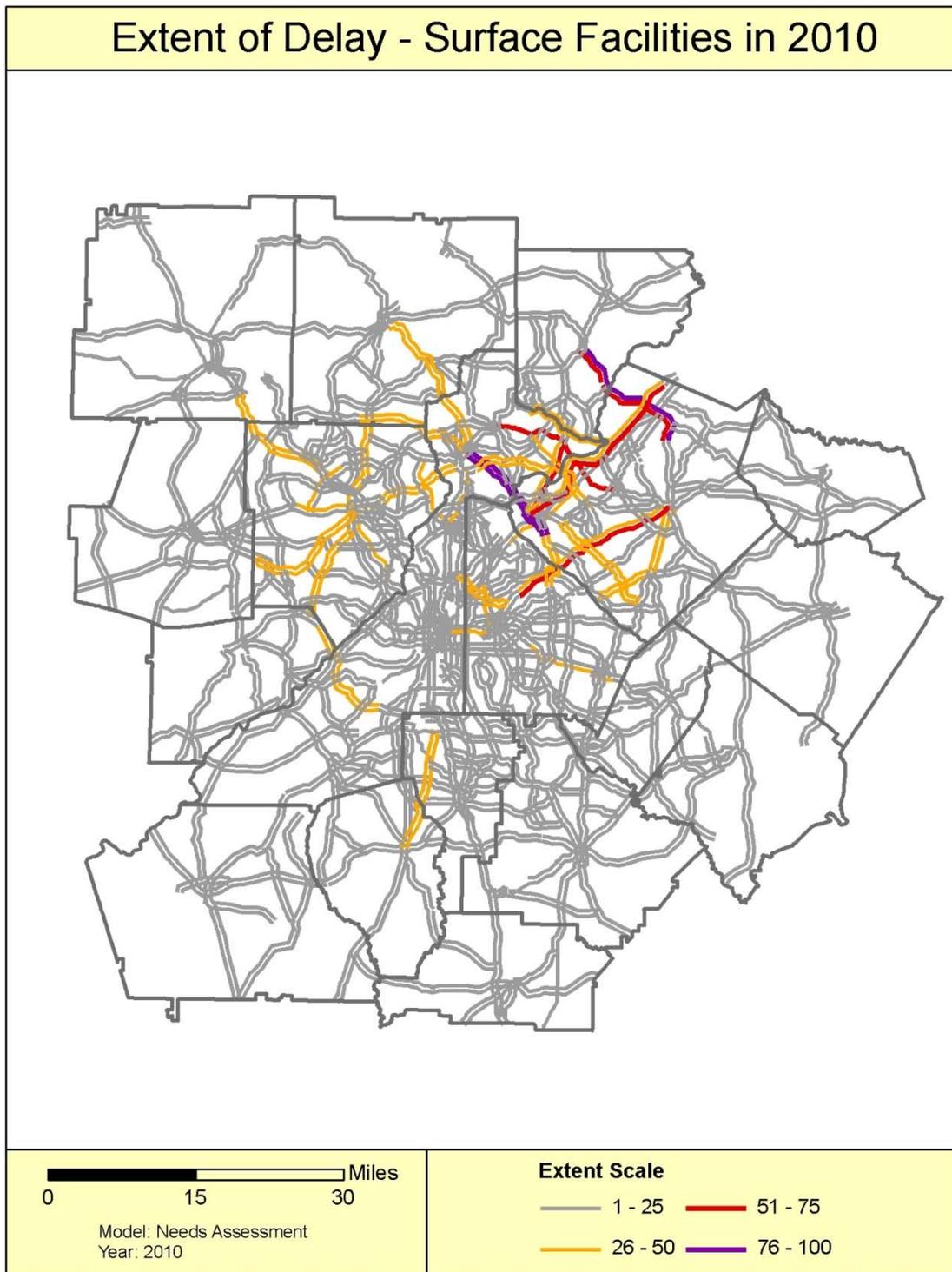
Source: ARC, 2009

Figure 36: Congestion Duration – Freeways



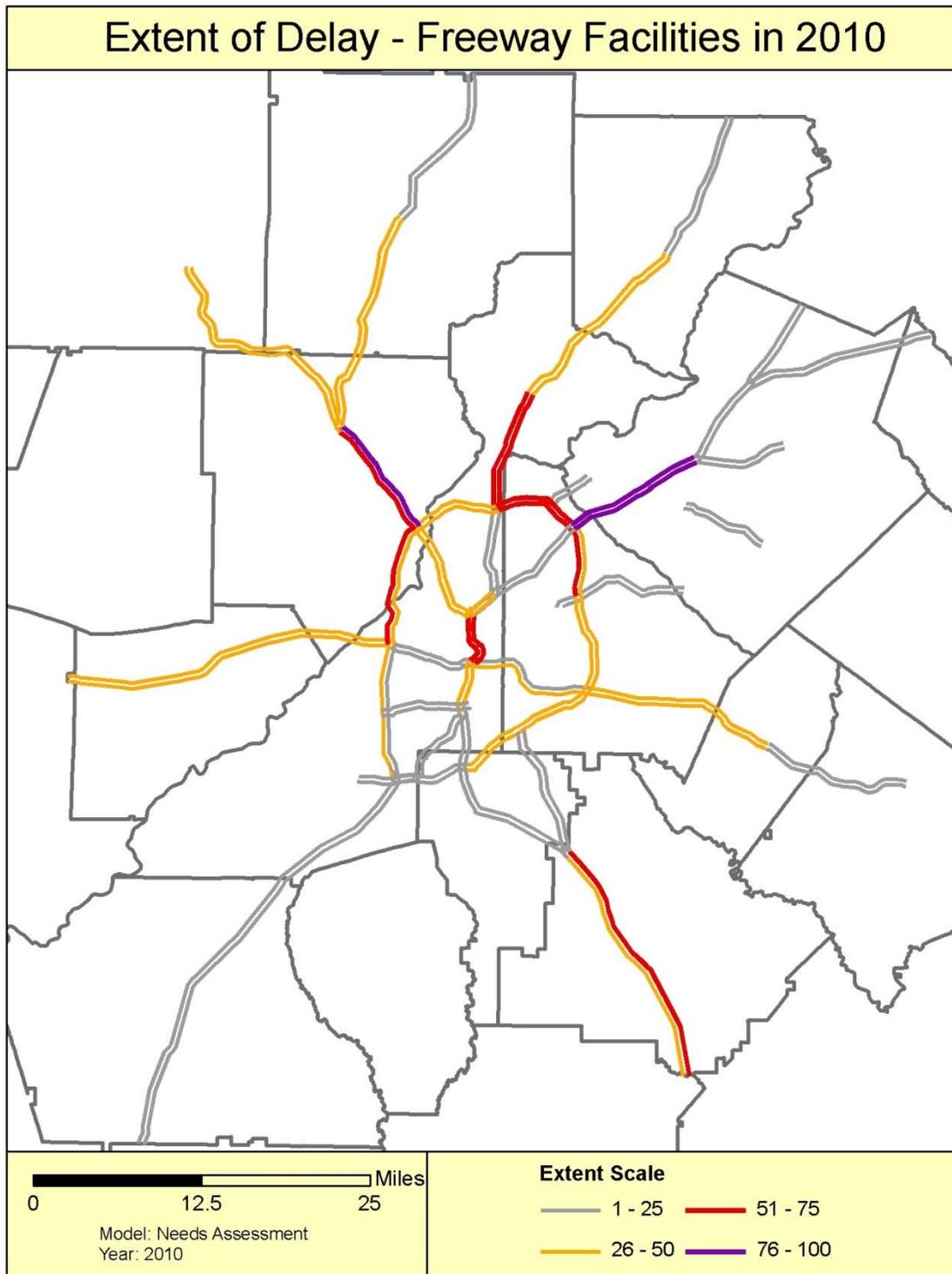
Source: ARC, 2009

Figure 37: Percent of Vehicle Hours of Delay (Extent) – Non-Freeways



Source: ARC, 2009

Figure 38: Percent of Vehicle Hours of Delay (Extent) – Freeways



Source: ARC, 2009

To assess the overall levels of congestion, all three-dimensional factors are compiled into composite scores. Each facility has the possibility of scoring a maximum of 18 points, based on

the individual dimension scores. Several facilities scored five or less. This is consistent with current land development patterns, where most of the low scoring facilities are in the suburban and rural areas of the region. The region's most congested facilities are shown in Figures 39 and 40.

It is important to understand that because a facility received a low score, it does not mean that there is no congestion experienced on those facilities. The composite rankings resulted from a process that compares the facilities amongst each other to determine the worst capacity deficiencies as well as the most heavily traveled corridors.

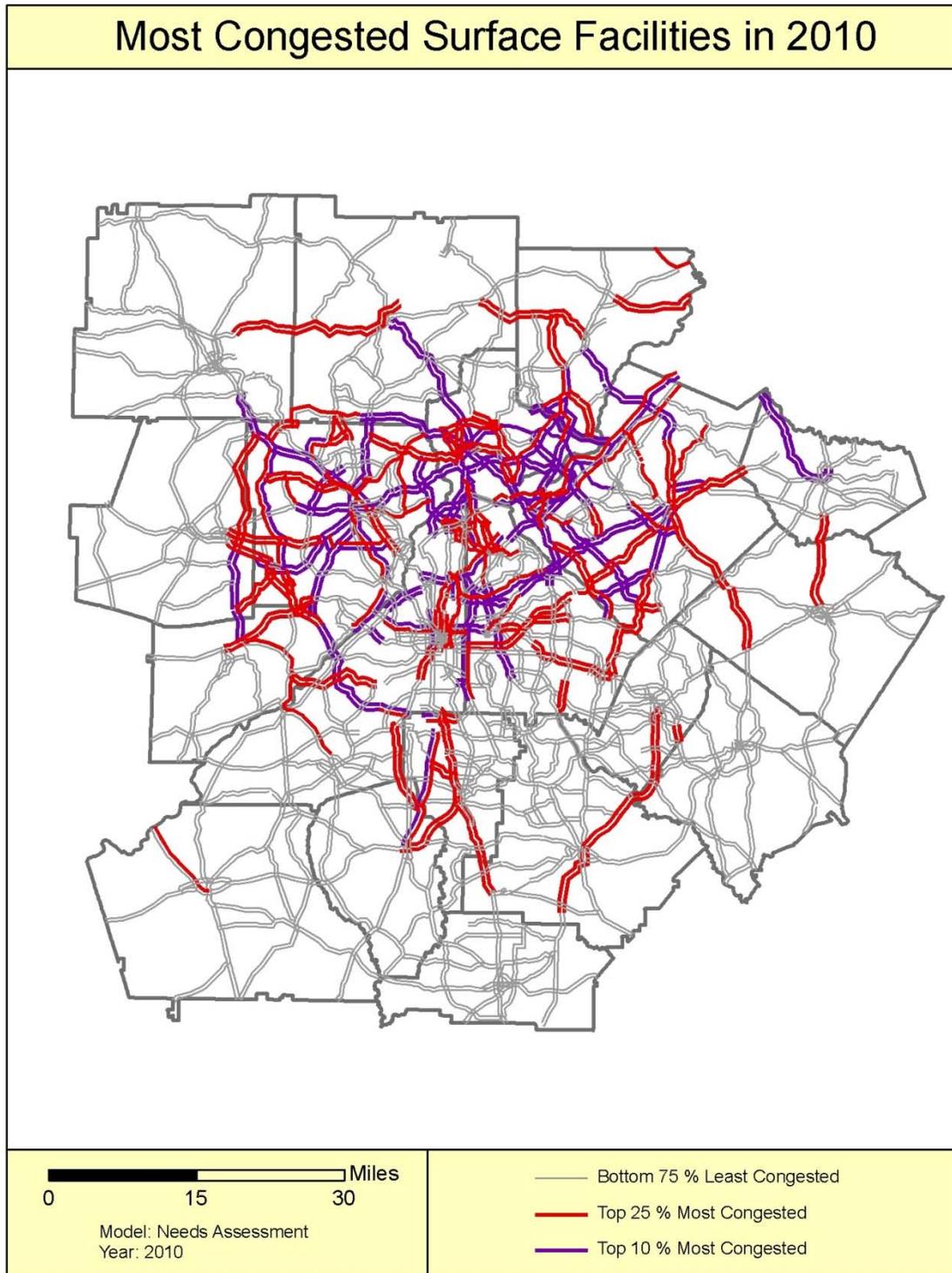
Non-capacity related factors, such as crash density (number of crashes per miles driven) are not incorporated into this methodology, but it is possible that some of the comparative ranking results could change if these factors were integrated. Non-capacity factors, or non-recurring congestion, are more difficult to predict.

Access to real-time and historic field data would enable the process to include such factors. However, that type of data is not currently available at the regional scale, and is expensive and time consuming to accumulate.

The extremities of the region's highway network have the lowest TTI values since peak-hour traffic normally "tails off" towards the edge of the region. The segments that are adjacent to the region's most intense employment centers such as Downtown, Midtown, Buckhead, Town Center, and Perimeter Center experience the highest TTI values in 2010.

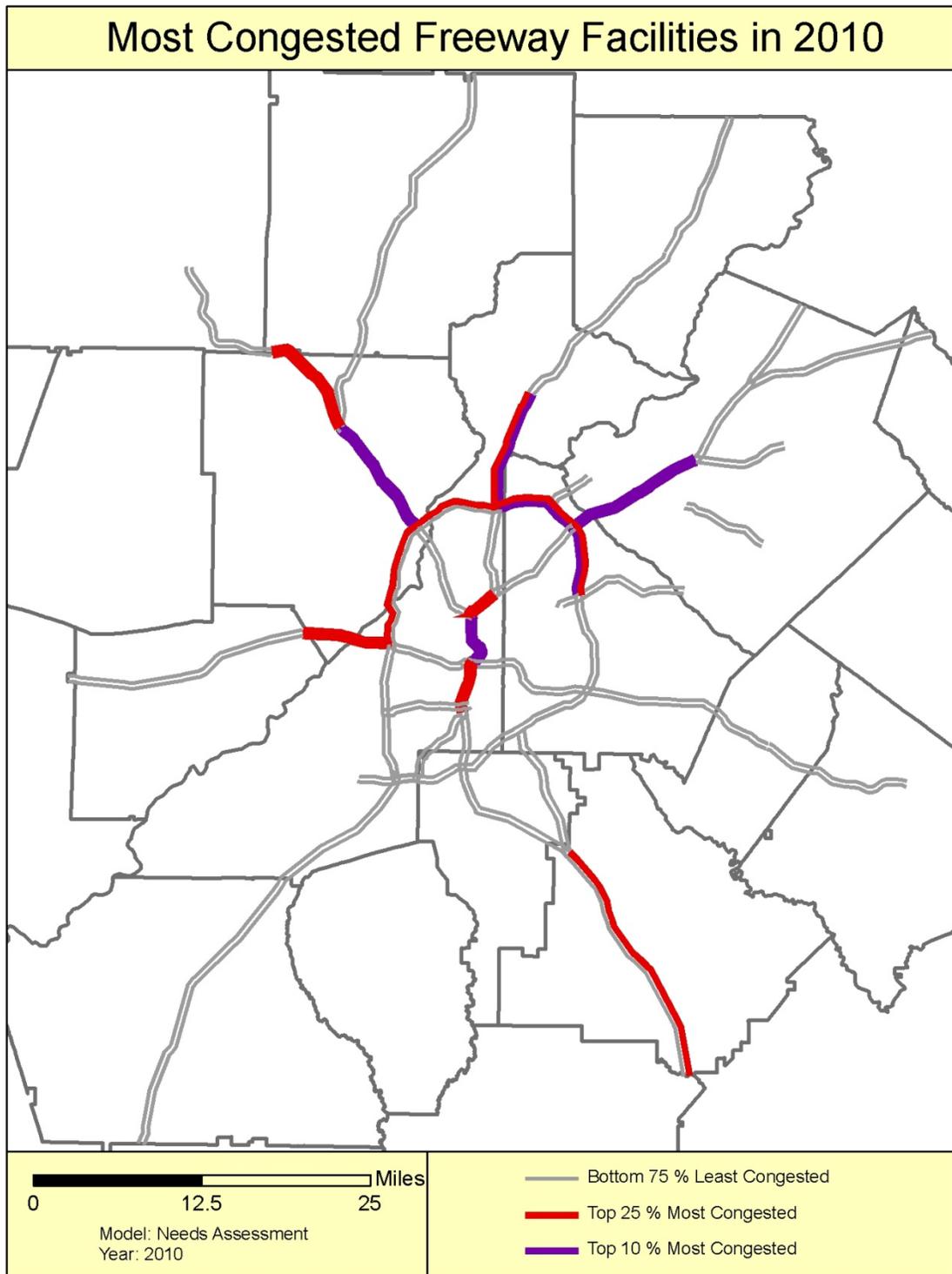
The north side of the Atlanta region is "job rich" relative to the number of households within a 30 minute peak commute, leading to complex and long trips – particularly along the SR 400 corridor.

Figure 39: 2010 Composite Congestion Rankings – Non-Freeways



Source: ARC, 2009

Figure 40: 2010 Composite Congestion Rankings – Freeways



Source: ARC, 2009

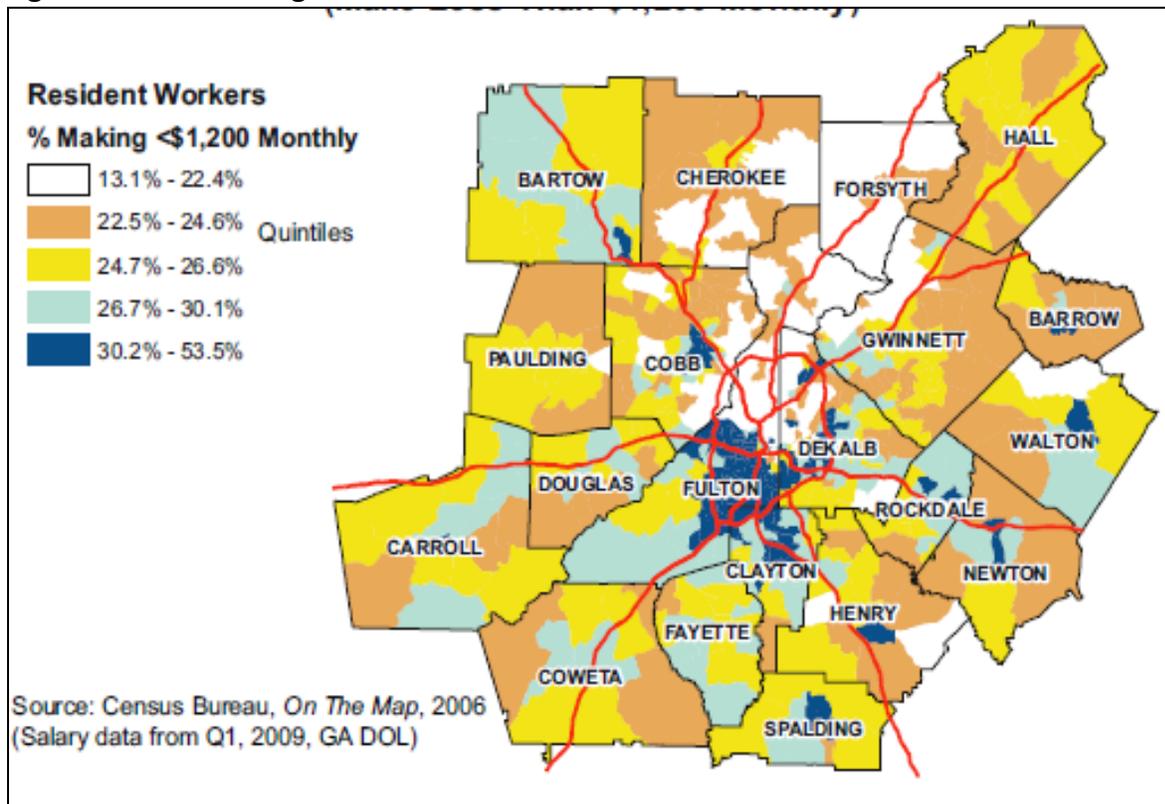
Travel Options for Low-Earning Workers

The vast majority of transportation dollars in Georgia are dedicated to residents who drive. Infrastructure investments and fuel subsidies support those who have the ability and the funds to use an automobile as their primary mode of transportation. As a state, Georgia has very few options for those who are unable or unwilling to drive. Suburban and rural areas in particular lack the options non-drivers need.

Over the next 30 years the region will need to take a more comprehensive approach to transportation in Georgia to assist the growing numbers of residents that cannot drive or choose not to drive. Investing in transportation options now will better prepare the state to manage an increasingly diverse population with increasingly diverse needs. Many other states and regions are investing significant dollars into transportation alternatives. There is greater interest at the federal level in transportation options than there has been for several decades.

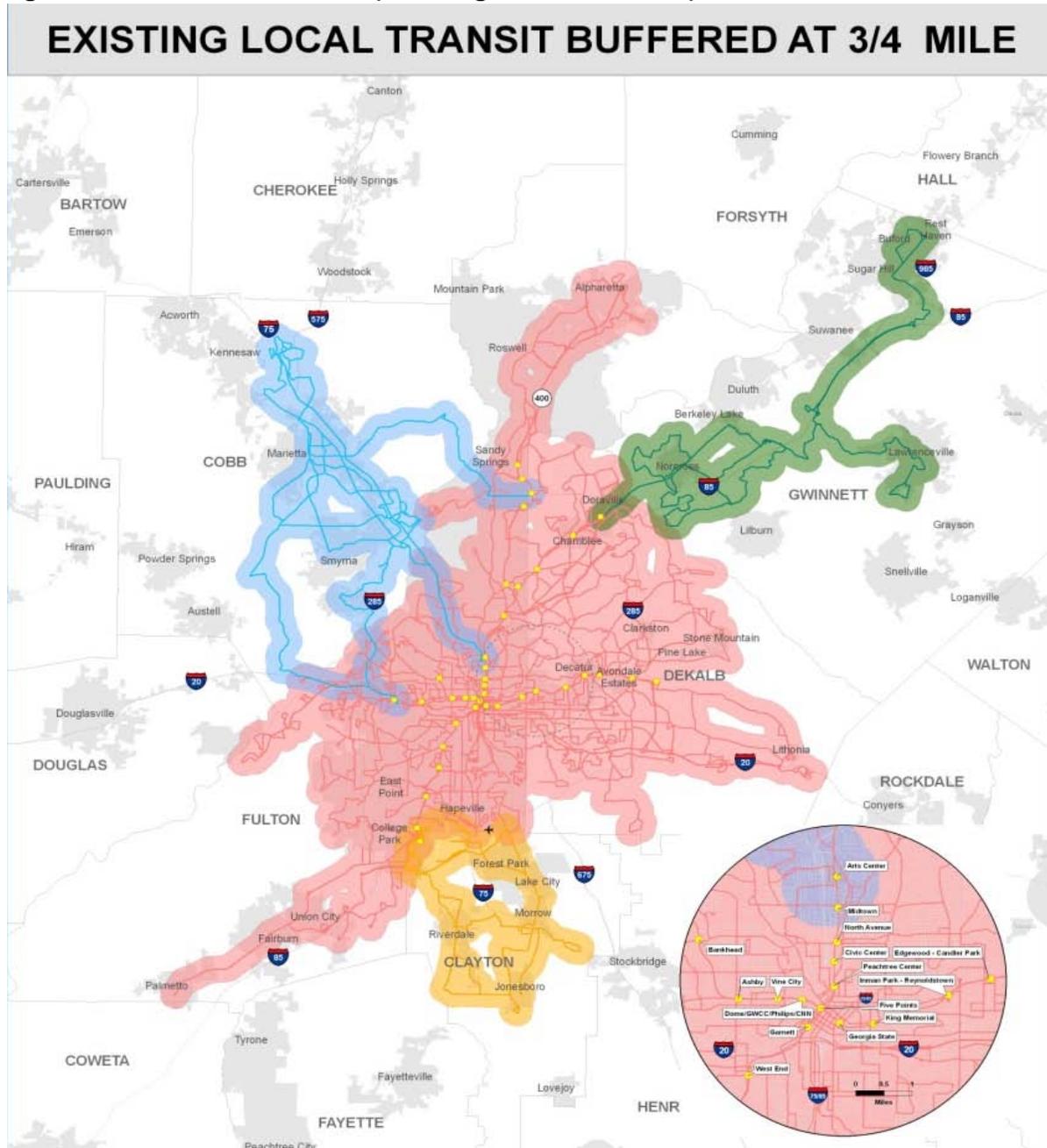
The location of low-earning workers and accommodating their needs must be a critical strategy in developing a program of transportation strategies that addresses full spectrum of travel needs in the region. These workers are in most need of alternative transportation strategies. Figure 41 below shows the locations of low-earning workers are found throughout the region. The largest concentrations of these workers reside inside of I-285 and south of I-20. Additional areas are found in several areas that are not currently served by high capacity transit, including Monroe, Conyers, McDonough, and Marietta.

Figure 41: Low-Earning Workers



Most of these areas in the core 10-county region are served by local transit systems, with several exceptions in Henry and Rockdale Counties. A foundation of local bus services exists to build on expanded services can meet the needs of the transportation disadvantaged. Existing local transit is shown in Figure 42. The region’s long-range transit vision, Concept 3, provides an extensive expansion of regional transit services that meets the transit needs of the region and communities around the region.

Figure 42: Transit Service Areas (Including Local Bus Routes)



Concept 3 – Transit Vision for the Atlanta Region

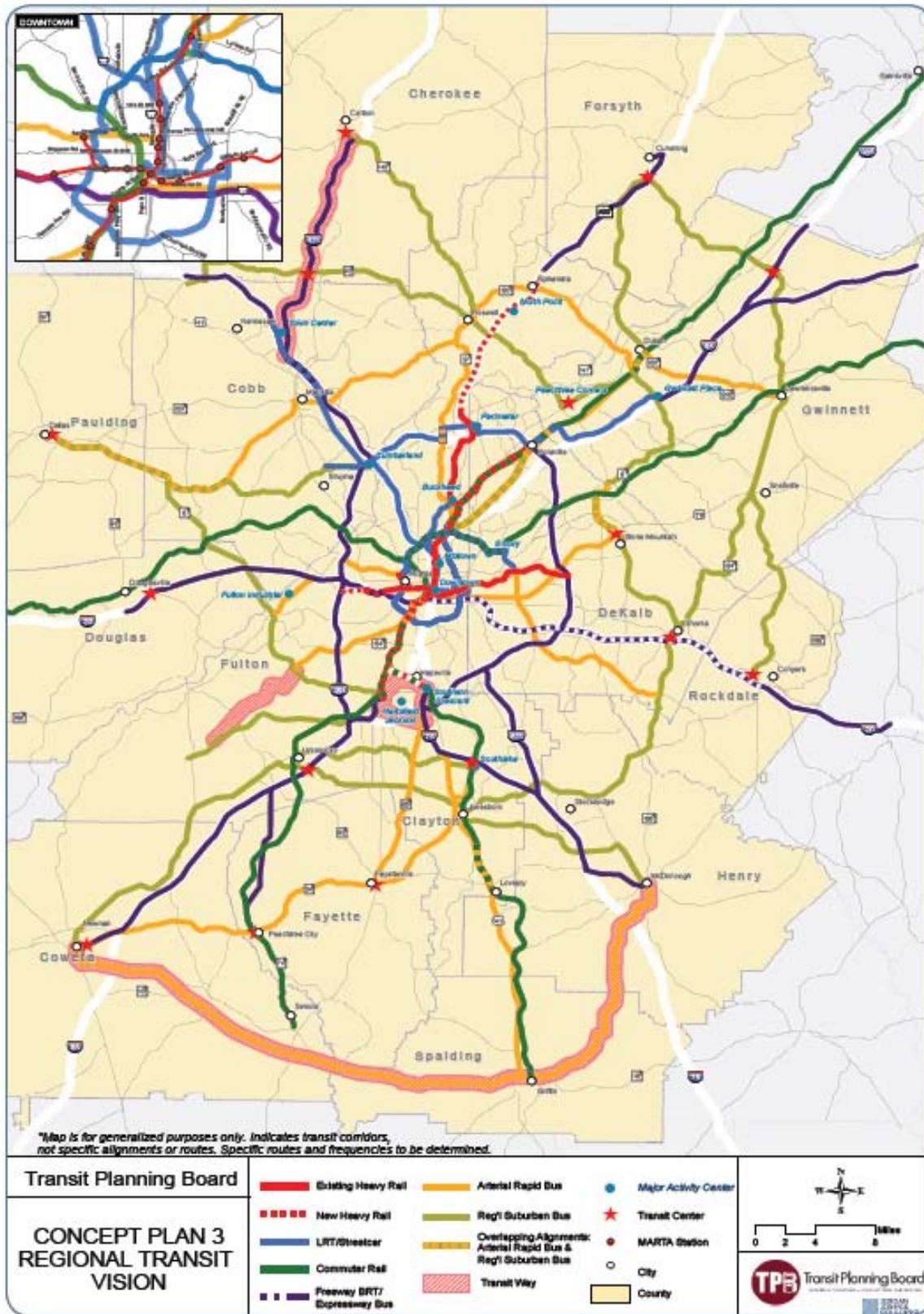
Metro Atlanta continues to lay the groundwork for a major expansion of the regional transit system. The centerpiece of this effort in 2008 was the adoption of a regional transit plan called Concept 3, an ambitious long-range vision based on the principles of connecting people throughout the region to employment/activity centers; providing mobility choices; providing access to those without cars or who do not drive; providing reliable and competitive transit travel time; and making seamless regional transit travel convenient, accessible and attractive.

Concept 3 was adopted by the ARC Board in December 2008 and now serves as the transit component of the region’s long-range Aspirations Plan. The development of Concept 3 was a two-year effort overseen by the Transit Planning Board (TPB), a regional partnership created in 2006 by a joint resolution of ARC, MARTA, and GRTA. Following adoption of the plan, the TPB reached its sunset in December 2008, and was immediately succeeded by the Transit Implementation Board (TIB). The TIB shares the same membership as its predecessor, but the focus has shifted toward identification of a long-term funding and governance strategy to make the Concept 3 vision a reality. The 19-member TPB/TIB board of directors is made up of county commission chairpersons from 10 metro counties, the DeKalb County CEO, the mayor of Atlanta, the Chairpersons of the Boards of MARTA, GDOT, and GRTA, the MARTA General Manager/CEO, and three appointees of the Governor of Georgia.

Implementation of Concept 3 will require not only funding, but also commitments from around the region to transit-supportive land use patterns.

A map of Concept 3 follows on the next page (Figure 43). Additional information regarding the regional assessment of transit needs as completed in 2008-2009 is available on-line at <http://tpb.ga.gov/>.

Figure 43: Concept 3 - Regional Transit Plan



Environmental Justice and Transportation Planning

Environmental Justice public policy includes a goal to ensure that harmful human health or environmental effects of government activities does not fall disproportionately upon those with low income and minority populations living and working with the community. The populations impacted may be African-American, American Indian, Asian, Hispanic, the elderly, children, or people with disabilities. Those impacts could come from air pollution, noise, safety issues, hazardous materials, limited access to jobs, services and other opportunities, deflated property values, business and/or home displacement, or disproportionate costs of transportation. The social impact could be on neighborhood cohesion and functioning as well as safety and aesthetics.

ARC emphasizes the importance of environmental justice in its transportation planning process. Title VI, Executive Order 12898 and Section 450 of TEA-21 requires that ARC's transportation plans and programs:

- Provide a fully inclusive public outreach program.
- Prevent disproportional impact to minority and low-income communities.
- Ensure that low-income and minority citizens fully share in the benefits of the region's transportation infrastructure.

ARC's Environmental Justice program is interwoven into the regional planning process. Considerable attention is directed toward ensuring the fair and equitable distribution of benefits and burdens combined with equal opportunity for citizens to help shape the substance of regional plans and policies. ARC's comprehensive approach emphasizes outreach to all segments of the community; an equitable allocation of resources; broad based community partnerships; and balanced planning impacts.

ARC has incorporated the Model Plan for Public Participation developed by the National Environmental Justice Advisory Council as a guide for encouraging public participation in all aspects of environmental decision-making and to maintain honesty and integrity in the process.

ARC has implemented several positive programs to further the goals of environmental justice planning:

- ARC's regional Access to Jobs Program.
- Establishment of an ARC liaison to African American, Hispanic and Asian-American communities.
- Structuring ARC's Public Involvement Plan using the Model Plan for Public Participation developed by the Public Participation and Accountability Subcommittee of the National Environmental Justice Council.
- Participation from many of Atlanta's environmental justice special interest groups on the Environmental Justice Planning Team.
- Investments in environmental justice communities through the Livable Centers Initiative, including \$2,000,000 in planning studies.

ARC's Access to Jobs Program created the first comprehensive regional job transportation plan to identify specific county-by-county transportation improvements that expand employment opportunities for minority populations, especially those with disabilities and low-incomes. In addition, ARC's liaison to African-American and Hispanic communities assists with the coordination of public involvement activities for transportation plans, develops and maintains relationships with these communities and coordinates environmental justice strategies. ARC is constantly researching new ways to encourage public participation in all aspects of environmental decision-making and to maintain honesty and integrity in the process.

Walking and Bicycling

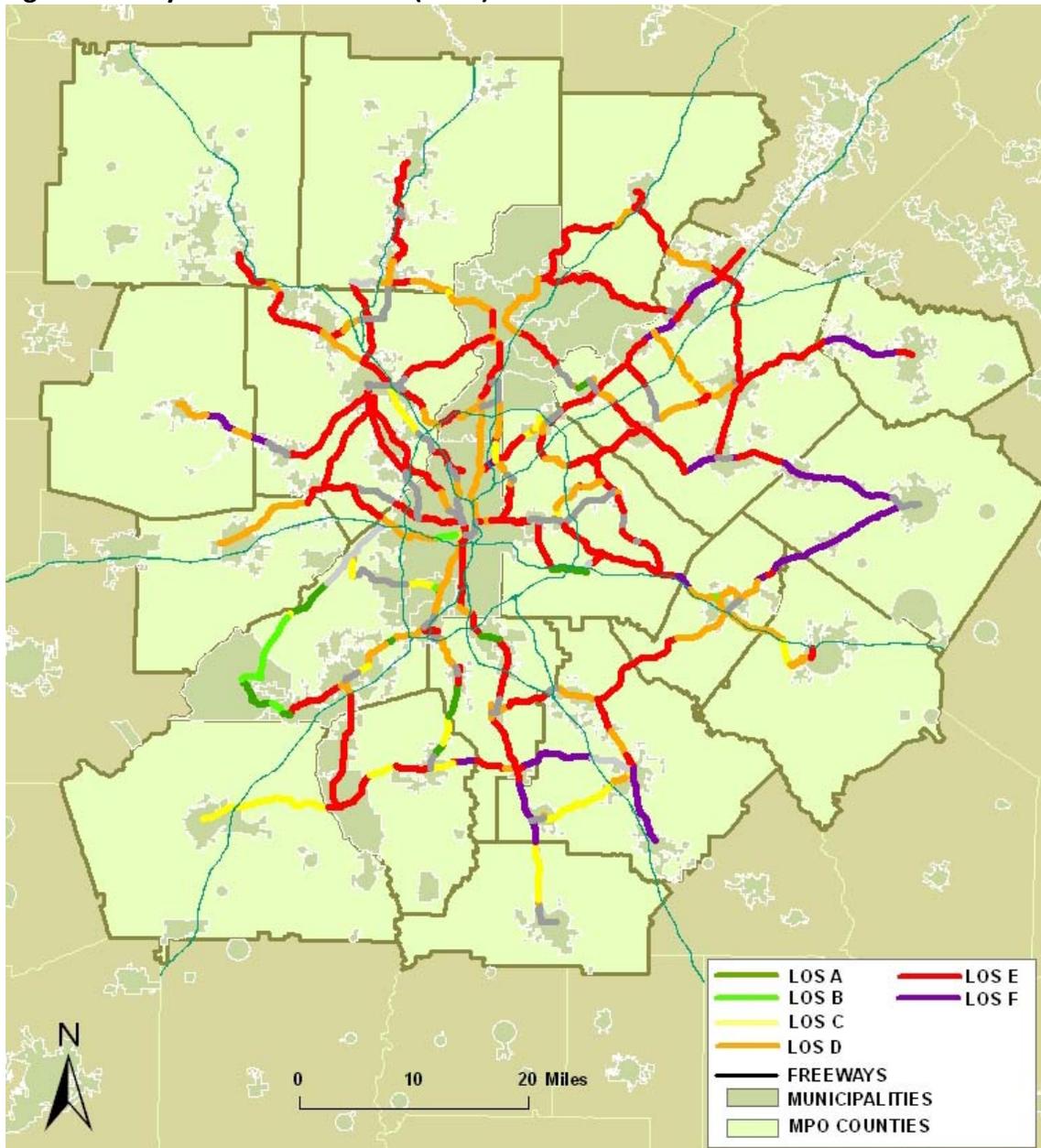
Bicycling and walking have become realistic modes of transportation in the Atlanta region as the region becomes more urban and traffic congestion becomes more severe. They also provide residents with an opportunity to reduce the percent of their household budget dedicated to transportation. While cyclists and pedestrians can use almost any regional transportation corridor, many facilities are not equipped or safe enough to support this mode of transportation. ARC has been promoting safe, functional, and regional bicycle and pedestrian planning since 1973 and continues to update its process to address new needs and trends.

A multi-modal transportation system includes facilities designed for all types of users, including bicycles. In Georgia, bicycles are considered vehicles and are therefore allowed to operate on nearly every roadway, with the exception of those routes on which bicycles are specifically prohibited such as interstate highways and limited-access freeways. Though bicycles are able to operate within and share the roadway with motorized vehicles, dedicated bicycle facilities are often provided to make bicycling safer and more comfortable.

The *2007 Atlanta Region Bicycle Transportation & Pedestrian Walkways Plan* identified a Bicycle Study Network made up of regionally significant roadways that serve as links between regionally significant nodes including Livable Centers Initiative (LCI) study sites, town centers, and activity centers. These roadways are significant to regional transportation needs and have a federal funding priority. Building on this effort ARC conducted the first regional bicycle facility inventory to begin establishing a dataset of where dedicated bicycle facilities are located throughout the region.

Figure 44 following page shows the performance of the existing roadway network in terms of accommodating bicycles (using Bicycle Level of Service).

Figure 44: Bicycle Level of Service (2007)



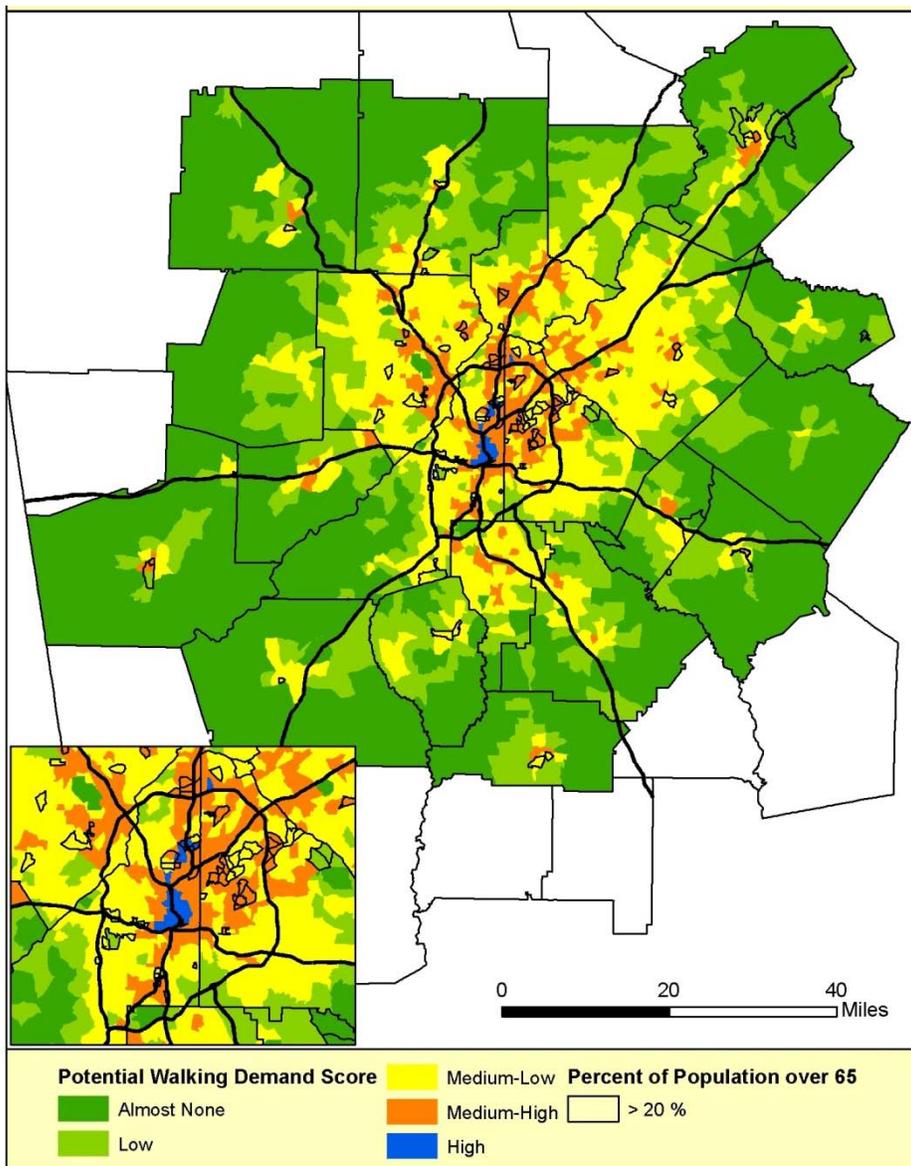
Source: ARC

Figure 45 below shows a measure developed by ARC to identify potential demand for walking trips. The map also specifically highlights areas that have a current concentration of older adults (only 7% live in High potential demand areas). The Potential Walking Demand Index measure evaluates the latent demand for pedestrian trips throughout the region based on local proximity to specific variables that are likely to attract or generate pedestrian trips. The evaluated variables include service and retail employment, the number of households and the

number of street intersections within a half-mile radius of each Traffic Analysis Zone (TAZ) center.

Areas that score high have a large number of each of these variables and can be considered mixed-use communities with a high degree of attractiveness to pedestrian trips. The best scoring areas are in the highest density locations of the region, as well as in outlying town and activity centers. Currently, only 20% of the region's population lives in areas that score medium-high to high. These same areas account for over 50% of the region's retail and service employment and occupy less than 5% of the region's surface area. Consequently, walking is not a viable option for travel for most of the region's inhabitants.

Figure 45: Potential Walking Demand Index – 2010 (Including Concentrations of Older Adults)

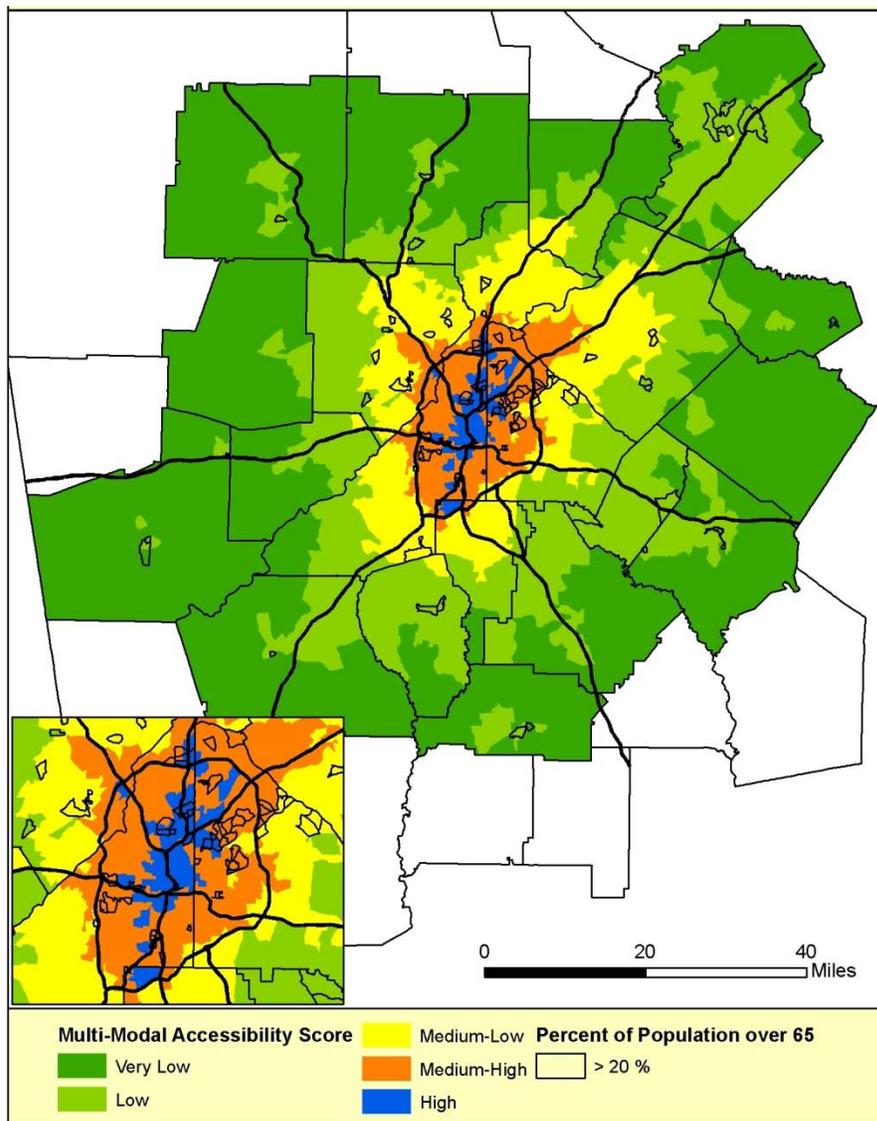


Source: ARC

The Potential Walking Demand Index does not take into account the existence or quality of pedestrian amenities, but it does highlight areas that have attributes that support pedestrian trips.

The region also has limited areas that have a degree of access to jobs using the three primary modes of travel (walking, transit and automobile). ARC has developed a multi-modal measure to identify areas that have a high degree of multi-modal accessibility based on travel times (15 minute walk, 30 minute drive or 45 transit trip). Figure 46 below shows the spatial pattern of how areas performed on this measure. As was shown in the previous map, Figure 46 also specifically highlights areas with existing concentrations of older adults. These areas likely represent places in the region that are in need of multi-modal environments due to existing residents that have limited travel options. Nearly 60% of the region’s population over 65 currently lives in High or Medium-High Access areas.

Figure 46: Multi-Modal Access to Employment

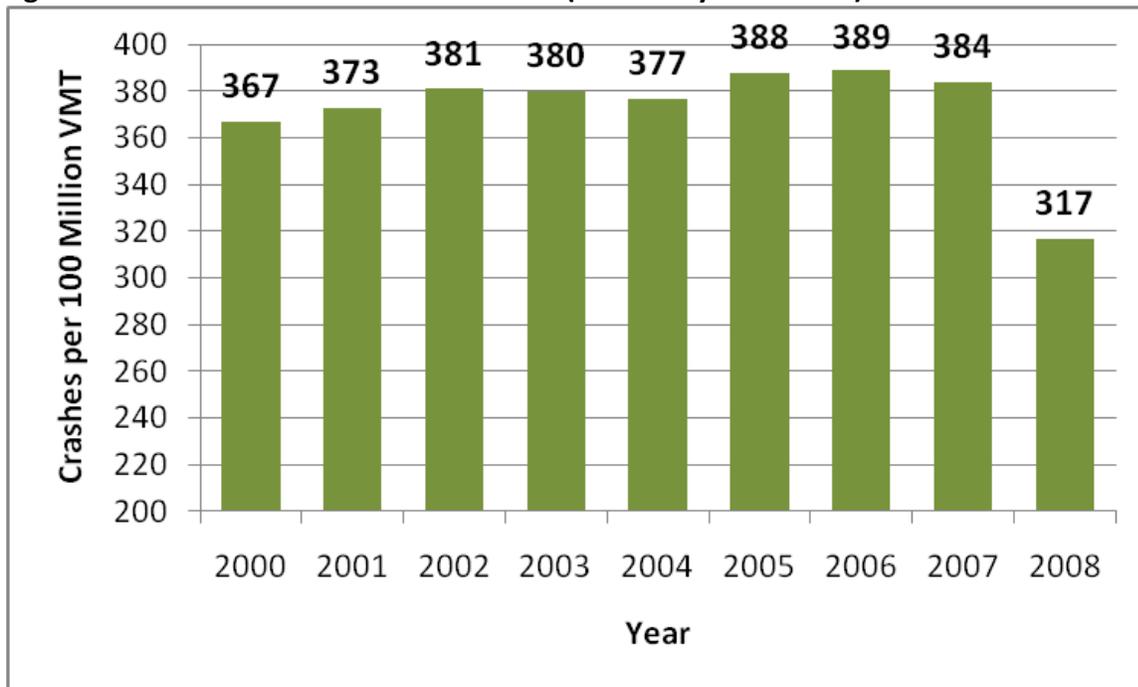


Source: ARC

Safety

As the Atlanta region continues to grow, additional vehicle trips translate into increased automobile crashes. This had been the story for the Atlanta region from 2000 to 2005, but since 2005, crash data shows a decrease for total number of crashes, fatalities, and injuries for both the Region and the State. These totals are now lower than 2000 crash numbers. The vehicle crash, fatality and injury rates are also decreasing. Figure 47 below displays the decrease in crash rate per 100 million vehicle miles traveled (VMT) for the 18-county Atlanta MPO area. Decrease in the growth of VMT for the region and throughout the State within recent years is considered a main reason for this decrease in highway incidents.

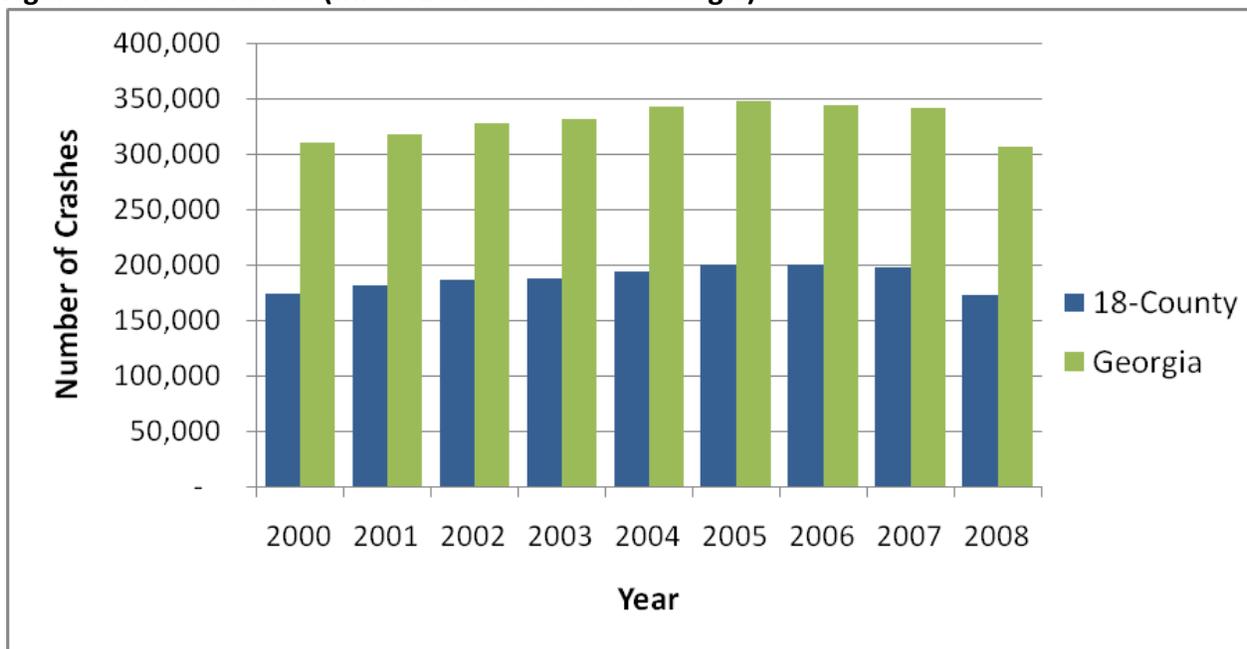
Figure 47: Crash Rate Per 100 Million VMT (18-County MPO Area)



During the past three years, total vehicle crashes in the Atlanta region have decreased more than 13%, from 200,500 crashes in 2005 to 173,420 in 2008. There was also a decrease in total fatalities from motor vehicle crashes for both the Region by 20% (from 655 in 2005 to 521 in 2008).

The 2008 pedestrian crash rate for the region was 26 crashes per 100,000 population, slightly higher than the state pedestrian crash rate of 23 crashes per 100,000 population. The bicycle crash rate for the region was six per 100,000 population, slightly lower than the state rate at eight crashes per 100,000 population. As shown in Figure 48, the 2008 region pedestrian and bicycle crashes rates are lower than the 2000 levels.

Figure 48: Total Crashes (MPO Area and State of Georgia)



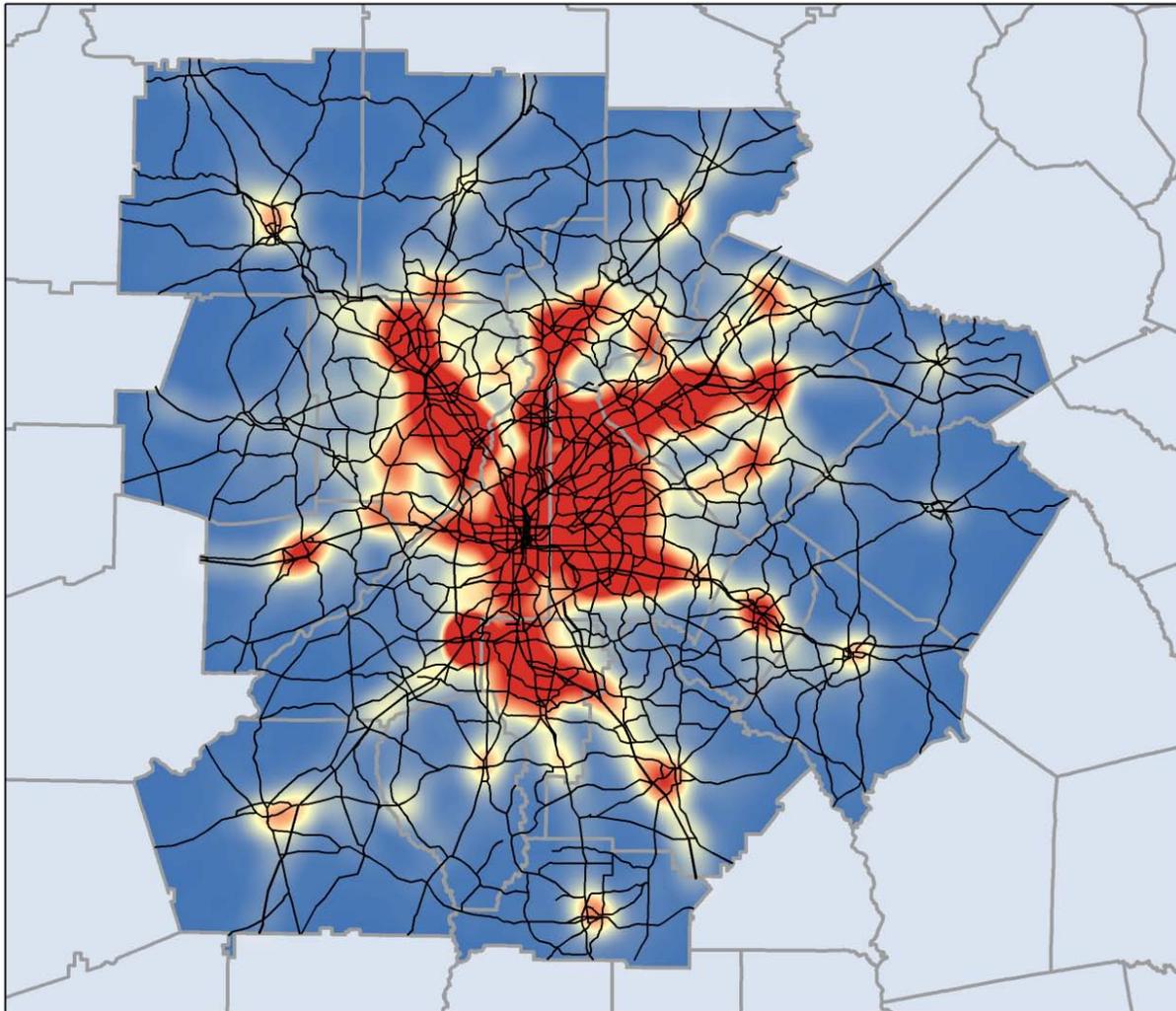
SAFETEA-LU (August 2005) requires that each State DOT develop a Strategic Highway Safety Plan (SHSP) to identify and reduce the number of highway fatalities and serious injuries on all public roads. To best leverage the statewide safety planning initiatives and to meet the specific safety needs of the 18-counties in the Atlanta region, ARC actively participates in the development of the SHSP and subsequent safety task teams.

Through the collaborative efforts with Federal, State, and local safety stakeholders, the SHSP establishes goals and objectives for improving highway safety and identifies key emphasis areas for priority implementations. In relation to this process, ARC will seek more expertise to assess the region's safety needs more accurately and more comprehensively. For each jurisdiction in the region, ARC will develop a safety profile, including key crash rates, and mapping of hot spot locations for different types of crashes such as pedestrian and commercial vehicle crashes. ARC will also use the state-wide goals and objectives identified in the SHSP as guidance to establish its own benchmarks based on various criteria. These benchmarks will then be used in *Plan 2040* project evaluations and selections.

ARC will continue to analyze the crash rates on severely congested corridors as identified through the CMP network. ARC will also use GDOT's research and the Critical Analysis Reporting Environment (CARE) software to develop benchmarks for crash rates based on functional classification, identify corridors and intersections with high crash rates, and establish a methodology for cost benefit evaluations. ARC's research and analysis in this discipline may lead to the identification of more advanced safety policies for consideration in *Plan 2040*.

Figure 49 on the following page shows areas in the region that experience a high share of the region's crashes (shown as crash density).

Figure 49: Crash Densities (2005 - 2008)



Pedestrian crashes accounted for 0.7 percent and bicycle crashes accounted for 0.2 percent of the Atlanta 18-county MPO area's total number of crashes in 2008. The 2008 pedestrian crash rate for the region was 26 crashes per 100,000 population, slightly higher than the state pedestrian crash rate of 23 crashes per 100,000 population. The bicycle crash rate for the region was six per 100,000 population, slightly lower than the state rate at eight crashes per 100,000 population. The 2008 region pedestrian and bicycle crashes rates are lower than the 2000 levels.

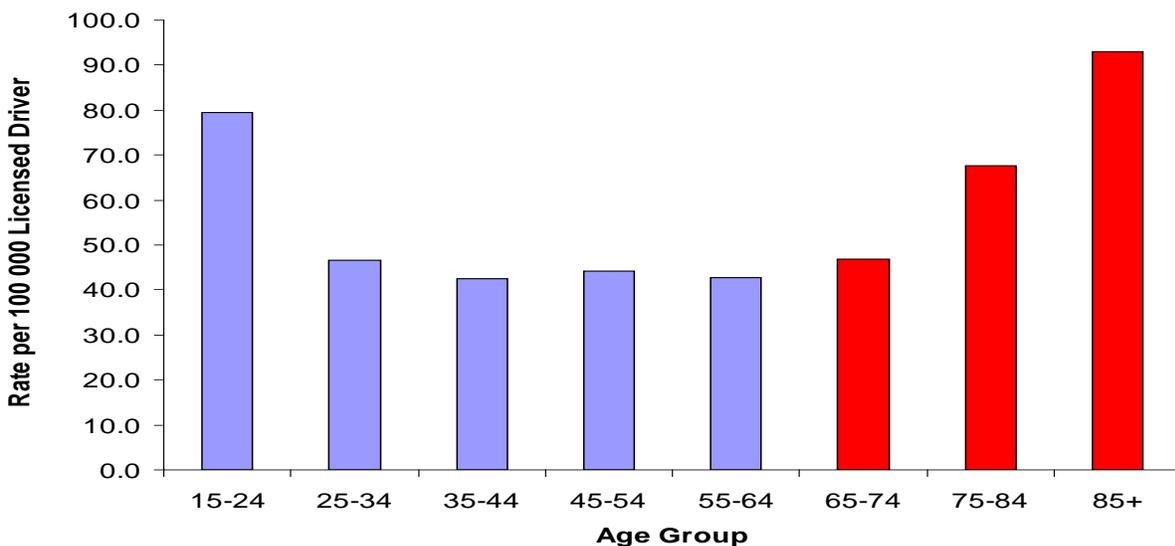
In 2007, Georgia's population aged 65 and over represented 12.1 percent of the state's total number of licensed drivers and 10 percent of the total population. The growth in the older adult population, particularly the growth in the 85+ segment of the population, will dramatically increase the number and percentage of older drivers on Georgia's roads. Nationally, one out of every four licensed drivers will be aged 65 and older by 2030. The personal vehicle is the dominant mode of transportation for older adults. When faced with the

prospect of no longer being able to drive, many older drivers are reluctant to give up the keys, fearing loss of mobility and independence.

The natural process of aging leads to a decline in physical, cognitive, and sensory capabilities affecting a person’s ability to drive. Older individuals tend to be relatively safe drivers, with lower crash rates per licensed driver. They are less inclined to engage in risky behavior while driving.

Statistically, however, older drivers have an excessively high rate of motor vehicle fatalities, on a per vehicle mile traveled (VMT) basis, compared to other adult age groups. Drivers 74 years and up are at greater risk of suffering a fatal injury in the event of a crash than their younger counterparts. As shown in Figure 50, by age 85+, older drivers have crash hospitalization rates in excess of teenage and younger drivers.

Figure 50: Georgia Motor-Vehicle Driver Hospitalization Rate



Source: Georgia State Highway Safety Plan, Older Driver Task Force Recommendations Report, 2007

Older Adults and Travel Safety

Pedestrian fatalities and injuries related to pedestrian-vehicle crashes remain significant in Georgia, especially among older adults aged 65+ years who live in urban areas. In 2007, 60 percent of pedestrian fatalities among older adults in the U.S. occurred at non-intersection locations.

Older adults, particularly those in suburban or rural areas, are subject to driving longer distances on higher-risk road conditions to access health and community services (University of Georgia Institute of Gerontology, 2005). The lack of public transportation in the Atlanta region limits the transportation options for older adults. *Plan 2040* must consider how to better coordinate land use and transportation planning to promote more age-friendly communities and provide transportation options, including transit services, for Georgia’s diverse population.

Several potential actions are recommended for further consideration in the *Plan 2040* process:

- Continue to support for the Georgia Older Driver Safety Program.
- Integrate the Federal Highway Administration’s guidelines for older driver road design into state standards.
- Support the recommendations of the Georgia Older Driver Task Force (ODTF).
- Enforce the integration of ADA standards into the pedestrian environment.

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Freight Needs in the Atlanta Region

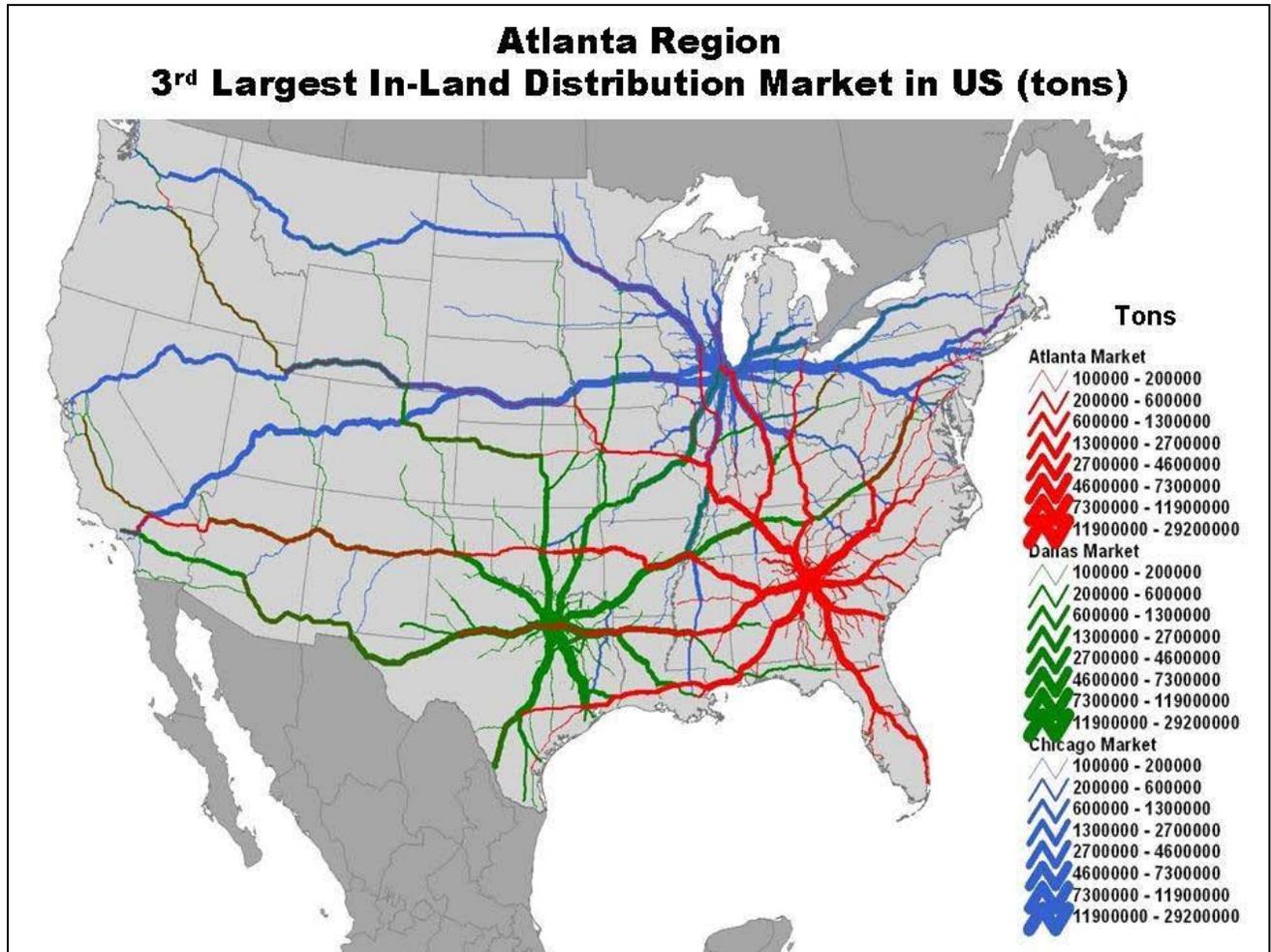
The Atlanta region plays a strategic role in the nation’s freight system. Identifying and programming effective improvements to accommodate increasing freight, goods, and services movement in the Atlanta area is critical to the economic vitality and quality of life of the region.

The region’s transportation system must grow to meet the challenges of existing traffic volumes and the growing amount of volume and trips associated with the region’s key role in the national freight system.

The highway freight networks for the three largest inland distribution cities in the U.S. are illustrated in Figure 51. Note that Chicago and Dallas (as well as Atlanta) all have large local

markets. The total regional freight volumes being transported by truck is approximately 84 percent. Truck traffic is primarily focused on the interstate network.

Figure 51: National Freight Patterns



Source: ARC, 2007

Because of the heavy reliance on truck transportation, the highway system is instrumental in the efficient movement of freight in the Atlanta region. Figure 52 below lists the top 10 destination ZIP codes in Metro Atlanta for trucked freight in 2008, which together are responsible for 29 percent of trucked freight delivered to destinations within the metro area. Many of these locations are at or near intermodal yards serving a broad range of destinations

Figure 52: Top Ten Freight Truck Destinations in the Atlanta Region

TOP TEN FREIGHT TRUCK DESTINATIONS IN METRO ATLANTA 2008 (from origins outside the region)		
Destination (by ZIP)	Tons	Vehicles
Union City - 30291	18,615,787	786,559
Atlanta - 30318	13,458,445	862,755
Alpharetta - 30004	10,857,937	551,215
Alpharetta - 30022	10,132,373	492,037
Atlanta - 30349	8,357,302	488,296
Roswell - 30076	7,402,078	477,775
Atlanta - 30331	7,183,632	357,926
Mableton - 30126	6,645,738	292,097
Atlanta - 30344	6,135,254	369,484
Roswell - 30075	6,133,835	318,942

Source: Global Insights

Six percent of the nation’s rail tonnage today is based in or carried through the region, including 11 percent of U.S. intermodal volume. Rail comprises 13 percent of Atlanta’s total freight tonnage and plays an important role in essential economic sectors such as the supply of coal to electric utilities, and the commerce associated with burgeoning international trade. Figure 52 on the following page lists the top 10 destination ZIP codes in Metro Atlanta for rail freight arriving at destination points within the metro area. Most of these destinations are related to heavy users of raw materials, such as coal-burning Georgia Power plant in Cartersville.

There are two primary Class I railroads, along with three small railways, operating in the region including CSX Transportation and Norfolk Southern. The Class I systems stretch generally from the Atlantic Coast to the Mississippi River, and from the Gulf Coast to the Canadian Border.

Figure 53: Top Ten Rail Destinations in the Atlanta Region

TOP TEN FREIGHT RAIL DESTINATIONS IN METRO ATLANTA 2008 (from origins outside the region)		
Destination (by ZIP)	Tons	Vehicles
Cartersville - 30120	10,509,967	96,783
Whitesburg - 30185	4,997,700	42,661
Newnan - 30263	2,575,351	22,375
Smyrna - 30080	1,389,248	12,424
Atlanta - 30354	1,113,968	30,804
Atlanta - 30340	1,070,602	19,443
Flowery Branch - 30542	1,067,021	11,098
Atlanta - 30316	777,536	7,975
Gainesville - 30501	658,352	6,967
Winder - 30680	561,037	5,894

Source: Global Insights

The Atlanta region has experienced prosperity due to the world’s busiest passenger airport, Hartsfield-Jackson Atlanta International Airport (H-JAIA). In 2008, 90,039,280 passengers traveled through H-JAIA). Air cargo activity (includes domestic and international freight, express shipping, and mail) within the Atlanta region is dominated by Atlanta-Hartsfield Jackson International Airport (H-JAIA) as well. In 2008, HJAIA handled 722,443 tons of air cargo, which is 9 percent less activity than in 2007—reflecting the current global economic downturn.

Theme 3: Governing Collaboratively to Address Funding Issues and Effectively Implement Regional Plans

ARC Planning Areas

ARC is the regional planning and intergovernmental coordination agency for the Atlanta metropolitan area. For 60 years, ARC has helped to focus the region's leadership, attention, and resources on key issues of regional consequence such as aging services, governmental services, leadership development, research and mapping, workforce development, environmental planning, land use planning, and mobility and air quality issues.

Cooperation among local governments in the Atlanta region is a long-standing tradition. ARC and its predecessor agencies have coordinated the planning efforts in the region since 1947, when the first publicly-supported, multi-county planning agency in the United States was created. At that time, the Metropolitan Planning Commission (MPC) served DeKalb and Fulton counties and the City of Atlanta. Since then, ARC membership has grown to its current size of 10 counties and 63 municipalities. The Atlanta Regional Commission Board is composed of officials from political subdivisions and private citizens within the region. Thirty-nine members comprise the ARC Board - 23 local elected officials, 15 private citizens and a representative of the Georgia Department of Community Affairs.

ARC's work program includes many interrelated issues, but in many instances the planning boundaries within which we plan are different.

ARC serves multiple roles in the regional planning arena, under state and federal laws, and these roles cover different geographies as well. ARC is fortunate to be tasked with managing multiple issues around the region in one agency. This affords ARC the opportunity to offer programs and services that reflect strong integration among many of these issues.

Atlanta Region Workforce Board (7-county planning area) - provides workforce solutions for dislocated workers, low-income adults and youth, and for businesses seeking qualified applicants. Services include: training for in-demand occupations, business partnerships, youth programs, career resource centers, and rapid response activities to address plant closings and layoffs. Additionally, ARC is the grant recipient for multiple strategic industry sector initiatives, including the Bio Science Innovation Crescent and the Supply Chain Management sectors. These initiatives often include counties outside the 7 county ARWB area.

Area Agency on Aging (10-county planning area)- plans and provides comprehensive services to address the needs of the region's older population through a continuum of home and community-based services, including information and referral services, case management, transportation, in-home services, home-delivered meals, health and wellness programs, employment and volunteer opportunities, senior centers, caregiver support and legal services.

Regional Commission (10-county planning area) – assisting local governments in fulfilling the state comprehensive planning requirements, including reviewing comprehensive plans, solid waste plans, and capital improvement elements; reviewing and determining compliance with state and regional goals for developments of regional impact; preparing a regional land use plan with associated maps and policies.

Metropolitan Area Planning and Development Commission (10-county planning area) – established by state law to coordinate planning and development within each area of the state having a population of more than 1,000,000 according to the United States decennial census. This law designates the MAPDC also as the Regional Commission. For purposes of this intergovernmental coordination discussion, the role of the MAPDC is included in references to the Regional Commission roles.

Metropolitan North Georgia Water Planning District (15-county planning area) – created to establish policy, create plans and promote intergovernmental coordination of all water issues in the District from a regional perspective, with a primary purpose to develop regional and watershed-specific plans for stormwater management, waste-water treatment, water supply, water conservation, and the general protection of water quality. ARC provides planning staff to the District under a Memorandum of Agreement between ARC and the District.

Metropolitan Planning Organization (18-county planning area) - charged with developing regional plans and policies to enhance mobility, reduce congestion and meet air quality standards through activities such as modeling, forecasts, and preparing short and long range transportation plans.

Ozone Non-Attainment Area – 8 hour Standard (20-county planning area) – In late 2003, a 20-county Atlanta nonattainment area for ozone under the 8-hour standard was designated which includes the 13-county area in the 1 hour area plus Barrow, Bartow, Carroll, Hall, Newton, Spalding and Walton Counties. ARC must perform required technical work, including long-range forecasts and emissions modeling to meet federal conformity requirements.

Particulate Matter (PM 2.5) Non-Attainment Area (20-county planning area + parts of two counties) - In 2004, an Atlanta nonattainment area for particulate matter was designated. This area includes the 20 counties in the 8-hour ozone area plus small areas of Heard and Putnam counties. ARC must work with state, federal and adjacent MPOs to accomplish technical processes that meet federal conformity requirements.

In carrying out the roles described above, ARC partners with numerous organizations at the federal, state, regional and local level. In each case there are a variety of formal and informal coordination mechanisms to guide the relationship between organizations. The table below provides a snapshot (but not an exhaustive list) of partners ARC coordinates with while performing its various activities.

Figure 54: ARC Planning and Coordination Partners

Local & Regional Organizations	RC	MPO/AQ	AAA	MNGWPD	ARWB
Cities and Counties	X	X	X	X	X
MARTA	X	X	X		
Gainesville-Hall MPO		X			
Adjacent Regional Commissions	X	X		X	
Chambers of Commerce and Development Authorities	X				X
Universities, Colleges, Boards of Education	X	X			X
Non-Governmental Authorities and Organizations (such as CIDs, TMAs, CDCs, etc)	X	X	X	X	X
Non-Profit Groups (such as PEDS, Georgia Conservancy, Livable Communities Coalition, etc)	X	X	X	X	X
State Organizations	RC	MPO/AQ	AAA	MNGWPD	ARWB
Department of Community Affairs	X	X			
Department of Transportation	X	X			
Georgia Regional Transportation Authority	X	X			
Department of Natural Resources	X	X		X	
Governor’s Office of Workforce Development					X
Department of Human Services			X		
Department of Labor					X
Governor’s Office of Planning and Budget				X	
Georgia Environmental Facilities Authority				X	
Governor’s Office	X	X		X	
Federal Organizations	RC	MPO/AQ	AAA	MNGWPD	ARWB
US HUD	X		X		
US DOT FHWA	X	X			
US DOT FTA		X	X		
US EPA	X	X		X	
US DOL					X
US HHS			X		X
National Park Service	X				
Army Corps of Engineers				X	

Regional plan development and implementation includes working with partners above and many others to identify potential planning issues, but to also identify shared programs, policies and actions that can collectively address them. On many issues and programs ARC has a key role in implementation, particularly when ARC has been designated as the agency to carry out a federal or state plan or program. In other areas ARC may have an integral role in identifying issues and moving the region toward implementation, but many other parties are more directly linked to implementation activities, particularly the region’s local governments.

During development of the Regional Assessment stakeholders and regional leaders consistently stressed the need for closer coordination on many issues facing the region. In this region, as in most regions of the U.S, regional plans are implemented through various programs of

incentives, state or regional rules, agreements, technical assistance and collaboration among agencies and local governments.

Financial Capacity for Plan Implementation

The region is currently dealing with a distressed regional economy as the result of economic struggles at the national level. The recession which began in 2006 and likely lingering effects, particularly for local governments and any state or federal financial tools that are needed to support community services or expand infrastructure.

Primary elements of Atlanta region's transportation system were built with federal funding. A core component of the region's economy has been the ability of the public and private sectors to provide housing and jobs to existing and new residents. Federal transportation dollars have been critical to allow the growth machine to keep turning. Uncertainty with how the federal government will manage the national budget as strategies to invest federal dollars in local and regional infrastructure in coming years will substantially impact the Atlanta region.

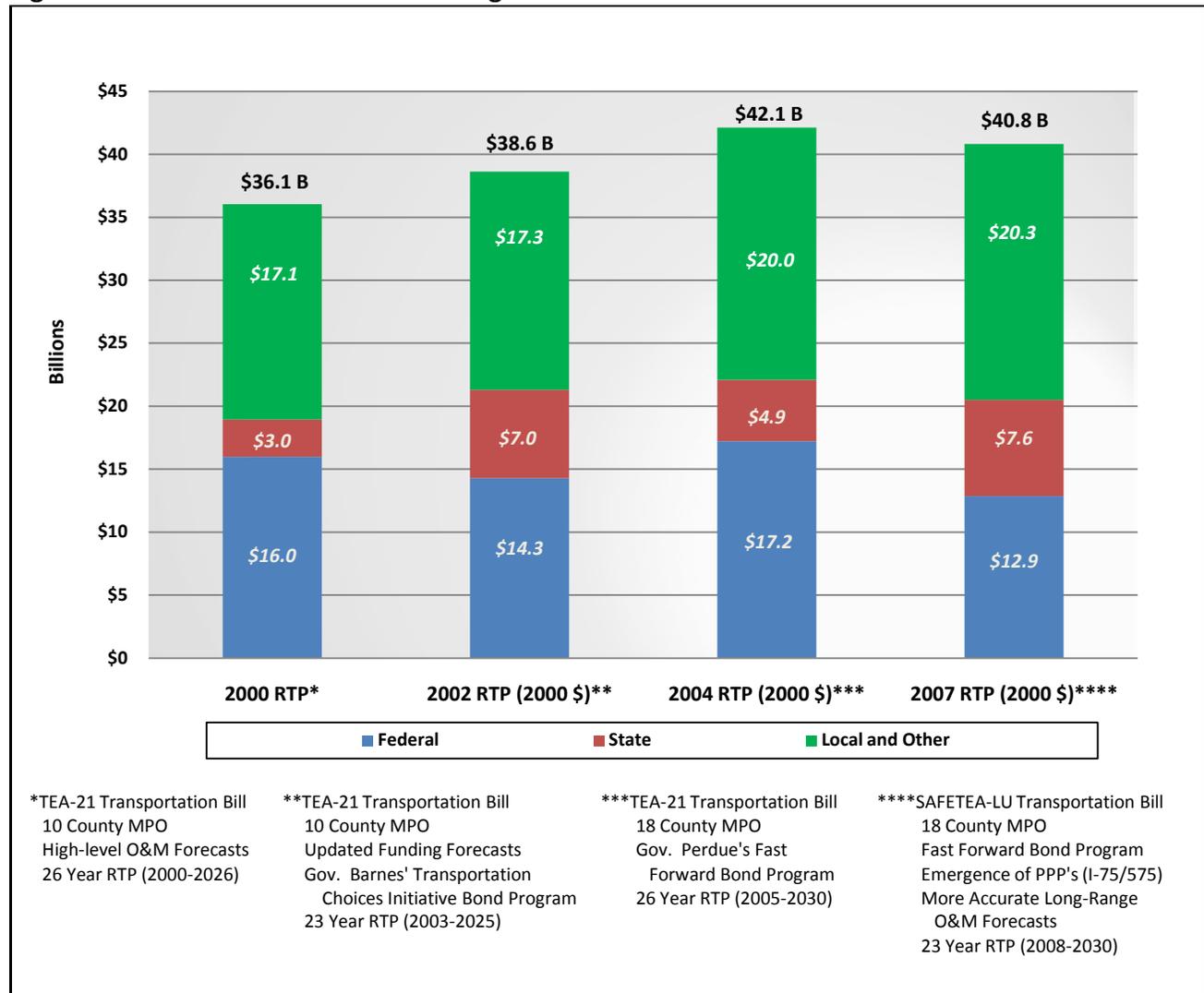
Over the past several years, ARC has tracked worsening trends impacting the financial capacity of the region to fully fund needed transportation plans and programs. These trends include a probable decline in future federal transportation funding for transit and roads, further decline in the purchasing power of state motor fuel taxes, and rapid inflation in the construction industry. Additionally, the economic downturn that began at year-end 2007 has contributed to significant decreases in the levels of funding for local governments—many of which depend on local SPLOSTs for capital infrastructure improvements—as well as for the State, which has been impacted by decreasing motor fuel sales tax revenue.

Local funding for transportation comes primarily from two sources: Special Purpose Local Option Sales Taxes (SPLOST or local imposts) and local general fund expenditures, which tend to fund operations and maintenance of existing infrastructure. In the Atlanta Region, local areas typically dedicate a portion of SPLOST revenues to fund transportation, with dedicated funds typically ranging from 30% to 100% of total SPLOST revenues. Primarily these revenues are used as a match to State and Federal funds for large capital projects. Many counties in the region have experienced a drop in SPLOST revenue of more than 10 percent between FY 2008 and FY 2009 (nominal values).

The rapid escalation in the prices of raw materials and construction, as well as the declining value of the US dollar, has compounded this problem. Fortunately, the full impacts of the economic downturn have been mitigated in part through the allocation of American Recovery and Reinvestment Act of 2009 (ARRA) funding by the Federal government to the Atlanta region. However, with the region facing \$110 billion of identified needs, based on recent plans and studies completed by the ARC, new initiatives that provide alternative funding sources and allocate funds to projects with optimal benefits for the Region will be essential for meeting our funding challenges.

As illustrated in the figure below, overall revenues for the region increased by 13 percent in the 2000-2007 period—from \$36.1 billion in the 2025 RTP to \$40.8 billion in the *Envision6* RTP (All dollar amounts in FY2000 dollars). However during this same period the ARC’s transportation planning area expanded from 10 counties to all or parts of 18 counties. Additionally the 20-county forecast area added nearly 850,000 residents.

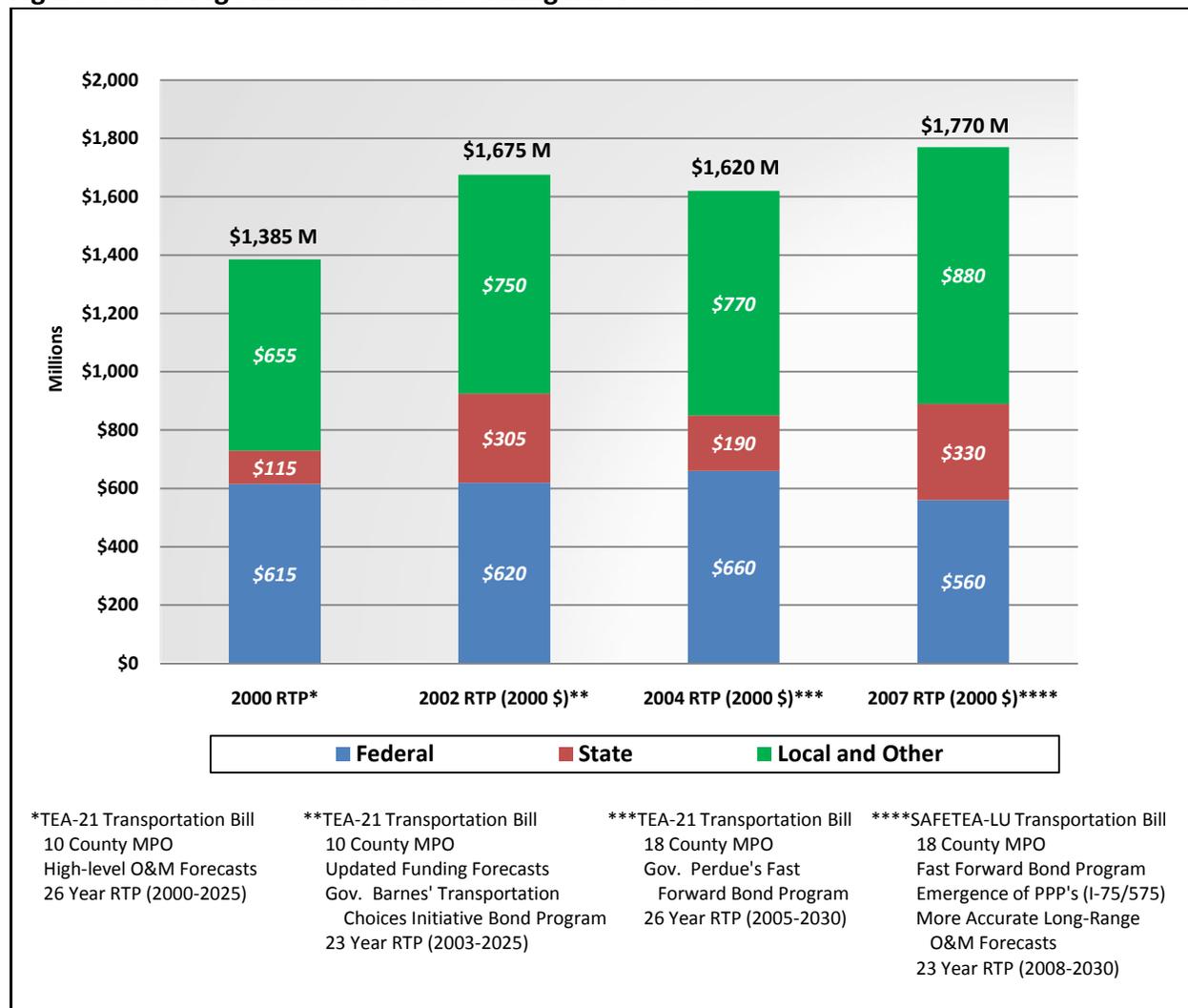
Figure 55: Total Annual Revenues during RTP Periods



Source: ARC, 2009

When considering the average annual revenues (held constant in year 2000 dollars) generated over the seven-year period for the transportation planning area, the troubling funding trends facing the region become even more apparent. Thus, the modest increase in overall revenues has proven inadequate to meet the ever-increasing needs generated by the rapid population growth and physical expansion of the region.

Figure 56: Average Annual Revenues during RTP Periods



Source: ARC, 2009

Federal funding for transportation is authorized through a transportation bill setting upper limits on funding for highways and transit facilities. Funding in the transportation bill comes from federal taxes on fuel, heavy-duty trucks, and, to a lesser extent, general funds. Tax revenues are tracked through the Highway Trust Fund (HTF) which is separated into two accounts – a highway account and a mass transit account. The highway account is by far the larger of the two accounts, comprising roughly 90% of the HTF.

Historically, the HTF has carried a positive net balance (or savings account) due to federal decisions to annually distribute or spend less than incoming tax revenues. However, the balance of the HTF is declining rapidly. In September 2008, the funding crisis facing the HTF became apparent to the public when the president approved the transfer of \$8 billion from the Congressional General Fund to the HTF in order to avoid insolvency.

According to State law, Federal and state transportation funds are required to be balanced by Congressional Districts—leading to balanced transportation spending based on population. However, despite the rapid growth and expansion of the ARC’s planning area, the level of Federal funding to the region has decreased over the past several years. In the 2000-2007 periods, average annual Federal funding for the Region has decreased 9% from \$615 million annually under the 2000 RTP to \$560 million under the 2007 RTP.

The State of Georgia collects two types of taxes on motor fuels to help fund transportation investments.

Motor Fuel Excise Tax: This is based on a fee or tax based on the volume (gallons) of fuel purchased. The amount of the excise tax on gasoline is 7.5 cents per gallon. The current rate has been used since 1971 and is not indexed for inflation. Since this tax is based solely on the volume of gasoline sold, revenues increase only with an increase in roadway usage. However improved engine technology and higher fuel efficiency of vehicles has counteracted the efficacy of this tax.

Prepaid Motor Fuel Sales Tax: Georgia also collects a 4-percent sales tax on the average retail price of fuel, referred to as a Prepaid State Tax. Three percent is dedicated to transportation and the remaining 1 percent is allocated to the State General Fund. Revenues from this tax rise and fall with the price of gasoline. However, frequent fluctuations in the revenue stream are minimized by how Georgia collects the sales tax. The Prepaid State Tax is collected based on a cent per gallon rate that is set using a weighted average indexed retail sales price for each type of fuel. The weighted indexed retail sales price is determined and published in the months of November and May in order that they are enacted at the beginning and mid-point of each fiscal year.

The State of Georgia also issues bonds to construct roads and transit facilities. Bond transportation funding is a valuable tool enabling needed facilities to be built sooner than the traditional pay as you go method. Bonds can be backed and transportation projects funded from a variety of anticipated state revenue sources including state motor fuel funds, federal transportation funds, toll revenue, or any combination of these sources. The most recent State bonding program for transportation investment was Governor Sonny Perdue’s Fast Forward Congestion Relief Program, which is a 6-year \$15.5 billion program enacted in 2004 to relieve congestion and spur economic growth through the acceleration of programmed projects.

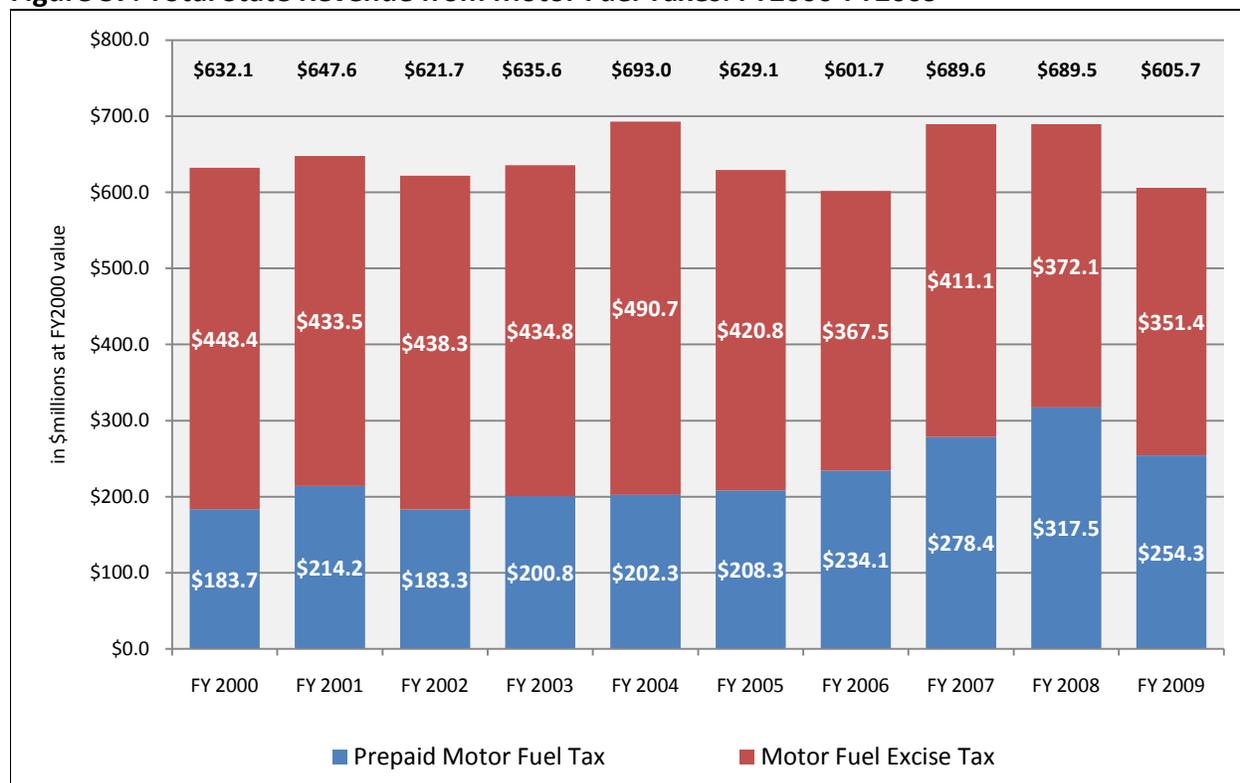
Average annual State funding for the Region has almost tripled since 2000—increasing from \$115 million annually under the 2000 RTP to \$330 million annually under the 2007 RTP. However, it is important to note that the large increase in State funding is the result of several large-scale projects that were to be financed through bond financing, but have been either canceled, reduced in scale, or delayed for several years into the future. Despite the history of the use of bonding for financing large-scale transportation projects, the State has signaled through its budgeting process that it will not fund large-scale capital projects through the issuance of bonds given the current financial climate and the subsequent massive cuts in the State budget.

Overall, motor fuel tax revenue remains the primary source of revenue for transportation on the State level through the Motor Fuel Excise Tax and the Prepaid Motor Fuel Sales Tax. As stated earlier, the Motor Fuel Excise Tax raised has remained at the rate of 7.5 cents/gallon since 1971 and is not indexed for inflation. Therefore, the real value of the revenue contributions from this funding source has declined sharply. Conversely, the real value of the Prepaid Motor Fuel Sales Tax portion of total revenue has steadily increased during the same period by 38.4 percent (an average annual rate of 3.7%)--given that it is based on a percentage rather than a flat rate. Rising fuel prices contributed to revenue generated from this source to peak in FY 2007; however revenue from the Prepaid Motor Fuel Sales Tax began to decline the following year as fuel prices dropped. The counteracting effects of the two fuel taxes have contributed to a steady level of total fuel tax revenue over the past ten years, despite the robust growth that the Atlanta Region—and the state of Georgia as a whole—has experienced over the decade.

Overall fuel tax revenue has remained steady over the past ten years, but significant growth in the region has created more demand than revenue.

The current economic recession and the resulting significant level of unemployment have contributed to a drop in total fuel tax revenue. As shown in the figure below, total fuel tax revenue collected by the State has dropped 12.2 percent between the fiscal years 2008 and 2009. After the economy recovers, it is expected that revenue generated from state motor fuel taxes will stabilize at modest levels as motor vehicle fuel efficiency improves.

Figure 57: Total State Revenue from Motor Fuel Taxes: FY2000-FY2009

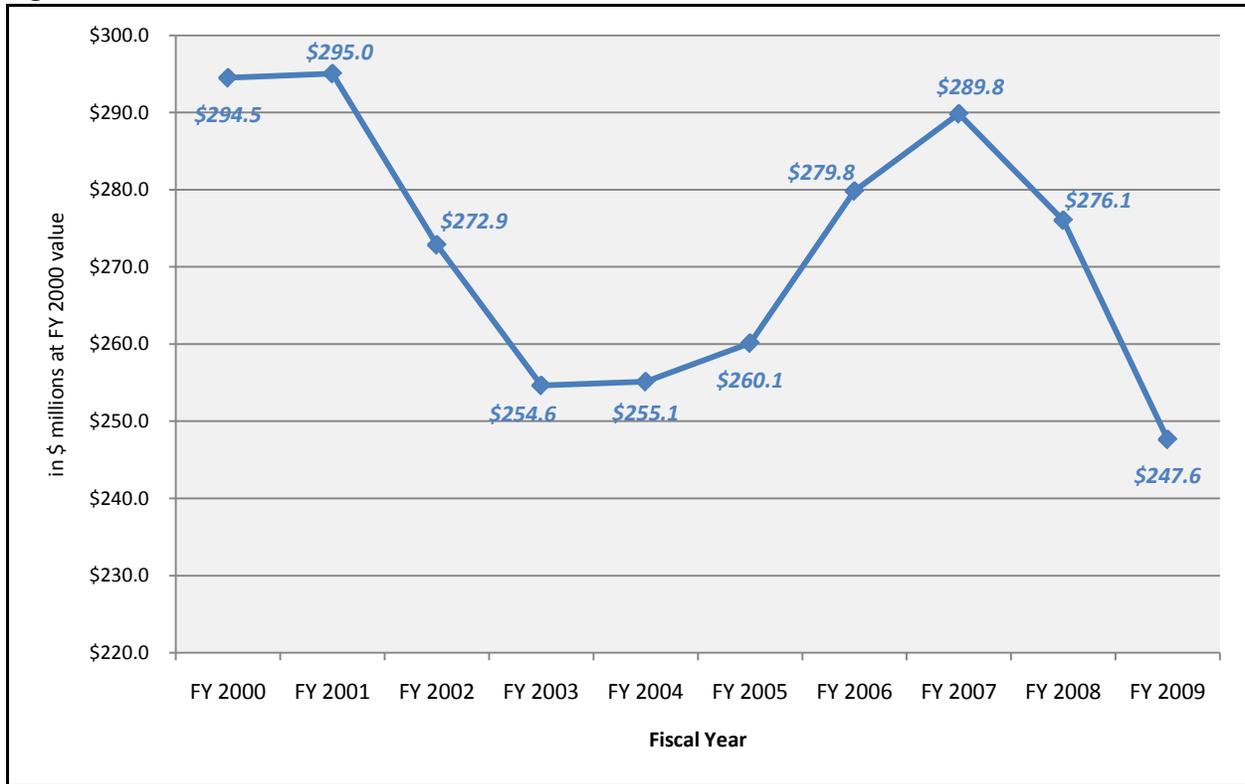


Sources: Georgia Department of Revenue/Bureau of Labor Statistics Consumer Price Index

Another significant source of funding regionally that is generated from a sales tax is the 1-percent sales tax levied by MARTA on Fulton County, DeKalb County, and the City of Atlanta. Looking at historical revenue trends, while holding the US dollar at its FY 2000 value, MARTA sales tax revenue decreased by 15.9 percent—from \$294.5 million in FY 2000 to \$247.6 million in FY 2008 (\$308.9 million in FY 2008 dollars). As shown below the effect of the recent economic downturn becomes evident in the sharp decrease in revenue by 14.5 percent or \$42.2 million between FY 2007 and FY 2009. It must be noted that MARTA is the only major public transit agency with a heavy-rail network that receives no financial support from the state level—thus adding further challenges to the agency’s decline in revenue.

In May 2009 the ARC Board approved stimulus funds to temporarily address MARTA’s budget shortfalls. This historic action required region-wide support for the region’s core transit provider. The money for MARTA was needed because the state legislature failed to pass a bill allowing the agency to shift a portion of its \$65 million capital-investment budget into its general operations fund. In return MARTA will expend capital funds for transit-oriented projects in communities in their service area. Nonetheless, sales tax revenue collected by MARTA, as well as by local and county governments through SPLOSTs, is expected to remain at modest levels until FY 2012 when consumer expenditures are forecasted to grow again.

Figure 58: MARTA Sales Tax Revenue: FY 2000-FY 2009



Sources: Georgia Department of Revenue/Bureau of Labor Statistics Consumer Price Index

With the recent and future growth rate for the Atlanta region, implementing needed transportation improvements is crucial to meeting the region's travel demands, but also improving quality of life and maintaining the region's economic competitiveness. In 2008 ARC released the sixth annual progress advancement report (*Breaking Ground*). The 2008 report found that of all projects scheduled for 2008, 63 percent were delayed to fiscal year 2009 or later, or were dropped entirely. The funding committed to project phases that were delayed is about \$2.4 billion. Over the six years that ARC has prepared the *Breaking Ground* report annual project advancement has rarely topped 50%. Key challenges to advancement include:

- Rising construction costs and the declining value of the US dollar*
- Lower funding obligation levels from the Federal government*
- The State's diminished bonding capacity and stagnant levels of motor fuel tax revenue in the face of a rapidly growing population*
- Declining sales tax receipts, through county SPLOSTs and the MARTA sales tax, as a result of the current economic downturn*

Regional challenges associated with project delivery and meeting the transportation needs of a growing urban area are anticipated to continue for the foreseeable future. The region and its planning partners must adopt and follow comprehensive strategies that can work to address these challenges in a variety of ways. Key strategies should at minimum include:

Identify new sources of funding—i.e. regional TSPLOST, the extra one-percent of the Prepaid Motor Fuel Sales Tax that is allocated towards the State General Fund, tolling/user fee, value capture

Institute a comprehensive and transparent project prioritization process that selects projects of the highest need and greatest benefit regionally

Further, integrate transportation planning with land use planning over the long range in order to encourage responsible and sustainable development patterns that minimize impacts on the regional transportation network.

Emphasizing Programs that Focus on Implementation

Implementation of key programs and strategies identified during the development of the *Plan 2040* Regional Agenda and RTP should build on past successes, while also recognizing the value of new approaches. ARC has many existing programs that have proved successful, and also is currently nurturing new ideas and concepts to help address growing issues. Two prime examples of this are the Livable Centers Initiative (LCI) program and the Lifelong Communities effort.

The LCI program has been nationally recognized and was consistently mentioned by regional leaders and stakeholders as a model for effective regional plan implementation through local actions. The LCI planning process, project goals and deliverables outlined in the LCI program provide an efficient, realistic and effective method for communities to undertake smart-growth planning and implementation. In return, this works to achieve more balanced regional growth by focusing new development away from undeveloped greenfields and into areas with existing infrastructure, reducing vehicle miles traveled and improving air quality.

Over the past 10 years, the LCI program has spurred cities, counties and communities of all sizes to undertake planning and create transportation-efficient land use strategies for activity

centers, town centers and corridors. The LCI program has been the primary regional program and resource during the past decade in the Atlanta region to spur redevelopment, foster new urban development and implement transit oriented development (TOD). To date, over \$141 million in planning and transportation funds have been allocated to support 102 distinct planning areas in the region.

The LCI program has proven enormously successful as the catalyst to major redevelopment efforts taking place in transit station areas and small and large urban centers and corridors. These investments have spurred new housing and development closer to jobs, and are helping to promote more efficient transportation nodes.

The 2009 LCI Implementation Report indicated that LCI communities are consistently capturing a growing share of the region's new development, especially office and commercial uses. Since the last Implementation Report in 2006, the amount of development concentrated into LCI areas compared with the 10-county region has doubled.

Connect homes, shops and offices by encouraging a diversity of mixed-income residential neighborhoods, employment and recreational choices at the center/corridor level.

Provide access to a range of travel modes including transit, roadways, walking and biking, while emphasizing the pedestrian.

Improve safety and a sense of place in order to increase livability and quality of life for all members of the community.

Develop an outreach process that promotes the involvement of all community stakeholders so that the LCI plans created reflect the goals and vision of the community.

All LCI communities are different and face different challenges and opportunities. As a result, LCI plans vary in response to these specific needs. But, as unique as each community is, all LCI plans demonstrate an understanding of the primary goals and policies of the program:

As the region transitions from a region dominated by age groups in their working years to a region with a larger share of older adults it will face numerous challenges to long term care services, but will also challenges related to the built environment. Not only will the region very quickly become home to more older adults, this growing senior population is like none before it. They expect and demand different things. As caregivers for their own parents, they have been well-educated about the challenges of growing older. They want to live in the communities they have helped develop and love and they expect to have the options and choices they desire.

Many of these communities however were not designed to support the needs of older adults. ARC's Lifelong Communities program recognizes that the social service challenges the region will face as the number of older adults doubles are made much more difficult by the design of the region's communities.

ARC is working with partners throughout the region to transform cities, counties and neighborhoods into Lifelong Communities. Lifelong Communities are places where individuals can live throughout their lifetime; they provide a full range of options to residents, insuring a high quality of life for all.

This tremendous shift will transform the region and challenge every aspect of community life: healthcare, transportation, employment, housing, recreation and leisure, economic development, infrastructure expansion, and education. In response to and because of these changes, the rapidly increasing older adult population offers the Atlanta region the opportunity to re-imagine what it means to live as a community improving the quality of life for all residents, no matter their age.

Plan 2040 will also need to build on the policies and programs initiated during the region's most recent long-range planning effort, *Envision6*. ARC's *Envision6* planning process resulted in a resolution approved by the ARC Board to adopt three key development guides to assist with on-going integration of land use and transportation plans and policies.

- *Envision6* Regional Development Plan Land Use Policies
- Atlanta Region Unified Growth Policy Map (UGPM)
- *Envision6* Regional Place and Development Matrix

Lifelong Communities work to achieve three major goals:

Promoting Housing and Transportation Options

Encouraging Healthy Lifestyles

Expanding Information and Access to Services

In addition, the *Envision6 Implementation Strategy* was developed to outline programs and activities that ARC would undertake during the 2006 to 2009 period to coordinate land use, transportation and related planning and forecasting associated with updates of the RTP. The staging of activities was determined by resources and programmed in the ARC Annual Work Program. The activities were supported by the ARC Board for implementation of land use components of *Envision6*. Individually and collectively these activities sought to further integrate issues of land use, transportation, water and associated regional and local plans.

The region must do more to strongly move towards patterns of growth which are more in line with the most progressive regions of the U.S. and world. The Atlanta region remains very dependent on the automobile for most transportation needs, thereby limiting travel choices to much of the region's population. The region's housing stock is very low density and could potentially become increasingly obsolete as demographic trends create smaller households and buyers seek new lifestyles choices.

The region's transportation choices and investments in the coming years must yield more strategic investments that enrich the existing region's footprint rather than expanding it.

Strategic Efforts to Minimize Demand

ARC's Transportation Demand Management Division (TDM) strives to relieve traffic congestion and improve air quality in the region by helping commuters find simple, reliable alternatives to driving alone. Record-high gas prices, fuel shortages and an increase in local efforts made 2008 one of the banner years for TDM efforts in the Atlanta region. Assistance is provided to those who live or work in the Atlanta MPO area, which includes some commuting from adjacent states.

TDM strategies are organized through the RideSmart program. RideSmart encourages and helps regional commuters find potential carpool, vanpool and bike partners, or transit schedules through the use of customized software. RideSmart also manages the funding for eleven employer services organizations (ESOs) in the region. These organizations provide comprehensive service for a defined geographic area and additional programs, such as vanpool subsidies, circulator shuttles, information sessions for both employers and employees and promotional events. These organizations work closely with employers to encourage formation of and participation in employer-supported commute options programs that can help with employee retention, and tardiness and absenteeism, as well as parking demand.

Support for TDM programs in the region is provided by federal Congestion Mitigation and Air Quality (CMAQ) funds distributed by the Georgia Department of Transportation. Approximately \$15 million in CMAQ funding was spent on TDM efforts in 2008, including ESO funding awards,

advertising and marketing, reporting and measurement and vanpool subsidies. The ESOs were awarded CMAQ funds primarily through the RideSmart program.

Plan 2040 – Next Steps: Plan Development in 2010

The *Plan 2040 Regional Assessment* will be provided to the ARC Board for their review in January 2010. The Assessment will be transmitted to the Department of Community Affairs for their review in February 2010. During 2010, ARC will engage stakeholders from around the region in an effort to ensure broad input and support for Plan 2040 goals, policy, transportation investments and programs is achieved. These activities will supplement the ARC existing committee structure and include opportunities for diverse public participation as the region develops the Plan 2040 Regional Agenda and Regional Transportation Plan. The following are the anticipated key milestones in Plan 2040 development in 2010.

Finalize Regionally Important Resources Map – Develop Regional Resource Plan

Currently ARC has developed a Draft Regionally Important Resources Map that was developed through public nomination and a regional evaluation of those nominated resources, as well as local, regional and state conservation priorities that have been identified in various plans and programs. In 2010 ARC will work with local governments from around the region to finalize resource boundaries and develop policies that support appropriate management practices.

Update Regional Goals, Objectives, and Performance Measures

Utilizing findings from the Plan 2040 Regional Assessment, statewide planning initiatives, and *Envision6*, ARC will work with local governments and regional stakeholders to develop plan-level goals, objectives, and performance measures focused around the “triple bottom line” theme of delivering a plan that maximizes sustainability through environmental, social, and economic strategies. Regional goals and objectives will be used to guide development of land use and transportation policy and project performance evaluation criteria. The performance measures will be used to measure overall performance of Plan 2040 in achieving the triple bottom line.

System Visions Development

An important component of the Regional Transportation Plan is identifying system-level visions. Employing regional goals and objectives, Unified Growth Policy Map, and project compilation work conducted in 2009 of projects included in approved local, regional, and state transportation planning studies, ARC will develop system visions. These system visions will be evaluated on their ability to meet regional goals using the regional performance measures. Outreach with local, regional, and state stakeholders will be critical in evaluating and finalizing the system visions.

2010 Update of the Unified Growth Policy Map (UGPM)

Beginning in April 2005, the process to develop the Unified Growth Policy Map (UGPM) and other *Envision6* Development Guides, and subsequent Regional Transportation Plan (RTP), has relied on extensive collaboration between ARC and our local, regional, state, and federal

planning partners. Maintenance of the UGPM requires extensive outreach and coordination with local governments in the region. ARC anticipates a significant update process to the UGPM in 2010 that will evaluate all aspects of the Development Guides including, but not limited to, product format and how regional growth and development policies across an increasingly complex region.

Project-Level Performance Evaluation

Using the regional goals, objectives, and performance measures as a foundation, project-level performance evaluation procedures will be drafted, tested, and vetted through local, regional, and state planning partners. These will include both quantitative and qualitative assessment tools for various project and program types. Once finalized, the project-level performance evaluation procedures will be used to develop a draft constrained Regional Transportation Plan.

Develop Draft Financially Constrained Recommendations

ARC will develop a draft financially constrained Regional Transportation Plan that includes policies, programs, and projects that will be pursued over the life of the plan to achieve regional the goals and vision. This draft Regional Transportation Plan will include extensive local, regional, state, and federal level stakeholder outreach and incorporate final programmed funding levels and financial forecasts.

Develop Local Performance Standards

A critical component of the implementation program of the Regional Agenda will be a new focus on establishing expectations for local government implementation of regionally planning programs and policies. ARC will be working with local government to establish Performance Standards that will recognize the varying size and capacity of local governments in the region. Meeting, or exceeding, the standards will ultimately be linked to Qualified Local Government (QLG) status as currently maintained by the Department of Community Affairs.

Regional Work Program and Implementation Strategies

ARC will identify specific activities that will be pursued over the first five years of the planning horizon to achieve the goals of the plan. These activities will include programs performed by ARC to assist local governments in their efforts to meet the Local Performance Standards. ARC will also develop communications, education and technical assistance programs that support plan implementation.

Atlanta Regional Commission



Regional Assessment Technical Appendices

DRAFT
January 27, 2010

Appendix: Areas Requiring Special Attention

Areas Requiring Special Attention

Georgia DCA rules require that ARC consider projected development patterns and other sources of information to evaluate the land use trends within the region to identify any areas “requiring special attention”. Georgia DCA describes these areas to include:

- Areas identified on the Regionally Important Resources map;
- Areas where significant natural or cultural resources are likely to be impacted by development;
- Areas where rapid development or change of land uses are likely to occur, especially where the pace of development has and/or may outpace the availability of community facilities and services, including transportation;
- Areas in need of redevelopment and/or significant improvements to aesthetics or attractiveness (including strip commercial corridors);
- Areas with significant infill development opportunities, including scattered vacant sites, large abandoned structures, or sites that may be environmentally contaminated;
- Areas of significant disinvestment, levels of poverty, and/or unemployment substantially higher than average levels for the region as a whole.

Using demographic information and existing known redevelopment locations, ARC has developed maps of the potential areas of special attention in the region. Identification of areas of special attention can aid ARC in determining priorities for regional action. While the Atlanta region is a large and diverse area, it is evident that specific and unique land use and infrastructure policies will be needed for diverse areas of the region. The following is a draft list of Areas Requiring Special Attention.

As ARC develops the Plan2040 Regional Agenda there will be significant outreach to local governments and stakeholders from around the region. This process is likely provide additional input as to the areas in the region that are likely to require additional programmatic attention.

Areas Requiring Special Attention-Poverty

What are these areas?

Throughout the region, there are areas of high concentrations of poverty among its residents. These areas have a variety of other issues that also impact those residents including, higher unemployment, education and access to quality education, and poor health. Research has also shown that poverty can negatively affect economic growth by rates of crime and social unrest¹. These factors limit the opportunities for these areas to break out of the poverty cycle and to become successful vibrant mixed income communities.

Where are these places?

Concentrations of poverty are not only located within the City of Atlanta but also areas in DeKalb, Cobb, Newton, Carroll, Clayton and Spalding Counties, and the Cities of Chamblee, Marietta, Griffin, East Point, College Park, Forest Park and Covington.

Why should these areas be a focus of Plan2040?

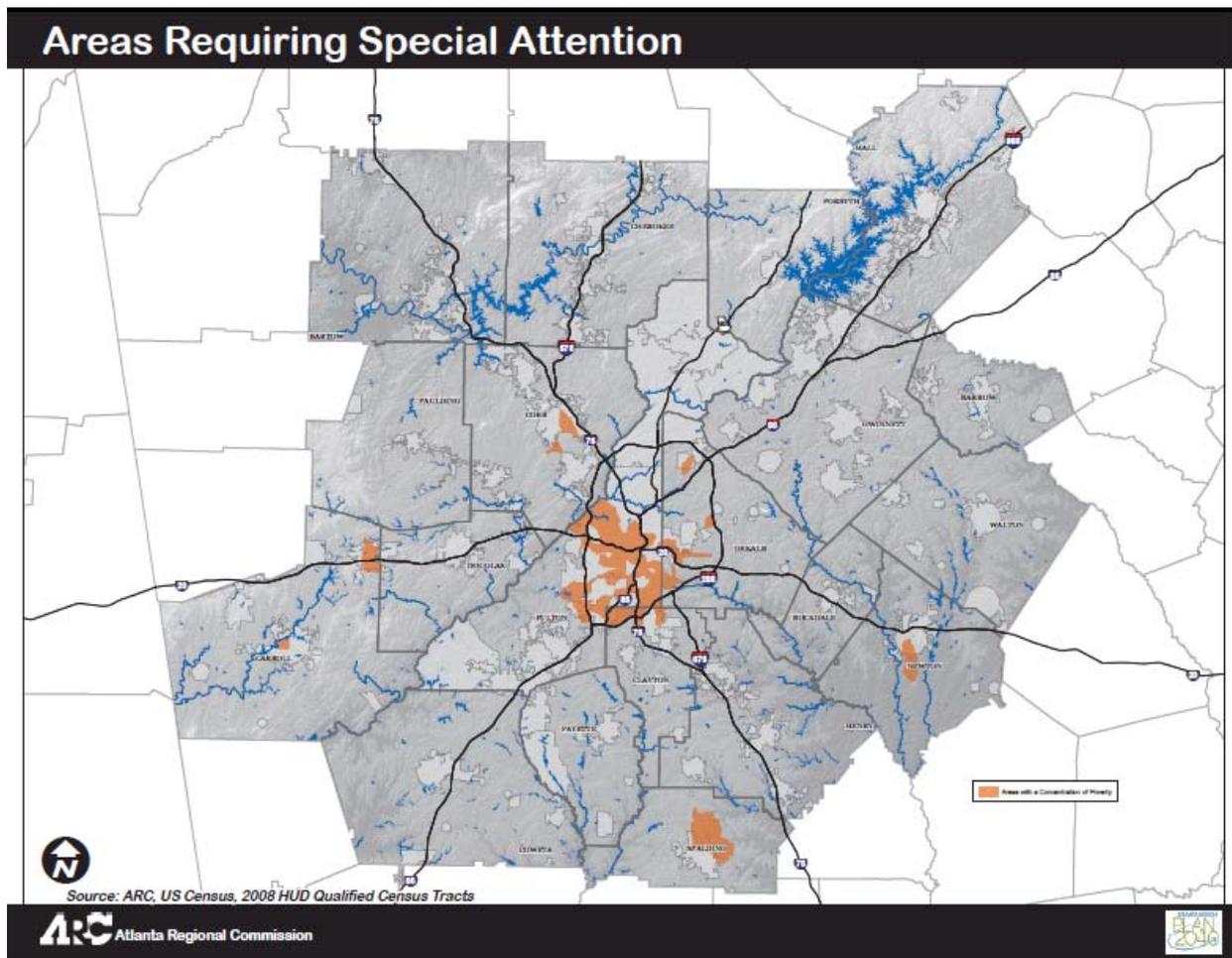
The concentrations of poverty in the region need special planning, policies, and tools to further limit their decline and to encourage reinvestment to break the poverty cycle to improve health, education, and employment opportunities.

How did we get the data?

The areas are identified as concentrations of poverty are census tracts where 50% of the households have an income less than 60% of the region's gross median household income. For 2009 the median family income is \$71,700. These areas are shown where over 50% of the households earn less than 43,029 a year.

¹ United States Government Accountability Office, POVERTY IN AMERICA
Economic Research Shows Adverse Impacts on Health Status and Other Social Conditions as well as the Economic Growth Rate, January 2007.

Figure 1: Areas Requiring Special Attention - Poverty



Areas Requiring Special Attention - Freight Areas

What are these areas?

The Atlanta Region is a major transportation and distribution center for the shipment of goods in the United States. Freight Areas are typically located at the intersection of major interstate routes, including the I-85 and I-75 highways at the compass corners bisected by I-20 running east/west, and also encompassing main lines of the Norfolk Southern and CSX railroads. The region is also home to Hartsfield-Jackson International Airport and proximal to major marine container ports, linking world commerce to southeastern markets and in many cases points beyond. The Atlanta region is just 250 miles from the Port of Savannah, and within 350 miles of the Ports of Charleston and Jacksonville. These factors make the Atlanta region home to one of the highest concentrations of workers in wholesale trade and transportation services in the country. It also brings planning challenges including preserving freight mobility and land use conflicts between different land uses.

Where are these places?

There are multiple different large industrial clusters within the Atlanta region. These clusters are near the Inman Yards in Northwest Atlanta, the Fulton Industrial Boulevard Area, adjacent to Hartsfield-Jackson International Airport, the Peachtree Corners area within Gwinnett County, and the GA 155 interchange within Henry County. Many other areas have a growing number of freight related uses.

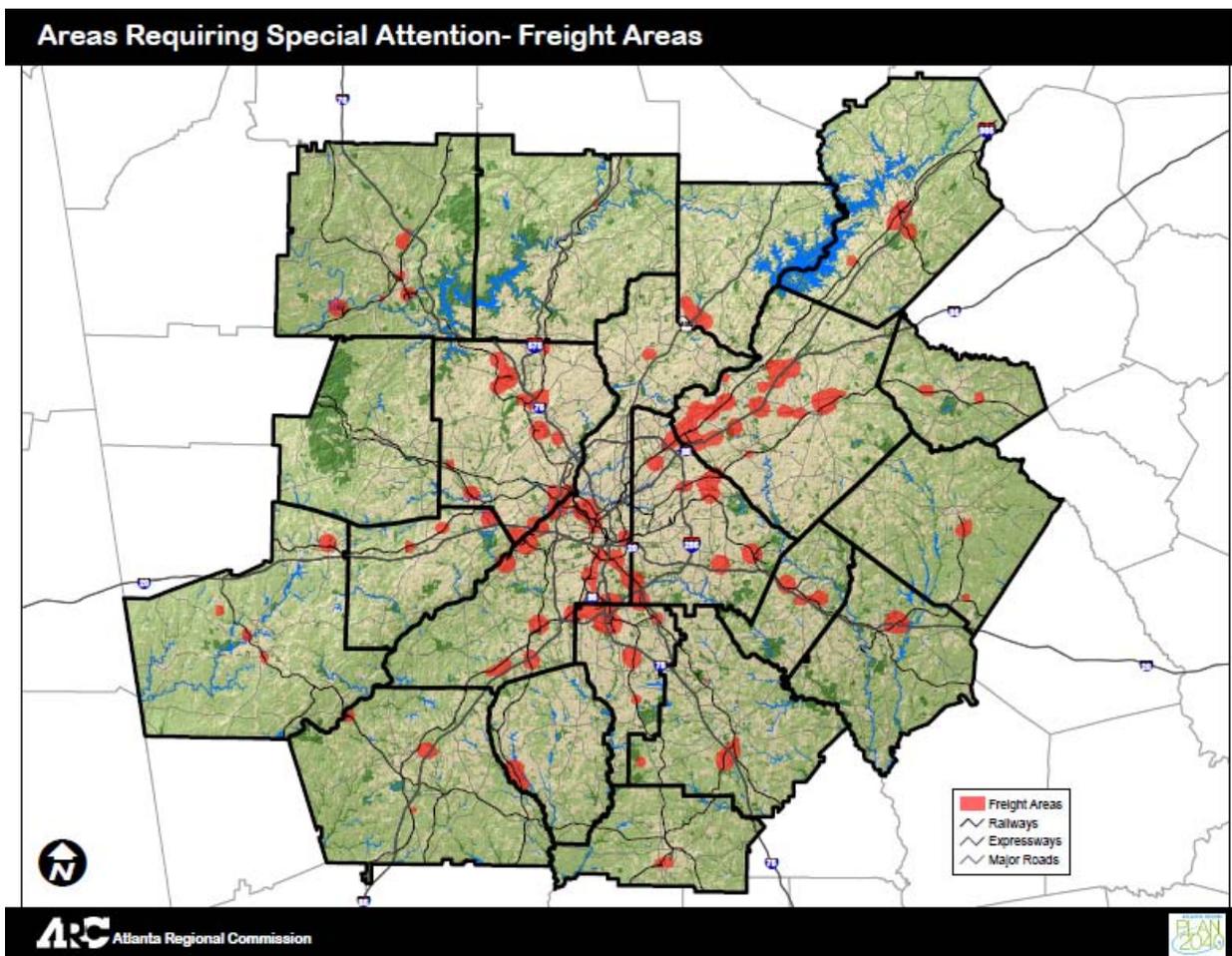
Why should these areas be a focus of Plan2040?

Freight and logistics employment is one of the largest regional sectors of employment in the Atlanta region. While critical to the regional economy the operation of these facilities can create challenges in providing regional mobility, as well as local land use conflicts.

How did we get the data?

Freight Areas are defined as concentrations of Industrial, Transportation Communications Utilities, Industrial/Commercial Complexes as defined by the 2007 LandPro coverage developed by ARC.

Figure 2: Areas Requiring Special Attention – Freight Areas



Areas Requiring Special Attention - Activity Centers

What are these areas?

Activity Centers are the major employment and retail centers of the region. Not only are they regional centers but they are also defined places within the region that have their own unique identity. These areas identified make up about 1.45% of the total region's land area but contain over 30% of the region's total jobs. Because of the high concentration of jobs these areas can have higher levels of congestion but they can also support transportation alternatives. These areas can support infill development of residential and new commercial development.

Where are these places?

The majority of the activity centers are located along interstates or limited access highways. Regional malls and shopping centers are also included, however some malls are slowly becoming obsolete and they can be redeveloped. With the exception of Hartsfield-Jackson International Airport all of the region's largest Activity Centers are located north of I-20.

Why should these areas be a focus of Plan2040?

Activity Centers are key pieces in the land use transportation connection because of their ability to support transportation alternatives, and potentially higher density housing, though many are currently concentrations of employment without a significant housing within the center.

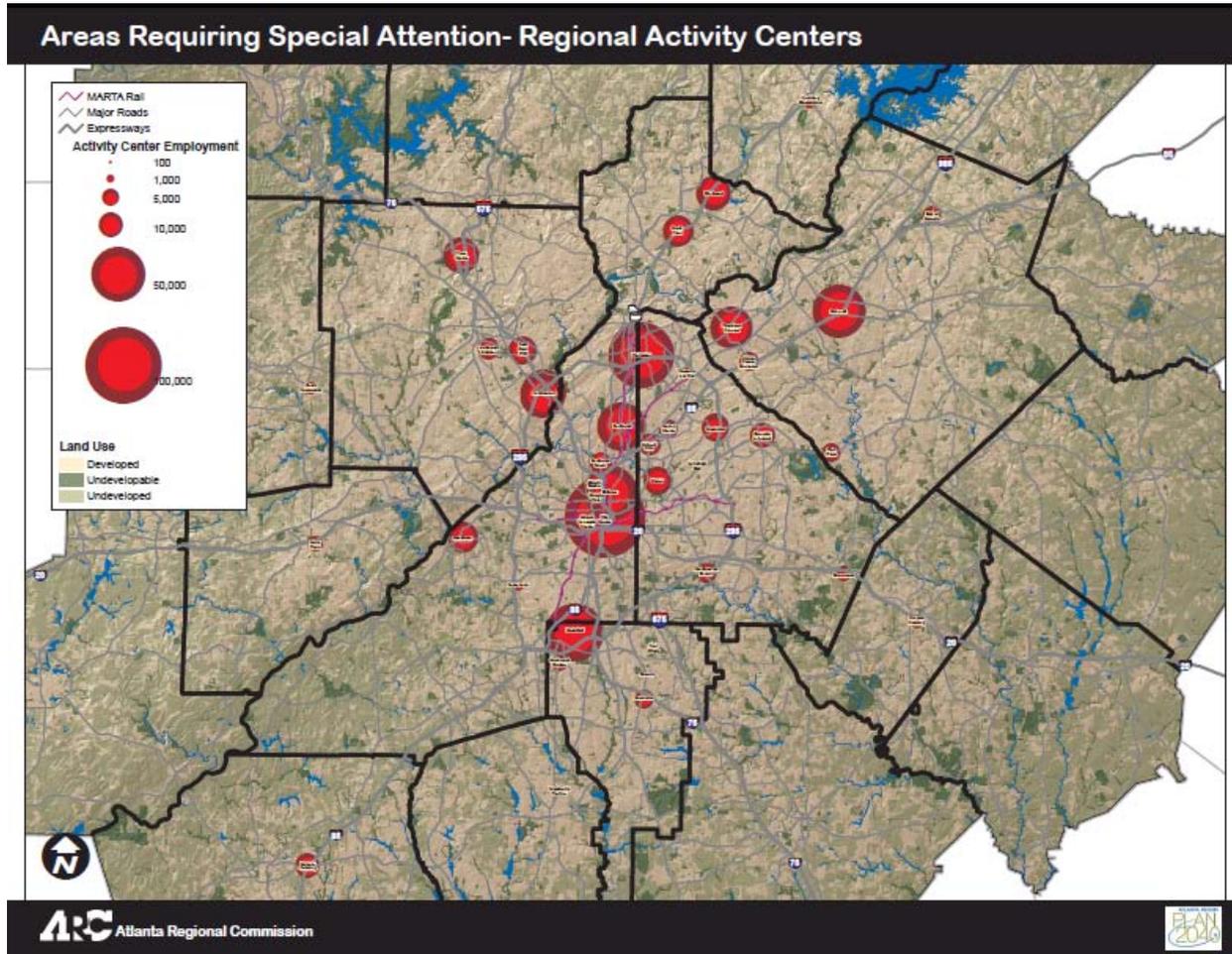
Figure 3: Job Categories with Significant Concentrations of Regional Employment in Activity Centers

Job Category	Regional Employment	Activity Centers Employment	Percent of Region's Employment
Information	88,043	49,263	56%
Management of Companies	41,442	21,497	52%
Public Administration	107,786	48,218	45%
Finance	107,547	47,655	44%
Professional, Scientific and Technical	170,707	72,978	43%
Transportation & Warehousing	138,845	56,444	41%

How did we get the data?

ARC works with the GA Department of Labor on our employment estimates. Activity Center locations are developed as part of the Unified Growth Policy Map and must include 1.5 million square feet of commercial space (including office) in an identifiable area.

Figure 4: Areas Requiring Special Attention – Regional Activity Centers



Areas Requiring Special Attention - Areas of Redevelopment.

What are these areas?

Many commercial properties within the region are facing the end of their designed lifecycle. Numerous jurisdictions around the region are struggling with commercial “big box” developments that are vacant or supporting marginal commercial uses. Many older traditional commercial corridors within the region are now facing obsolescence both in terms of development and in some cases the infrastructure used to support the development. In addition some very large sites within the region are facing transition as they redevelop from manufacturing or military use to new ownership and new uses.

Where are these places?

The majority of vacant retail properties are within the first generation of suburbs of the region. These areas were largely developed in the 1950's, 60's and 70's and have auto-oriented commercial uses that have existed well beyond their lifecycle. The region also has the opportunity to redevelop some unique sites - Fort Gillem, Fort McPherson, Hapeville Ford Plant and the Doraville General Motors plant. These areas are very large sites that are in different stages in the process to redevelop to new uses.

Why should these areas be a focus of Plan2040?

Redevelopment of vacant or marginal commercial uses is a primary focus of local governments throughout the Atlanta region. Local and regional policies, development tools and infrastructure investments are needed to encourage redevelopment. Redevelopment of individual sites is a very complicated effort and many resources are needed to achieve the desired end result, developments that meet the needs of local and region plans and contribute to local tax rolls. Currently there are very few examples in the region of primarily commercial areas being redeveloped, but this will be crucial to developing a more sustainable land use pattern over the next 30 years.

How did we get the data?

ARC as part of the Unified Growth Policy Map identified Urban Redevelopment Corridors. In addition to developing regional data, ARC is increasing using private vendor data to supplement ARC data in planning work. CoStar Inc, is a private firm that tracks commercial development. CoStar data was used to determine vacancy rates for large commercial shopping centers (over 100,000 square feet). The redevelopment sites were placed on the map manually based on interpretation of aerial photography.

Why should these areas be a focus of Plan2040?

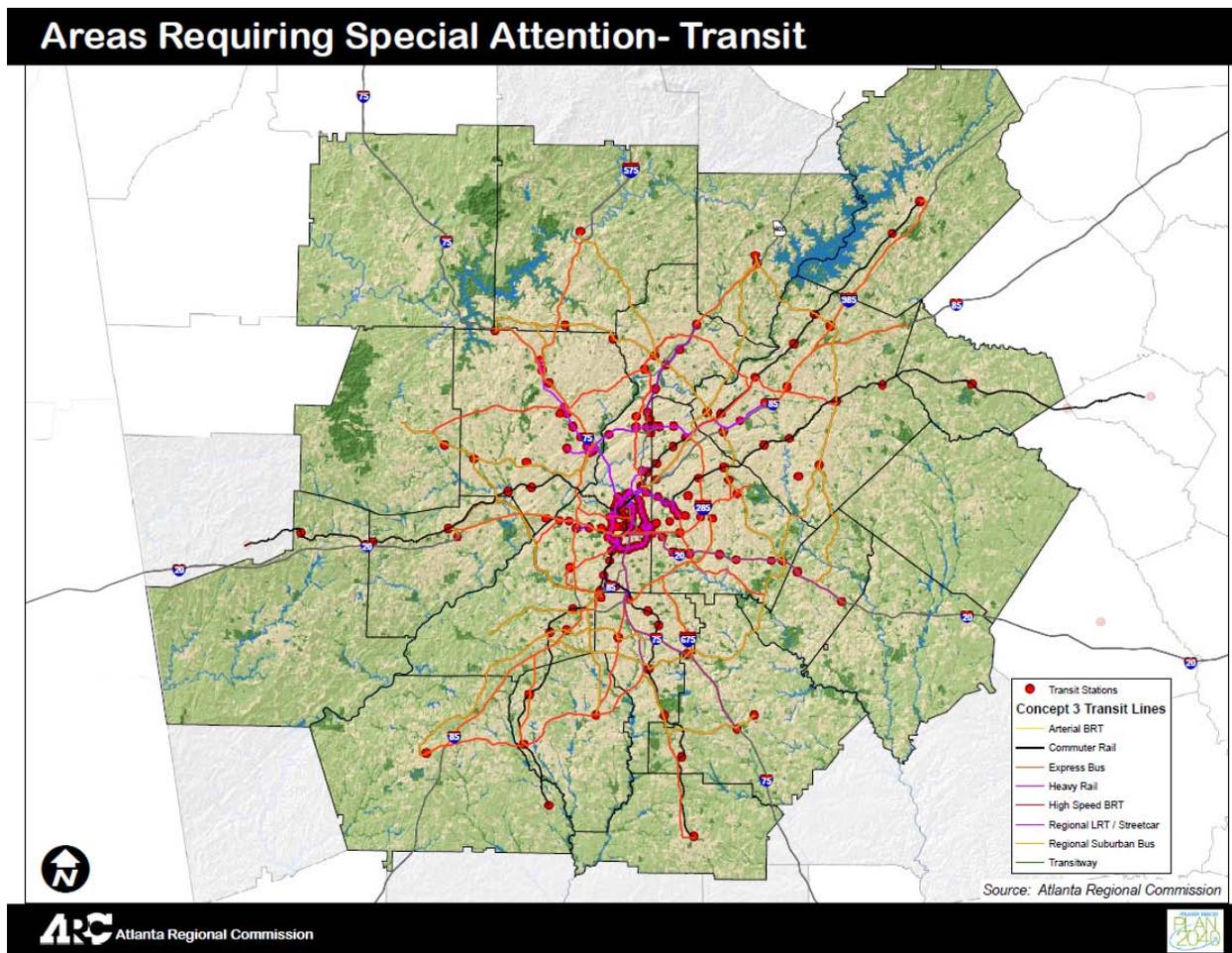
Transit infrastructure and service is a significant regional investment that needs appropriate land use, operations and governance strategies in order to be successful. Density, land use diversity and transit supported design are necessary to support transit ridership. Additionally, regional coordination and support of transit issues is needed in order for the region have a seamless and efficient system that can provide an alternative to SOV trips.

How did we get the data?

MARTA began service in 1972 with system expansion over the past few decades to now include 38 rail stations, covering 48 rail miles. The North Springs station is the most recent station added to the system. It was opened in 2000.

Concept 3 was adopted by the ARC Board in December 2008 and now serves as the transit component of the region's long-range Aspirations Plan. The development of Concept 3 was a two-year effort overseen by the Transit Planning Board (TPB), a regional partnership created in 2006 by a joint resolution of ARC, MARTA, and GRTA.

Figure 6: Existing Future Transit Lines and Stations



Areas Requiring Special Attention - Areas of Rapid Development

What are these areas?

During the next 30 years the 20-county Atlanta region will add 3 million people. This increase will be due to people being born in the region, but also people migrating to the region for economic reasons. Development of housing, employment areas and supportive services will be needed throughout the region to meet the needs of an additional 3 million residents. Much of this development will be focused in already developed or areas or in areas with limited transportation infrastructure to support needed mobility and/or limited water and wastewater infrastructure. These areas need policies and appropriate investments to handle the increased development pressures or tools to better manage growth in areas lacking needed infrastructure.

Where are these places?

Areas forecasted to receive high levels of growth include the urban core, but also along the GA400 corridor in Forsyth County, the I-75 corridor in Henry County, as well as areas in Gwinnett, Douglas, and Cherokee counties. Existing major activity centers also are forecasted to receive increased household growth by 2040.

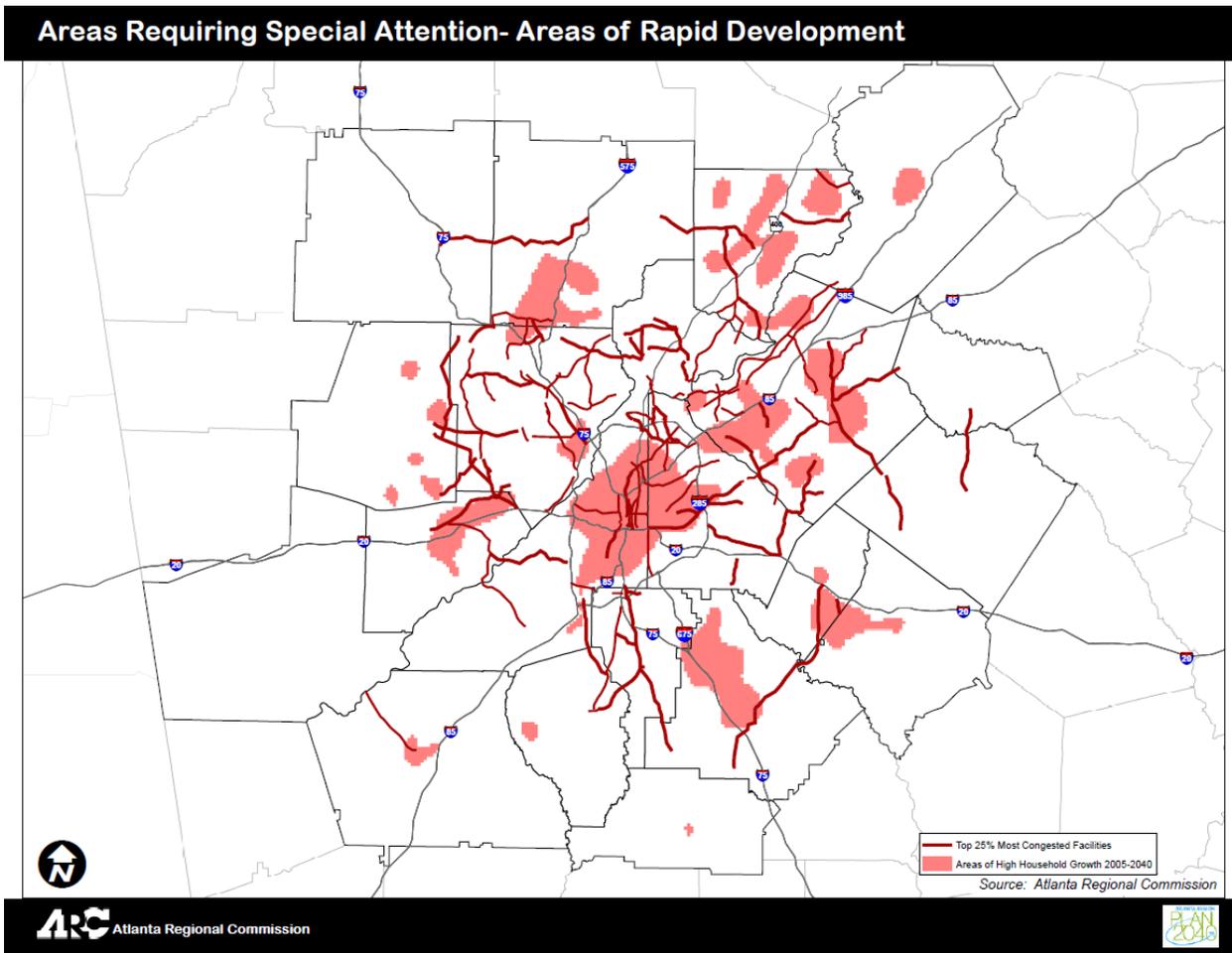
Why should these areas be a focus of Plan2040?

The areas receiving high growth need to have supporting infrastructure, policies and tools, to accommodate growth. Those areas with limited existing infrastructure will likely need to how to manage growth in such as way as to limit the demands for new infrastructure given the ongoing gap between demand for infrastructure investments and available funds. While the region continues to add significant population and jobs it is likely that the infrastructure the region has today will be the vast majority of infrastructure we have in the future.

How did we get the data?

ARC as the MPO for the Atlanta region produces a long-range forecast for population and employment for the 20-county planning area. The areas shown as High Household Growth came from the Draft forecast. Also included in the map are the region's top 25% most congested non-freeway corridors from ARC's travel demand model. This highlights that many higher growth areas are already experiencing significant levels of roadway congestion.

Figure 7: Areas Requiring Special Attention – Areas of Rapid Development



Areas Requiring Special Attention –Regional Important Resources and Conservation Areas

What are these areas?

New rules and procedures for the identification of Regionally Important Resources (RIR) became effective on July 1, 2009. The rules require development of a plan for protection and management of regional resources and review of activities potentially impacting these resources. ARC is the agency charged with developing a Regional Resource Plan and RIR map for the 10-county area of the Atlanta region (Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale).

Designation as a Regionally Important Resource does not denote that areas are off limits to development or create a new regulatory requirement. It does suggest that these areas should have an enhanced level of management and careful consideration should be given to new development in the area. Identifying the region's conservation priorities will promote collaboration and investment in these areas that are critical to the region's quality of life and ecological diversity.

Where are these places?

A public nomination process for submittal of potential RIR locations occurred in 2009. ARC received over 150 individual nominations, with many of these nominations including multiple properties. Using guidance from the ARC Board and the Georgia Department of Community Affairs (DCA) ARC evaluated the nominated resources as well as other potential resources around the region. ARC has developed an initial RIR map that will guide the development of a Regional Resource Plan that will further detail potential strategies to manage these important resources.

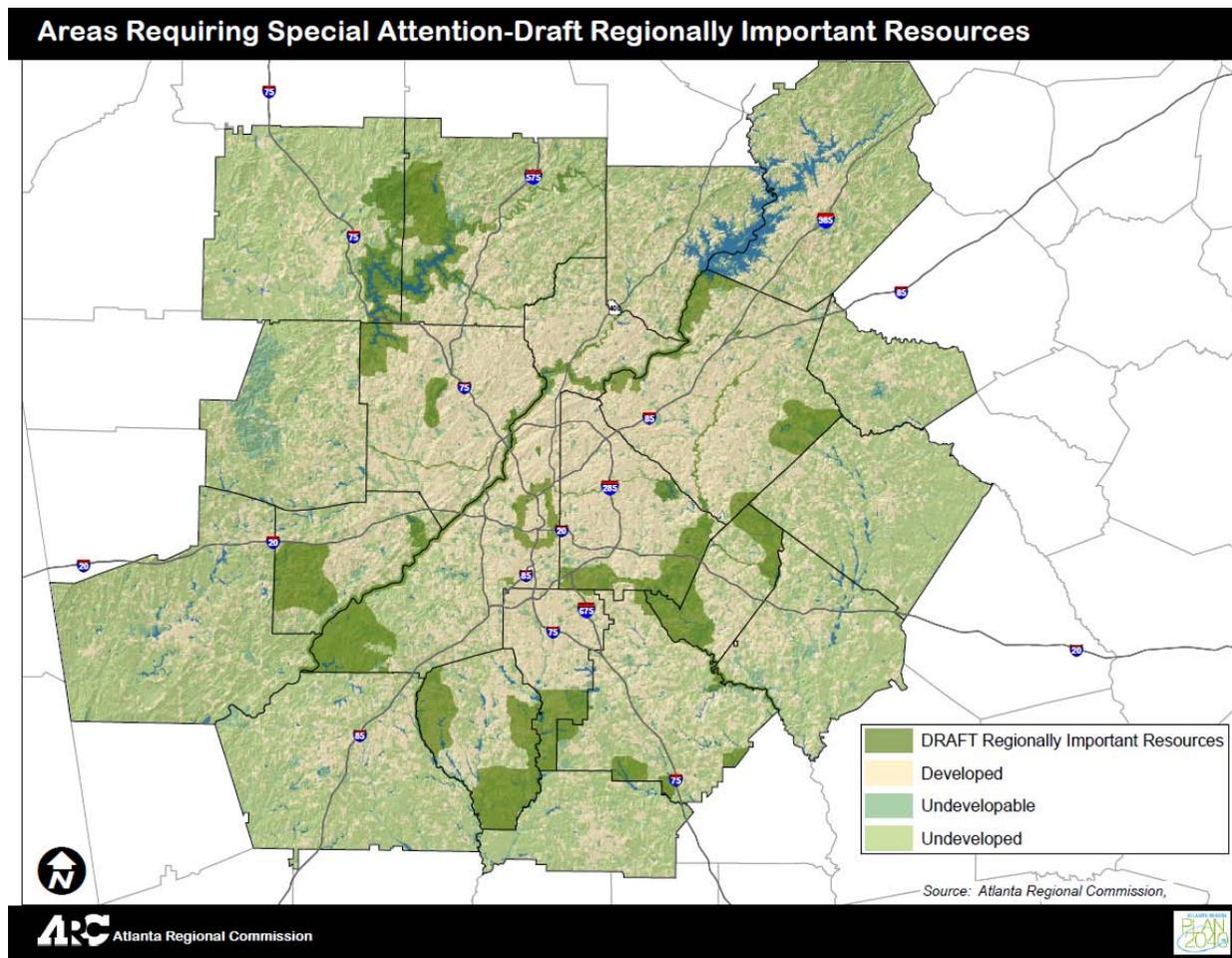
Why should these areas be a focus of Plan2040?

The region is fortunate to have major parks and recreation areas; wildlife management areas; conservation areas; nature preserves; regional trails and water resources that can serve as the beginning of an effort to develop a green infrastructure framework for the Atlanta region. Many of these resources require cooperation and coordination in order to ensure that can meet the needs of the region's population while also meeting the varied purposes. Additionally, the region will likely need to invest in new green infrastructure in the future to meet the needs of a growing population. Areas identified in the RIR map may provide opportunities for conservation efforts, including but not limited to acquisition, promotion low-impact development and cultural and heritage preservation.

How did we get the data?

The Draft RIR Map was created using input from public nominated resources and evaluation of appropriate resources that fit into the overall intent of the RIR program as overseen by DCA.

Figure 8: Areas Requiring Special Attention –Draft Regional Important Resources



Areas Requiring Special Attention - Naturally Occurring Retirement Communities (NORCs) and Opportunities to Develop Lifelong Communities

What are these areas? A naturally occurring retirement community (NORC) is a geographic area with a concentrated population of older adults. These are areas where older adults live and will likely continue to live and “age in place.” A Lifelong Community is an opportunity to create a place where individuals can live throughout their lifetime with access to housing and transportation options, access to healthy living and access to information and services.

Where are these places? ARC’s Area Agency on Aging serves the 10-county ARC region. The areas shown in Figure 9 below identifies concentrations of older adults over the age 55 by a percentage of the total population. While these are not officially defined as naturally occurring retirement communities or lifelong communities, they are locations where older adults are currently living and where high concentrations of older adults will likely continue to live in the future. These locations represent opportunities to advance lifelong community principles.

Why should these areas be a focus of Plan2040?

Older adults both want and plan to “age in place”. In a recent survey by the Carl Vinson Institute for the Atlanta Regional Commission, 83% of the region’s 55+ population said they plan to remain in their community as long as possible. Access to reliable transportation plays a key role in supporting the concept of “aging in place”. Understanding the concentration of the aging population helps to determine their relationship to the transportation services and the ability to access services.

Many of the areas with existing concentrations of older adults do not have adequate access to existing transit service. According to the 2000 census, approximately 13,000 people over the age of 55, residing in the 10-county area, did not own a vehicle, many more are likely driving because they have no other choice if they are to access needed services. Older adults living in these areas of the region must rely on various state and/or county based services that have limited funding to provide transportation services, which may only provide transportation for medical care.

Furthermore, understanding the location of older adults helps establish a baseline to discuss potential policies, programs and actions that support:

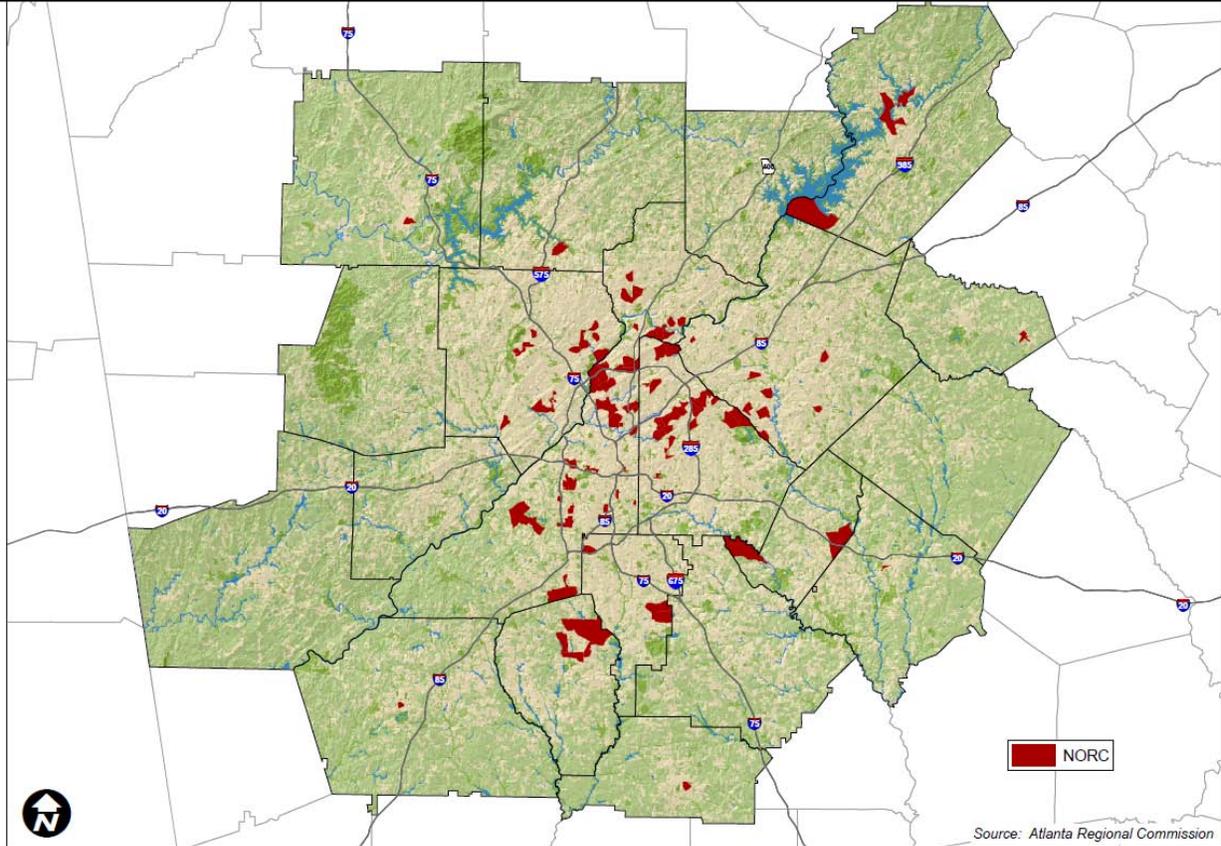
- Providing public transportation services to meet the demands of an aging older adult population
- Developing housing options that are affordable, accessible and located close to services within existing communities
- Improving access to services the older adult population needs and developing linkages to resources, communication infrastructure and access to education and long term care resources
- Directing aging service structure to better serve the region’s needs
- Identifying areas to logically advance lifelong community principles

The region is testing the concept of the NORC Supportive Service Programs (SSP) at 5 locations. These pilot programs are helping to analyze various methods to provide community-based health and supportive services to concentrations of older adults living in these locations. The results of these efforts and the advancement of lifelong community principles, those that promote housing and transportation options, encourage healthy lifestyles, and expand access to information and services, will help ARC develop programs that can address the needs of older adults residing in these concentrated areas.

How did we get the data? Demographic and population estimates were obtained from ESRI 2009 Population Estimates (source: Atlanta Regional Commission) and the Atlanta Regional Commission’s data source on existing transit services in the 10-county Atlanta Region. Information was also obtained from *the “Older Adults in the Atlanta Region: Preferences, Practices and Potential of the 55+ Population”* survey performed by the Carl Vinson Institute, 2007.

Figure 9: Areas in Region with More than 35% of Local Population over 55 Years of Age

Areas Requiring Special Attention-Naturally Occurring Retirement Community



Appendix: Development Patterns and Design

Development Patterns

Figure 1 lists the amount of land converted from undeveloped to some other form of land for the 13 county and 20 county Atlanta Region. In 2008, the 13-county Atlanta region converted 1,047,693 acres and the 20-county Atlanta region converted 2,088,709 acres. For the past 9 years, Coweta has led the 13 county region and Carroll County has led all counties in the 20 county region with the most acres converted annually.

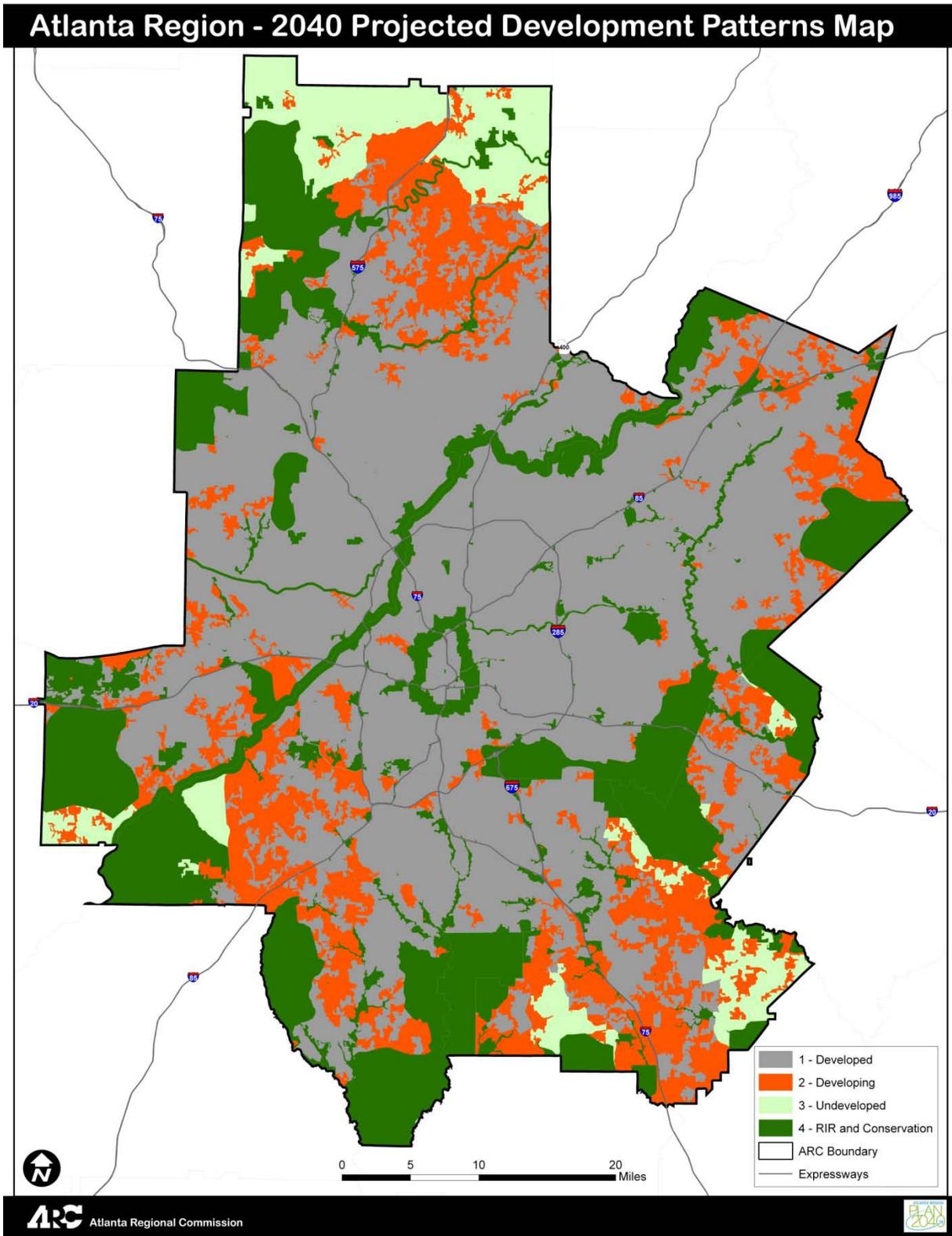
Figure 2 shows the projected development patterns for the 10-county Atlanta region as required by the Department of Community Affairs. The grey area of the region is considered to be developed, the orange area is projected to develop between now and 2040, the light green area is project to see little or no development, and the dark green areas on the map are those lands that are conservation areas, protected, or undevelopable. The amount and intensity of development in the grey or orange areas are not depicted and vary greatly depending on location.

Figure 1: Annual Rate of Primary, Developable Land Converted 2001-2008

Annual Rate of Primary, Developable Land Converted 2001 - 2008												
COUNTY	2001	2003	2005	2007	2008	Annual Rate Converted 2001-2003	Annual Rate Converted 2003-2006	Annual Rate Converted 2006-2007	Annual Rate Converted 2007-2008	Years until land exhausted (at 2007-2008 rate)	20-County Rankings	
											Of land left in 2008	Of land converted 2007-2008
Clayton	26,169	22,645	18,488	17,641	17,167	1,762	2,079	424	474	36	20	19
DeKalb	34,573	31,551	28,866	27,686	26,628	1,511	1,343	590	1,058	25	19	12
Rockdale	47,204	44,496	41,428	40,997	39,895	1,354	1,534	215	1,102	36	17	10
Cobb	48,099	43,715	36,635	35,099	34,774	2,192	3,540	768	325	107	18	20
Fayette	63,537	59,873	54,683	52,714	51,918	1,832	2,595	984	796	65	16	16
Douglas	76,790	70,750	65,209	63,400	62,765	3,020	2,771	905	635	99	15	18
Forsyth	85,245	81,004	69,655	67,001	65,924	2,121	5,675	1,327	1,077	61	14	11
Gwinnett	94,998	85,432	73,423	68,829	66,387	4,783	6,005	2,297	2,442	27	13	2
Henry	127,612	116,840	104,838	101,698	98,534	5,386	6,001	1,570	3,164	31	10	1
Fulton	130,479	122,270	107,875	104,386	101,976	4,105	7,198	1,744	2,410	42	9	3
Paulding	148,673	142,546	132,794	129,055	127,869	3,064	4,876	1,869	1,186	108	7	8
Cherokee	192,469	185,382	173,391	170,175	168,120	3,544	5,996	1,608	2,055	82	4	4
Coweta	207,089	202,487	190,067	187,403	185,735	2,301	6,210	1,332	1,668	111	3	5
13-county Total	1,282,937	1,208,991	1,097,352	1,066,084	1,047,693	36,973	55,820	15,633	18,391	57		
Carroll*	na	na	246,662	244,920	244,269	na	na	871	651	375	1	17
Bartow*	na	na	230,251	228,343	226,839	na	na	954	1,504	151	2	6
Hall*	na	na	165,321	161,639	160,752	na	na	1,841	887	181	5	15
Walton*	na	na	150,404	148,362	147,329	na	na	1,021	1,033	143	6	13
Newton*	na	na	112,251	111,377	110,157	na	na	437	1,220	90	8	7
Spalding*	na	na	86,847	85,249	84,107	na	na	799	1,142	74	11	9
Barrow*	na	na	69,722	68,496	67,565	na	na	613	931	73	12	14
20-county Total	1,282,937	1,208,991	2,158,810	2,114,470	2,088,709	36,973	55,820	22,170	25,761	81		

* Represent the "external" seven counties, i.e. those that were added to LandPro's scope beginning in 2005.

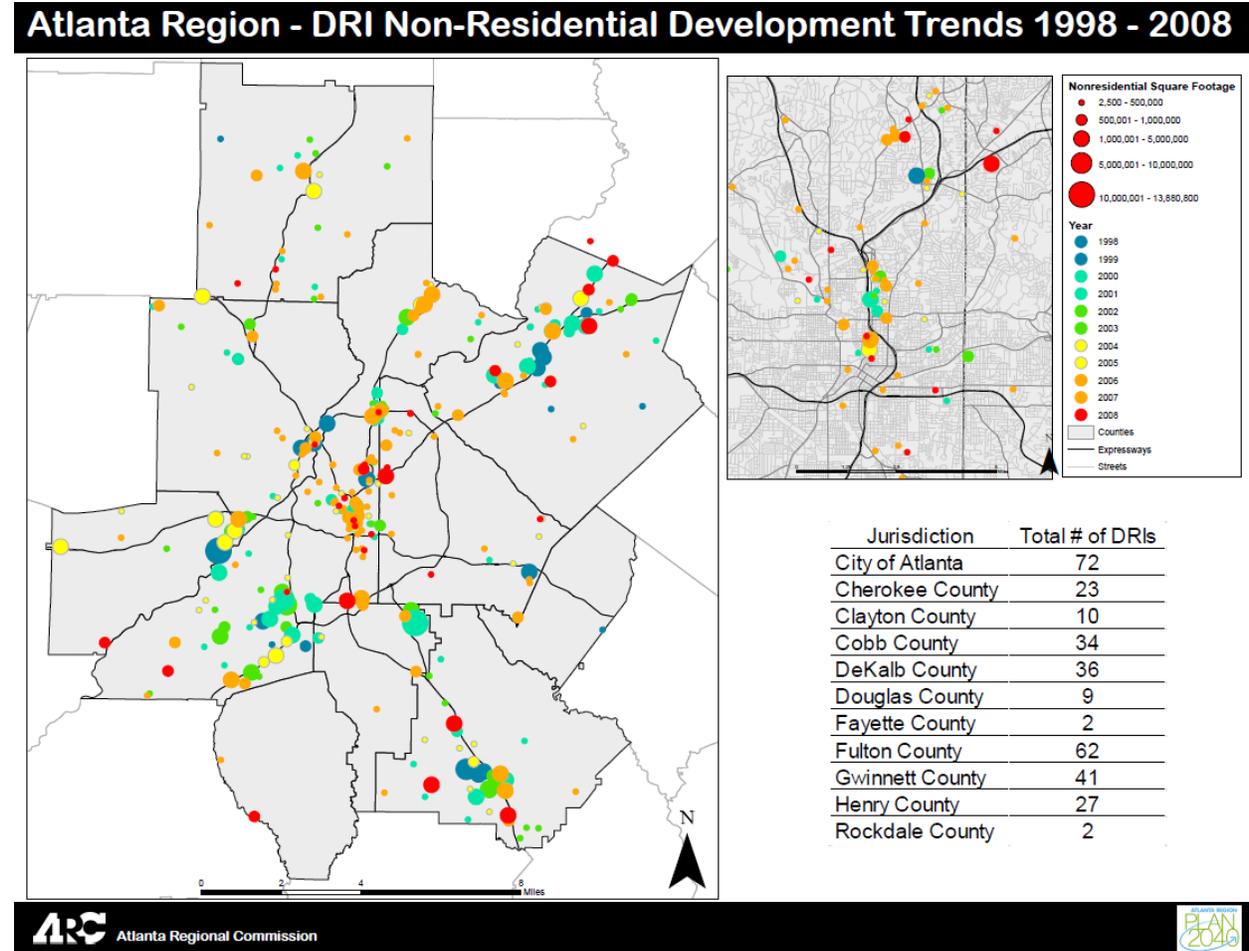
Figure 2 - Projected Development Patterns Map



Source: ARC

Developments of Regional Impact (DRI)

Figure 3 - DRI Non-Residential Development Trends 1998-2008

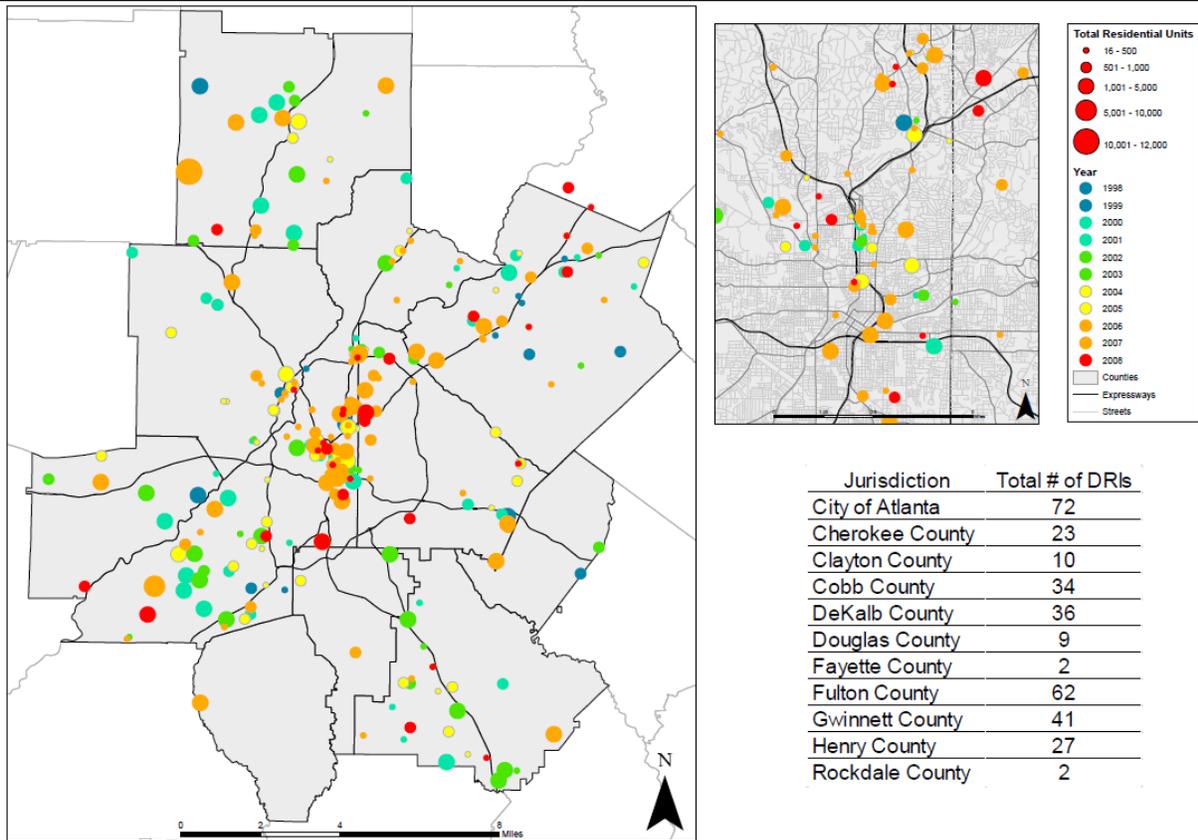


Source: ARC

Figure 3 above shows the location of all non-residential developments of regional impact (DRI) reviews have occurred over the past 10 years within the 10-county Atlanta region. These developments are large enough in size, or propose certain land uses, that are seen to have significant regional impact. Several areas of the region have seen many of these types of development proposed including the City Atlanta, Henry County and Gwinnett Counties along the interstates, and south Fulton County.

Figure 4 - DRI Residential Development Trends 1998-2008

Atlanta Region - DRI Residential Development Trends 1998 - 2008



Source: ARC

Figure 4 shows the location of all residential DRI reviews that have occurred over the past 10 years within the 10-county Atlanta region. While the location of these proposed developments are dispersed more than the non-residential developments as seen in the non-residential DRIs, they are still found in the same general areas of the region. The City of Atlanta in particular has attracted large developments of both types.

Figure 5 - Number of DRIs Reviewed and Average Residential Density

DRI Gross Density by Jurisdiction 2000-2008	
City of Atlanta DRIs Reviewed - 56 Gross Density - 94.6 units/acre	DeKalb DRIs Reviewed - 33 Gross Density - 27.87 units/acre
North Fulton DRIs Reviewed - 16 Gross Density - 14.2	Douglas DRIs Reviewed - 7 Gross Density - 1.86 units/acre
South Fulton DRIs Reviewed - 34 Gross Density - 7.5	Gwinnett DRIs Reviewed - 29 Gross Density - 12.7 units/acre
Cherokee DRIs Reviewed - 21 Gross Density - 3.7 units/acre	Henry DRIs Reviewed - 22 Gross Density - 2.68 units/acre
Clayton DRIs Reviewed - 3 Gross Density - 4.6 units/acre	Rockdale DRIs Reviewed - 1 Gross Density - 1 units/acre
Cobb DRIs Reviewed - 25 Gross Density - 19.32 units/acre	

Source: ARC

Figure 5 lists the number and average gross residential density of DRIs in each jurisdiction in 10-county Atlanta region for the years 2000-2008. The City of Atlanta had the highest average residential density for DRIs at 94.6 units per acre. This was followed by DeKalb and Cobb County with 27.87 and 19.32 units per acre respectively. The City of Atlanta saw the most DRIs reviewed with 56 followed by DeKalb with 33 and Gwinnett with 29. Rockdale and Douglas Counties had the lowest average density for DRIs while Rockdale and Clayton had the fewest DRIs reviewed.

Regional Urban Expansion and Infrastructure Comparison

Figure 6 - Regional Urban Expansion and Infrastructure Comparison- Sunbelt

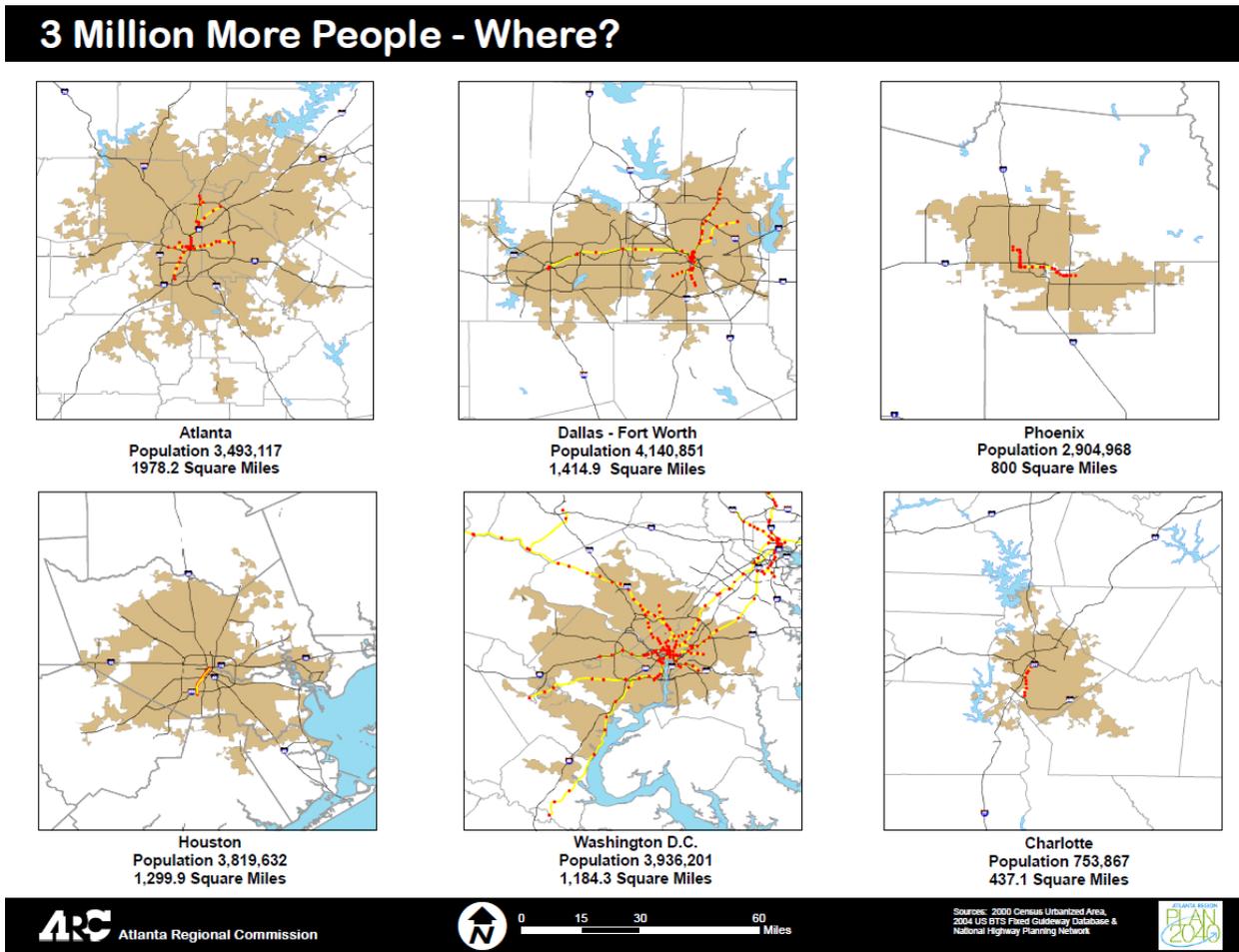


Figure 6 compares the Urbanized Area (as defined by the US Census Bureau) and transportation infrastructure of Atlanta with those of its peers in the “Sunbelt” region of the U.S. Note that Atlanta has the largest area in square miles but does not have the largest population. Atlanta has one of the oldest transit systems of these six cities, but does not have the largest rail transit system. Also, the Atlanta region has built less transit infrastructure within the last 10 years than any of its Sunbelt peers in this figure.

Figure 7 - Regional Urban Expansion and Infrastructure Comparison

3 Million More People - Where?

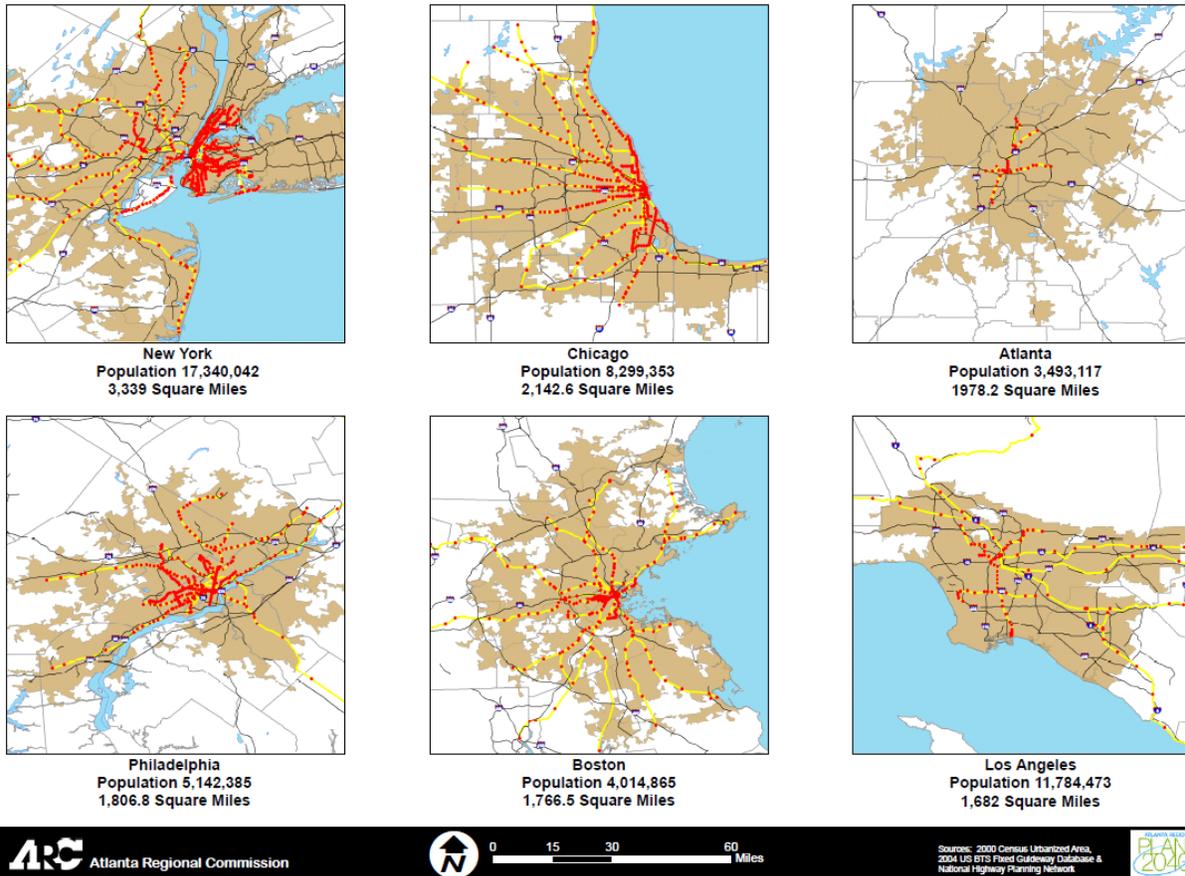
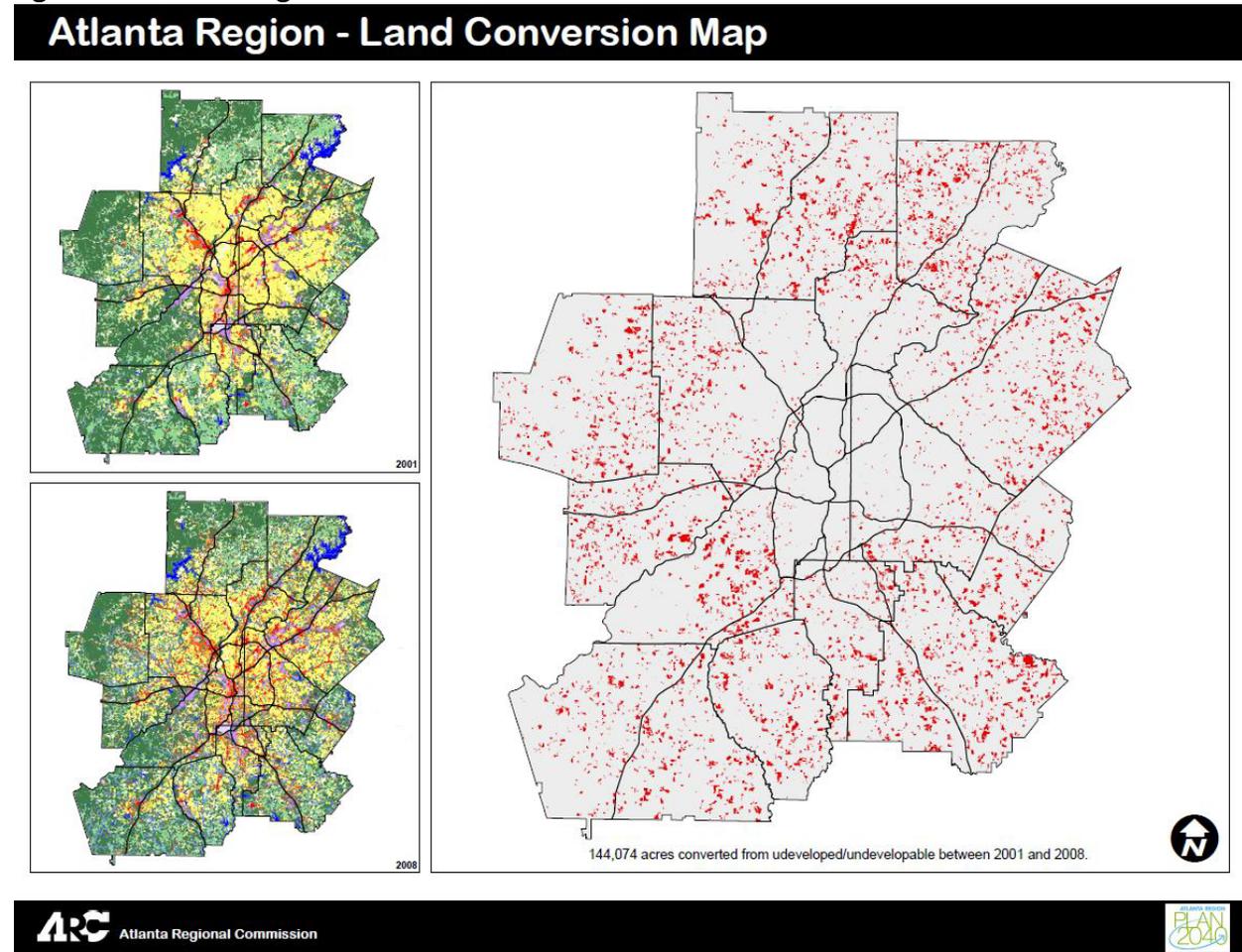


Figure 7 compares the Urbanized Area (as defined by the US Census Bureau) and transportation infrastructure of Atlanta with those of its peers in terms of overall size in square miles. Note that Atlanta's population (within the Urbanized Area) is the smallest of the six while its size in square miles is third largest. Also, Atlanta has the least amount of high capacity transportation infrastructure (limited access freeways and fixed guideway transit) of all six cities. Each of the peers in this figure has expanded transit service to the extent of its urbanized area while the Atlanta region has not.

Land Conversion

Figure 8 - Atlanta Region Land Conversion

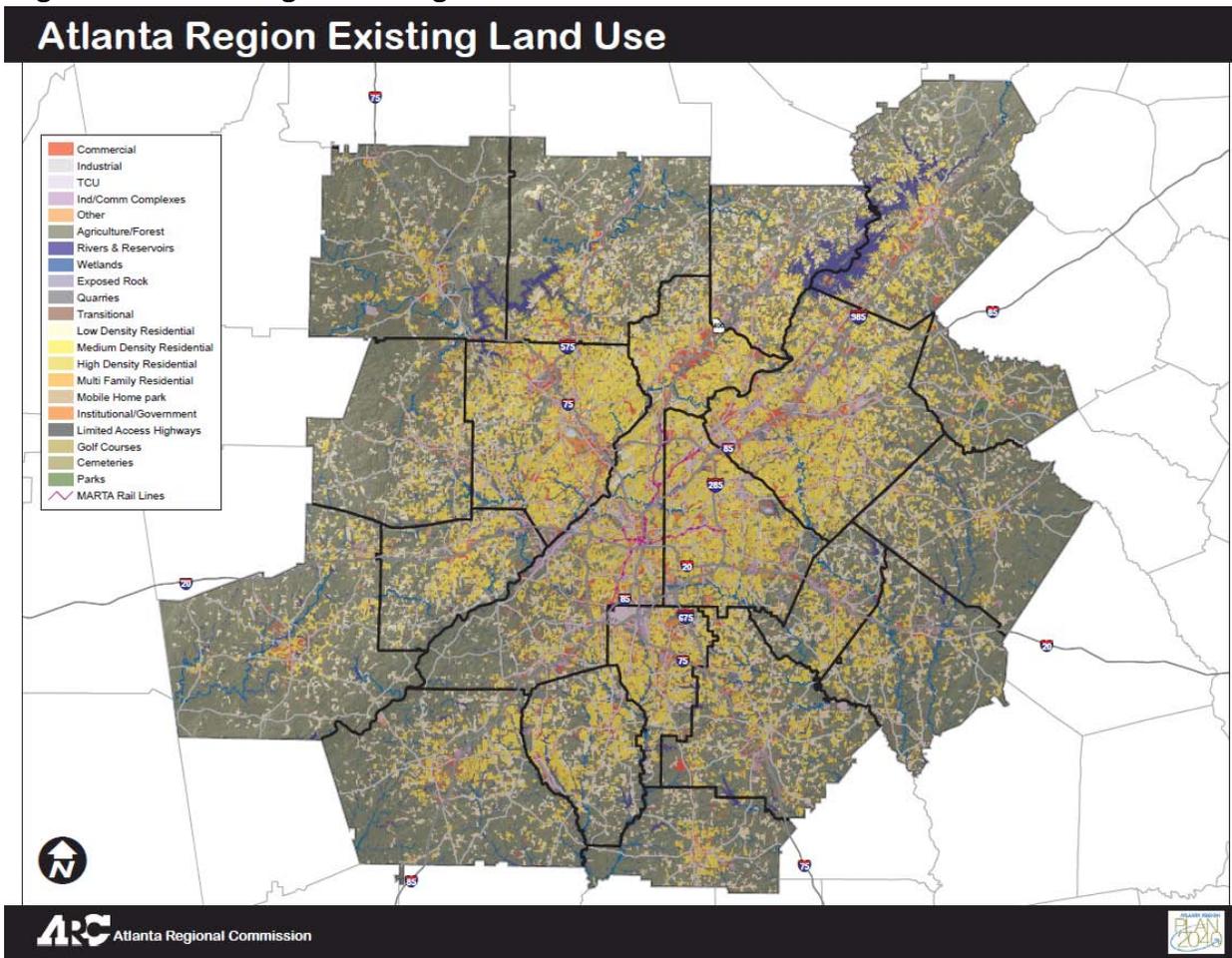


Source: ARC

Figure 8 shows the land converted from undeveloped to any other development category between 2001 and 2008. This illustrates the areas in the region that are experiencing urban and suburban expansion. The two smaller maps on the left of the figure show existing land use in 2001 and 2008. The larger map on the right displays just those areas that were converted from undeveloped lands between 2001 and 2008, in red, totaling 144,074 acres. Areas at the central core of the region have also experienced significant growth during this time, but in many instances the development reused existing development sites and therefore would not be considered to have converted from undeveloped.

Existing Land Use

Figure 9 - Atlanta Region Existing Land Use



Source: ARC

Figure 9 shows the existing land use for the 20-county Atlanta region. Note that the core 5 counties of Fulton, DeKalb, Cobb, Gwinnett, and Clayton are largely developed and consist mostly of residential uses while the remaining counties in the region consist of agriculture/forest uses with pockets of residential development.

Livable Centers Initiative

One of the Atlanta Regional Commission's (ARC) principal goals is to support local governments in their efforts to create highly livable and vibrant communities. Few of our programs do that as effectively as the Livable Centers Initiative (LCI) program.

The LCI program, adopted by ARC in 1999, is designed to help planners and governments more effectively link current and future land use planning to existing or planned transportation infrastructure. The program has spurred cities, counties and communities of all sizes to proactively plan for enhanced employment centers, town centers and transportation corridors, bringing a new level of livability to the region.

Seen as a cutting-edge program around the country, the LCI program was awarded the American Planning Association's National Planning Excellence Award for Implementation in 2009, and was awarded the Environmental Protection Agency's 2008 National Award for Smart Growth.

Figures 10 and 11 are graphs depicting those LCI areas with the most residential and office development within them since the program's inception in 2000. It is interesting to note that most of the office and residential development within LCIs has occurred in those LCIs within the region's core and major activity centers versus the many corridor and town center LCI study areas.

Figure 10 - LCI Study Areas with the Most Residential Development

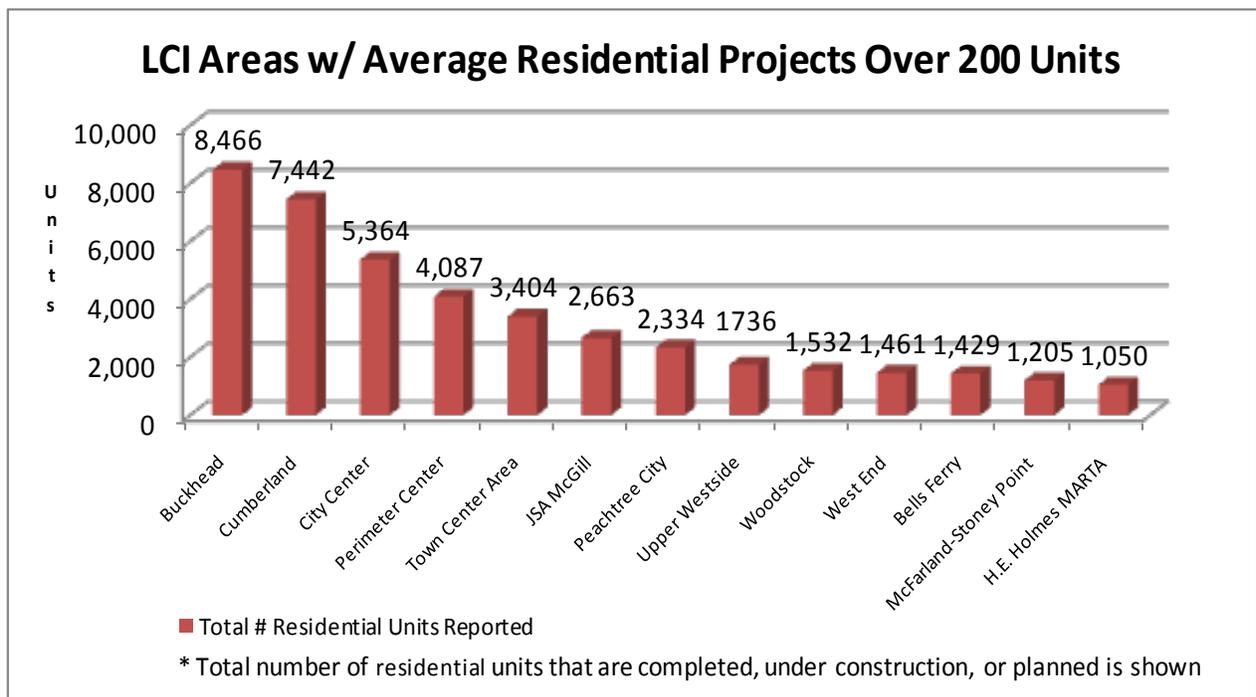
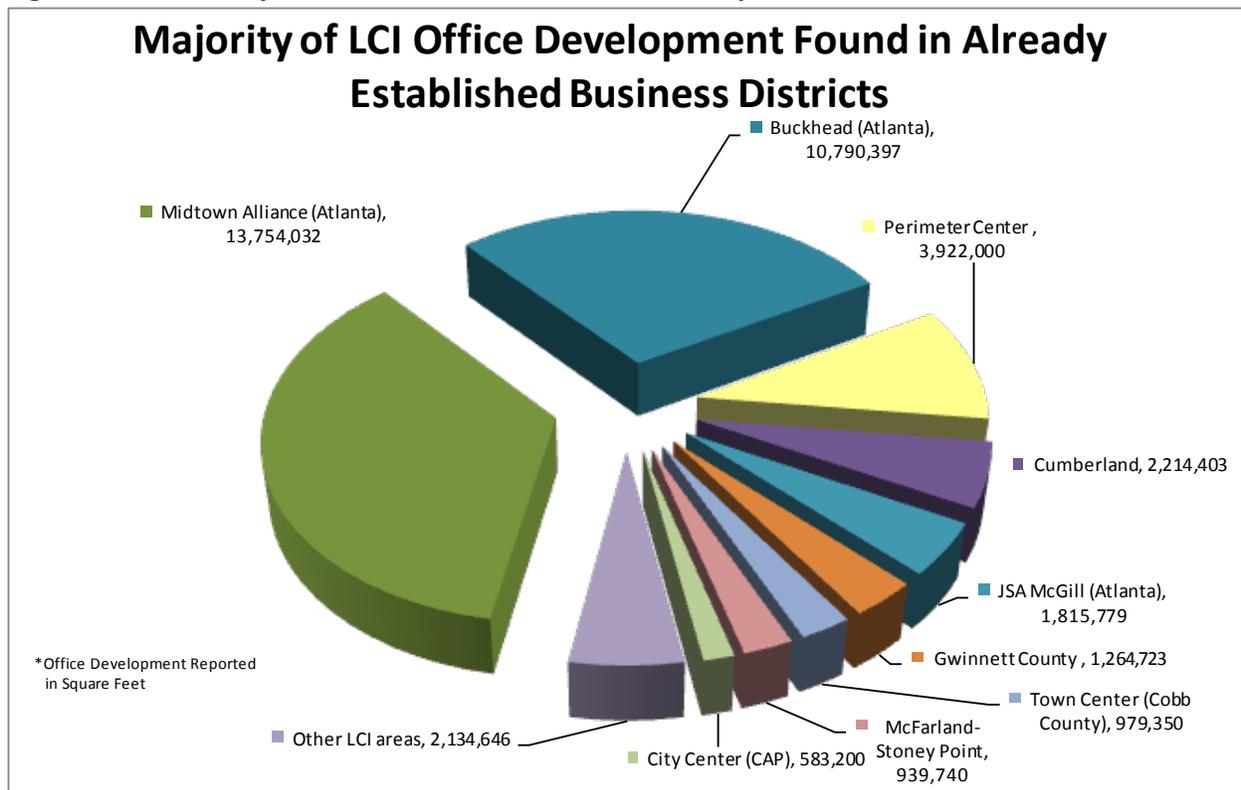


Figure 11 - LCI Study Areas With the most Office Development



Source: ARC

Figure 12 shows development totals within all LCI areas each year from 2000 to 2007. LCI study areas are grouped by the year in which the study was awarded. It appears there has been a fairly even distribution of development types within LCI areas thus far. Note the decrease in number of projects per year starting in 2005. This could be due to the beginnings of the economic slowdown or a reflection that many of the LCI areas are beginning to be built out.

Figure 12 - Development Totals within LCI Study Areas

Study Year	Number of Residential	Number of Hotel Units	Commercial Space (sq ft)	Office Space (sq ft)	Number of Projects
2000	9,936	200	1,986,092	415,161	189
2001	27,032	5,263	6,266,661	18,792,647	385
2002	5,096	-	1,137,231	454,548	77
2003	17,504	1,574	2,312,521	2,030,623	110
2004	5,714	156	2,428,046	1,436,689	136
2005	3,126	825	1,942,625	1,020,860	31
2006	1,063	43	358,200	260,960	23
2007	206	217	184,400	31,150	9
Grandfathered	14,829	4,051	2,655,544	13,955,632	188
Total	84,506	12,329	19,271,320	38,398,270	1,148

Source: ARC

Figure 13 compares residential, commercial, and office development within LCI areas with that of the 10 county region for the years 2000-2007. While the LCI areas represent only 4.2% of the land area within the 10 county region, those same LCI areas contain 66.97% of all office space and 21.34% of all commercial space within the 10 county region. This is due in large part to the LCI program's focus on major activity centers and town centers. However, due to the 10 county region's abundance of housing, which makes up a majority of its land uses, only 8.51% of all housing in the 10 county region is found in LCI areas.

LCI Development versus Regional Development			
Development 2000-2007	Housing (Units)	Commercial (sq ft)	Office (sq ft)
10 County Development (Source: CoStar)	312,990	38,157,401	31,866,980
	Land Area: 1,933,189 Acres		
LCI 10 County - Developments	26,645	8,143,761	21,341,504
	Land Area: 81,272 Acres		
LCI % of 10 County Development	8.51%	21.34%	66.97%
	Land Area: 4.2%		

Source: ARC

Appendix: Analysis of Consistency with Quality Community Objectives

In 1999 the Board of the Department of Community Affairs (DCA) adopted the Quality Community Objectives (QCOs) as a statement of the development patterns and options that will help Georgia preserve its unique cultural, natural and historic resources while looking to the future and developing to its fullest potential.

The QCOs provide guidance for Regional Commissions, such as ARC, to assist in evaluating progress toward sustainable and livable communities. Pursuant to the Minimum Standards for Regional Planning, ARC must evaluate policies, programs, and development patterns in the Atlanta Region for consistency with these goals and objectives.

Through a variety of mechanisms ARC monitors regional progress in developing a more sustainable and livable region. ARC has inventoried and evaluated local plans and/or regulations three times in the past decade. In June of 2000, the ARC Board adopted the Joint Land Use Strategy, which directed staff to work with local governments to coordinate the Regional Development Plan with the Local Comprehensive Plans of each community. In 2004 ARC completed an inventory of local approaches to better managing growth in the of the *State of Smart Growth* report. In support of the *Envision6* RDP Policies and RTP ARC developed a local growth scenario that consisted of modeling the regional land use and transportation impacts of local plans. ARC has also developed a *Smart Growth Audit Toolkit* to assist local governments in auditing their local plans and ordinances.

Planning tools like the ARC's Community Choices program and Livable Centers Initiative are changing the way local governments approach planning. Through targeted funding and technical assistance many communities throughout the region are actively working to implement regional plan policies through local efforts.

Quality Community Objectives

Regional Identity Objective

Regions should promote and preserve an "identity," defined in terms of traditional regional architecture, common economic linkages that bind the region together, or other shared characteristics.

With more than 2,000 international companies employing nearly 115,000 employees in the metro region, Atlanta's dependence on the global economy is obviously significant, but the region also makes an impressive imprint as well. Metro Atlanta, home to the world's busiest airport, is the hub through which goods sold on the east coast are shipped. Home to 49 foreign consulates, 31 foreign-American chambers of commerce and 16 trade and tourism offices, metro Atlanta competes on a global level. If it were a country, metro Atlanta would be the 28th largest economy in the world.

The region is also home to vibrant urban centers, leafy suburban areas and rural hamlets that dot the landscape of the Atlanta region. The region is an economic powerhouse that works just as hard to preserve the feeling of a community. This balance will also be a key area of focus moving forward such that the region remains one of significant economic opportunity and region-wide livability.

The Atlanta Region is fortunate to have a wide variety of programs and resources to promote identity of the region. The Atlanta Convention and Visitor Bureau is the liaison that promotes tourism within the region. The Metro Atlanta Chamber promotes economic development within the region. The Atlanta region includes four professional sports teams, the Atlanta Braves, Falcons, Hawks and Thrashers that promote the regional identity of Atlanta.

Growth Preparedness Objective

Each community should identify and put in place the prerequisites for the type of growth it seeks to achieve. These may include housing and infrastructure (roads, water, sewer and telecommunications) to support new growth, appropriate training of the workforce, ordinances to direct growth as desired, or leadership capable of responding to growth opportunities.

Through continuous planning efforts in support of long-range planning efforts ARC regularly engages with elected officials and staff members representing local governments from around the region. As one of the fastest growing regions in the country many conversations between state, regional and local leaders are centered on the topic of understanding the magnitude of future growth and identifying plans, programs and investments that can accommodate future growth in the region. While the growth of region has created a vibrant economy and substantial prosperity it has also created substantial challenges. Many in the region recognize that addressing the challenges associated with growth must involve close coordination and cooperation between many parties including ARC and our member local governments.

ARC does promote leadership and training opportunities for local officials in preparing for growth. In 2009, 287 people went through a Community Planning Academy (CPA) hosted by ARC. CPA are training for planning and other officials both as basic planning introduction and targeted classes such as Access Management, GIS training, and Economic Development Strategies. Also ARC hosts a Regional Leadership Institute (RLI) for leaders across the region expand leaders' knowledge regarding the key issues, opportunities and challenges that face the Atlanta Region. Additionally, for the past thirteen years ARC has lead cross-sector, cross-county leadership exchanges that bring together the region's most influential leaders to learn how metropolitan areas throughout the country are addressing the same challenges the Atlanta region is facing.

ARC has also developed policies and programs specifically aimed at assisting local governments, and therefore the region, in their efforts in better managing the region's explosive growth. The LCI program is aimed at communities that are expected to grow, but are looking to do so in a way that builds community and places less strain on existing local and regional infrastructure. ARC has also worked closely with local governments around region in the development of the

Unified Growth Policy Map (UGPM). The UGPM is both a policy tool and a visual representation of where different types of growth should be anticipated and encouraged in the future.

While the region has made significant strides in preparing for growth the breakneck pace of development in the region has resulted in areas that are unable to keep pace, and also areas that have been altogether overlooked and/or areas that have experienced growth in the past are now dealing with the consequences of private development that has reached the end of its life-cycle. These areas represent both incredible opportunities, but also significant challenges going forward.

In terms of preparing the workforce for employment opportunities that will be dictated by future growth dynamics ARC is the administrator for the Atlanta Regional Workforce Board (ARWB) and is responsible for providing policy guidance for the Workforce Investment Service Area as designated by the Governor. This area includes seven counties: Cherokee, Clayton, Douglas, Fayette, Gwinnett, Henry and Rockdale. Separate boards serve the City of Atlanta, DeKalb County, Fulton County and Cobb County. The Workforce board provides workforce solutions for dislocated workers, low-income adults and youth and for businesses seeking qualified applicants. ARC is also continuously investing in new tools that allow us to understand global and national growth dynamics and how these factors may influence the economic future of the region, including employment sectors that are likely to grow or contract based on the region's role in the larger economy.

Appropriate Businesses Objective

The businesses and industries encouraged to develop or expand in a community should be suitable for the community in terms of job skills required, linkages to other economic activities in the community, impact on the resources of the area, and future prospects for expansion and creation of higher-skill job opportunities.

In 2009 the Atlanta region's strongest sectors are Transportation, Trade and Utilities, Wholesale Trade, Information Services, and Professional Business. Unlike many other metro regions throughout the United States, the Atlanta region's economic base is diverse with strong levels of employment in a variety of fields. The region currently has relatively low levels of employment opportunities in Education and Health Care fields.

After being one of the leaders in job growth during the 1990s, the two national recessions this decade have taken their toll on metro Atlanta's employment. In most cases, the region's economy is similar to the rest of the nation's – anemic job growth and heavy losses in a few key sectors like Manufacturing and Construction. ARC does however forecast strong employment growth for the next few decades. ARC expects the Health Care/Social Assistance and the Professional/Technical sectors to lead the way as the Atlanta region begins to recover from the most recent period of job contraction.

Given metro Atlanta's job losses and the fact that they are concentrated in the higher-paying sectors, local incomes and wages are lagging behind our peers as well as inflation. While wages are growing slower than inflation (as measured by the Consumer Price Index (CPI) for all urban

consumers) in many metros areas, metro Atlanta has an unfortunate combination of both slow wage-per-job growth and per-capita income growth.

Undereducated and less skilled job seekers exist across the region and may be left out of the push toward a technology and information based economy. The region's diversified economy offers a great deal of options to job seekers and the strong growth of the service and retail sectors of the economy provide job opportunities to many of these residents and may mitigate the harshest effects of a transition to a more technological economy.

Despite currently not having any distinct advantage in competing for jobs in the Health Care sector the initial regional forecast for employment indicates this sector will add the most jobs. This is in large part due to the magnitude of overall population growth in the region and specifically the region's transition to a region with a greater share of older adults.

Employment Options Objective

A range of job types should be provided in each community to meet the diverse needs of the local workforce.

The Atlanta region's economy is diverse and therefore provides a great variety of job types. The region has performed well in job creation over the past few decades and in many industries the region has a large percentage of all jobs within that industry when compared with all other major metropolitan areas in the southeast. For example in January 2009 the Atlanta region had almost as many jobs in the Information Services sector as Birmingham, Charlotte, Chattanooga, Greenville, Huntsville, Jacksonville, Knoxville, Nashville, Raleigh and Savannah combined.

The Atlanta region does have a variety of job types within the region but an ongoing issue remains the spatial mismatch between job location and housing location. Ninety percent of the jobs in 10-County region are in the five core counties (Fulton, Cobb, Gwinnett, DeKalb and Clayton). These same five counties account for nearly 80% of the jobs in the 20-county planning area. Providing efficient and reliable transportation options that can support long-haul commute trips from suburban and exurban areas that are job-rich remains a primary regional challenge.

In 2008, fewer than 24 percent of all jobs in the 20-county region were in the top five highest-paying sectors. Between 2006 and 2008, however, the region lost about 1,700 of these jobs. In contrast, the region added nearly 24,000 jobs in the five lowest-paying sectors. All counties in the region currently have more total jobs in the low paying sectors than in the high paying sectors (Fulton County coming the closest to an even distribution).

Recent analysis by ARC of US Census Bureau data showed that low-income workers, tend to live south of I-20, while high-income workers live north of I-20 along the GA 400 corridor. Retail workers are among the lowest-paid in the region, but the spatial distribution of where these workers live is different than that observed for low-earning workers (in general). Retail workers are heavily concentrated in the suburban and exurban fringes, with a corresponding lack of

concentrations inside the perimeter and urban core. In most of the region's suburban and exurban locales, Retail employment comprises a large share of total employment. Retail workers, of course, work in establishments that sell merchandise, but also include non-store retailers who reach customers through direct-mail advertising, catalogs and vending machines.

Accommodation and Food Services workers work in restaurants, drinking establishments and hotels. These workers, on average, are the lowest-paid workers in the region their heaviest concentrations are south of I-20.

ARC's Access to Jobs Program created the first comprehensive regional job transportation plan to identify specific county-by-county transportation improvements that expand employment opportunities for minority populations, especially those with disabilities and low-incomes.

Heritage Preservation Objective

The traditional character of the community should be maintained through preserving and revitalizing historic areas of the community, encouraging new development that is compatible with the traditional features of the community, and protecting other scenic or natural features that are important to defining the community's character.

Historic resources are an important aspect of an areas' character and sense of place. Historic sites, buildings or cemeteries are a record of a community's evolution and can help shape its future. The preservation of historic resources also provides economic benefits through construction jobs, heritage tourism, investment in older homes and small business and revitalization of downtown business districts.

Since 1999, ARC has funded 34 town center studies as part of the LCI program that encourages reinvestment and compatible development in traditional town centers within the region. ARC recognizes that these historic communities can serve as primary areas to attract new growth in the future as they are well served both by physical infrastructure and community assets. Ensuring the new development is compatible with the historic fabric is fundamental element in the town center studies. The LCI program allows for the redevelopment of traditional town centers while preserving the uniqueness of each community.

The region has many examples of adaptive re-use projects have transformed former schools and industrial buildings into residential developments, lofts and mixed-use centers. Through its Developments of Excellence program ARC has recognized numerous private development projects around the region that have re-used historic buildings, as well as infill development projects that have added significant vitality to historic areas.

Open Space Preservation Objective

New development should be designed to minimize the amount of land consumed, and open space should be set aside from development for use as public parks or as greenbelts/wildlife corridors.

Land consumed to support explosive growth remains an ongoing challenge for the Atlanta region. While the conversion of agricultural and forested lands has slowed when compared to earlier this decade, the 20-county region did convert some 26,000 acres of this primary, developable land into some other use, between 2007 and 2008. Most was converted to a commercial or residential use.

While this a staggering amount of land consumed in a single year it actually represents a significant decrease in recent land consumption trends. In the 2001 to 2003 period, the 13-county area converted almost 37,000 acres of developable land, annually. In the 2003 to 2005 period, that annual number jumped to almost 56,000 acres.

In 2005, 53 percent of all land in the 20-county area was either agricultural or forested. By 2008, that percentage had dropped to 51 percent. During 2007-2008, the 20-county region added nearly 20,000 acres of residential and an additional 500 acres of land dedicated to multi-family structures. Henry and Gwinnett counties converted the most land between 2007 and 2008 in both the 10- and 20-county planning area.

ARC has several existing regional polices that guide regional programs and initiatives related to the *Open Space Preservation Objective*:

Promote new communities that feature greenspace and neighborhood parks, pedestrian scale, support transportation options and provide an appropriate mix of uses and housing types.

Protect environmentally-sensitive areas including wetlands, floodplains, small water supply watersheds, rivers and stream corridors.

Increase the amount, quality, connectivity and accessibility of greenspace.

Through regional infrastructure planning, discourage growth in undeveloped areas of the region.

In addition to ARC's efforts to preserve open space around the region many local governments have identified greenspace priorities in their communities and passed measures to generate funds to acquire open space. While the efforts of local governments have expanded the region's portfolio of protected open space there remains no consistent, coordinated mechanism to ensure the region's inventory of protected lands continues to grow to meet the region's needs in the year 2040.

Environmental Protection Objective

Air quality and environmentally sensitive areas should be protected from negative impacts of development. Environmentally sensitive areas deserve special protection, particularly when they are important for maintaining traditional character or quality of life of the community or region. Whenever possible, the natural terrain, drainage, and vegetation of an area should be preserved.

As mentioned in relation to the *Open Space Preservation Objective* ARC has existing policies that are aimed at protecting the environment in the region. As the region's Metropolitan Planning Organization (MPO) for transportation ARC is directly involved with planning for improved air quality in the region.

Currently the Atlanta region does not meet the federal standards for ozone and fine particulate matter, two of the six pollutants regulated under the Clean Air Act. Natural weather conditions, geography, mobile sources, power plants, and industries all contribute to air quality.

The number of days exceeding the eight-hour ozone standard dropped dramatically from a high of 69 days in 1999 to fewer than 20 days in 2005. While the overall trend in number of days in exceedance from 1999 — 2007 is downward, 2006 and 2007 saw increases compared to 2003–2005.

Several factors explain the decrease in exceedances this decade. Atlanta experienced a hot, dry summer in 1999, a cool, wet summer in 2004 and a very hot and dry summer in 2007. Advanced technology, such as cleaner fuel standards, fleet turnover and particle capturing devices at power plants, have all contributed to improved air quality. Enhanced tools and models also help make more accurate measurements.

ARC currently utilizes air quality performance measures as a means of determining how well long-range regional transportation plans enhance and protect the quality of life for the region's citizens. ARC's air quality measures offer a quantitative measurement to analyze this success. ARC has also identified other potential quality of life measures, but has yet to develop measurement tools to quantify these measures.

The region is also actively working to protect natural features in the region as described in the *Open Space Preservation Objective*. These efforts are voluntary and are based on individual local governments and non-profits, as well as ARC recognizing the need to protect natural features in the region through land conservation and low-impact development efforts. ARC does however have a specific regulatory role in managing a crucial natural resource in the region, the Chattahoochee River.

In 1973, in response to growing concerns about the Chattahoochee River, the Georgia General Assembly enacted the Metropolitan River Protection Act (Georgia Code 12-5-440 et seq.). It established a 2000-foot Corridor along both banks of the Chattahoochee and its impoundments for the 48 miles between Buford Dam and Peachtree Creek. The Act was amended in 1998 to extend the Corridor an additional 36 miles to the downstream limits of Fulton and Douglas Counties (the limit of the Atlanta region). The act requires ARC to adopt a plan to protect the Chattahoochee River Corridor and to review development proposals for consistency with the plan.

The Act also requires local governments along the corridor to implement the plan by issuing permits based on ARC findings, monitoring land-disturbing activity in the corridor and enforcing

the act and the plan. Under the act, land-disturbing activity in the corridor must comply with the adopted plan to be legal.

As the coordinating and review agency for DRIs within the metro region, ARC reviews DRIs for consistency with regional adopted development guides, including the Regional Development Plan and Policies, the Atlanta Region Unified Growth Policy Map, the Regional Transportation Plan and Transportation Improvement Program and the Metropolitan North Georgia Water Planning District Plans. ARC seeks to identify potential impacts of the development on surrounding land uses, transportation systems, water supply and stormwater usage, environmental entities such as wetlands, water supply watersheds, and protected river corridors, and governmental services such as fire, police, schools and community services.

Regional Cooperation Objective

Regional cooperation should be encouraged in setting priorities, identifying shared needs, and finding collaborative solutions, particularly where it is critical to success of a venture, such as protection of shared natural resources.

For 60 years, ARC has helped to focus the region's leadership, attention, and resources on key issues of regional consequence such as aging services, governmental services, leadership development, research and mapping, workforce development, environmental planning, land use planning, and mobility and air quality issues.

Cooperation among local governments in the Atlanta region is a long-standing tradition. ARC and its predecessor agencies have coordinated the planning efforts in the region since 1947, when the first publicly-supported, multi-county planning agency in the United States was created. At that time, the Metropolitan Planning Commission (MPC) served DeKalb and Fulton counties and the City of Atlanta. Since then, ARC membership has grown to its current size of 10 counties and 63 municipalities. The Atlanta Regional Commission Board is composed of officials from political subdivisions and private citizens within the region. Thirty-nine members comprise the ARC Board - 23 local elected officials, 15 private citizens and a representative of the Georgia Department of Community Affairs.

During development of the Regional Assessment stakeholders and regional leaders consistently stressed the need for closer coordination on many issues facing the region. In this region, as in most regions of the U.S, regional plans are implemented through various programs of incentives, state or regional rules, agreements, technical assistance and collaboration among agencies and local governments.

Transportation Alternatives Objective

Alternatives to transportation by automobile, including mass transit, bicycle routes and pedestrian facilities, should be made available in each community. Greater use of alternate transportation should be encouraged.

Metro Atlanta continues to lay the groundwork for a major expansion of the regional transit system. The centerpiece of this effort in 2008 was the adoption of a regional transit plan called Concept 3, an ambitious long-range vision based on the principles of connecting people throughout the region to employment/activity centers; providing mobility choices; providing access to those without cars or who do not drive; providing reliable and competitive transit travel time; and making seamless regional transit travel convenient, accessible and attractive.

Since 2000, six of the region's twelve transit systems began operations. These six new systems have increased the regional fleet by over 400 buses and vans, increasing the number of regional transit miles traveled from 780 million in 2000 to over 911 million in 2007.

Bicycling and walking have become realistic modes of transportation as traffic congestion becomes more severe. While cyclists and pedestrians can use almost any regional transportation corridor, many facilities are not equipped or safe enough to support this mode of transportation. ARC has been promoting safe, functional, and regional bicycle and pedestrian planning since 1973 and continues to update its process to address new needs and trends.

A multi-modal transportation system includes facilities designed for all types of users, including bicycles. In Georgia, bicycles are considered vehicles and are therefore allowed to operate on nearly every roadway, with the exception of those routes on which bicycles are specifically prohibited such as interstate highways and limited-access freeways. Though bicycles are able to operate within and share the roadway with motorized vehicles, dedicated bicycle facilities are often provided to make bicycling safer and more comfortable.

ARC's Transportation Demand Management Division (TDM) strives to relieve traffic congestion and improve air quality in the region by helping commuters find simple, reliable alternatives to driving alone. ARC also manages the funding for eleven employer services organizations (ESOs) in the region. These organizations provide comprehensive service for a defined geographic area and additional programs, such as vanpool subsidies, circulator shuttles, information sessions for both employers and employees and promotional events.

The LCI program has awarded over, over \$141 million in planning and transportation funds have been allocated to support 102 distinct planning areas in the region to increase transportation alternatives. The transportation funds for the LCI program are aimed at local projects that support a multi-modal environment and encourage compatible private development.

Housing Opportunities Objective

Quality housing and a range of housing size, cost, and density should be provided in each community, to make it possible for all who work in the community to also live in the community.

The vast majority of housing available in the Atlanta region has been constructed over the past 40 years. In fact over 20% of the housing stock in the Atlanta region was built between 2000 and 2007. The development community, working within local government regulatory environments, has done a remarkable job of delivering substantial quantities of housing to meet historic and recent demands for housing, but it is uncertain if this supply is aligned with future consumer needs.

Workforce households in each county in the region earning between 60 and 90 percent of their county's area median income (AMI), are not able to easily afford a home priced at the county's median home value based on guidelines from HUD that as a rule of thumb home owners should not spend more than 30% of their household income on housing.

The region's lowest paying job sectors pay wages that result in a much more difficult for wage earners to find affordable accommodations. The five lowest paying sectors fall short of affording the median home price in any of the ten counties. Most of these five sectors also fall short of being able to afford rental housing in the 10-county region without having to spend more than 30% of their income on rent alone.

Approximately 30% of the 10-county region's housing stock consists of multi-family units. The majority of the region's households have less than two persons. This could represent a mismatch between the housing stock available and the number of smaller households in the region.

The remaining three Quality Community Objectives are inter-related and are represent primary focus areas for ARC.

Traditional Neighborhood Objective

Traditional neighborhood development patterns should be encouraged, including use of more human scale development, mixing of uses within easy walking distance of one another, and facilitating pedestrian activity.

Infill Development Objective

Communities should maximize the use of existing infrastructure and minimize the conversion of undeveloped land at the urban periphery by encouraging development or redevelopment of sites closer to the downtown or traditional urban core of the community.

Sense of Place Objective

Traditional downtown areas should be maintained as the focal point of the community or, for newer areas where this is not possible, the development of activity centers that serve as community focal points should be encouraged. These community focal points should be attractive, mixed-use, pedestrian-friendly places where people choose to gather for shopping, dining, socializing, and entertainment.

One of the ARC's principal goals is to support local governments in their efforts to create highly

livable and vibrant communities. Few of our programs do that as effectively as the Livable Centers Initiative (LCI) program. Seen as a cutting-edge program around the country, the LCI program was awarded the American Planning Association's National Planning Excellence Award for Implementation in 2009, and was awarded the Environmental Protection Agency's 2008 National Award for Smart Growth.

The planning process, project goals and deliverables outlined in the LCI program provide an efficient, realistic and effective method for communities to undertake smart-growth planning and implementation. In return, this works to achieve more balanced regional growth by concentrating new development away from undeveloped greenfields and into areas with existing infrastructure, reducing vehicle miles traveled and improving air quality. Key strategies for successful LCI communities embrace are utilizing infill development to create strong, vibrant traditional downtown areas that can serve as the focal point for the larger community and using the concepts of a traditional neighborhood design as the building block for communities that can support a mix of uses and a multi-modal environment.

The LCI program has proven enormously successful as the catalyst to major redevelopment efforts taking place in transit station areas and small and large urban centers and corridors. These investments have spurred new housing and development closer to jobs, and are helping to promote more efficient transportation nodes.

The 2009 LCI Implementation Report indicated that LCI communities are consistently capturing a growing share of the region's new development, especially office and commercial uses. Since the last Implementation Report in 2006, the amount of development concentrated into LCI areas compared with the 10-county region has doubled.

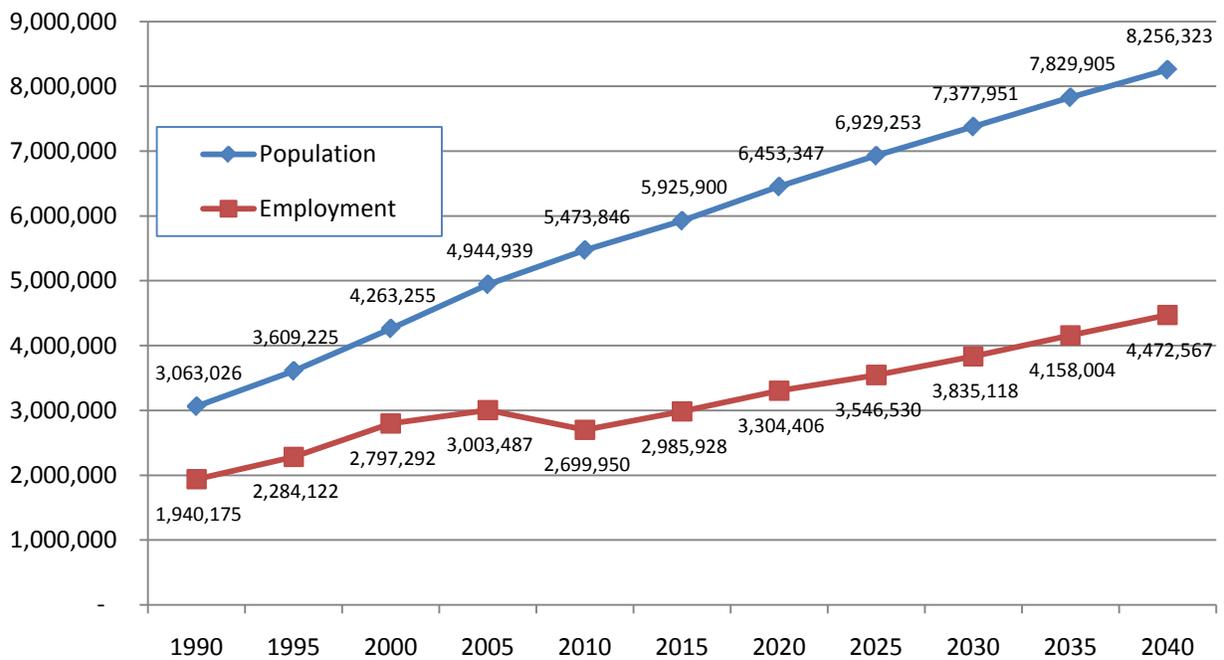
All LCI communities are different and face different challenges and opportunities. As a result, LCI plans vary in response to these specific needs. But, as unique as each community is, all LCI plans demonstrate an understanding of the primary goals and policies of the program. Analysis of these studies support conclusions that increased housing options and employment concentrated in centers and corridors, with supporting transportation options, reduce per capita VMT even while expanding the population and employment within the study areas.

Appendix: Demographics and Population

Population

Metro Atlanta's place as a transportation and logistics hub of the southeast positions it well to remain one of the fastest growing metropolitan areas in the country. During the last eight years alone, the Atlanta region has added 1.1 million people, making it the second-fastest growing metro in the country, behind Dallas. While the growth metro Atlanta has experienced during the last two decades will not continue at the same unprecedented rate. ARC produces, collects and analyzes population and employment data at several different geographic scales. Much of the data presented in this Appendix will be for the 20-county planning area for which ARC produces long-range forecasts. Figures 1 and 3 below provide details on observed and forecasted population growth in the 20-county region. Figure 3 provides observed and estimated population for the 10-county region (including 2009 ARC Estimates).

Figure 1: ARC's Population and Employment Forecasts (1990 - 2040) – 20-County Region



Source: ARC

Figure 2: Average Annual Forecast Growth (1990 - 2040) – 20-County Region

	Average Annual Growth				
	1990 - 2000	2000 - 2010	2010 - 2020	2020 - 2030	2030 - 2040
Population	120,023	121,059	97,950	92,460	87,837
Employment	85,712	(9,734)	60,446	53,071	63,745

Source: ARC

Figure 3: 10-County Region (Historic Population and Recent Population Estimates)

	1970	1980	1990	2000	2008	2009
Atlanta Region	1,500,823	1,896,182	2,557,800	3,429,379	4,099,600	4,124,300
Cherokee	31,059	51,699	91,000	141,903	203,000	205,900
Clayton	98,126	150,357	184,100	236,517	281,400	281,900
Cobb	196,793	297,718	453,400	607,751	674,200	676,800
DeKalb	415,387	483,024	553,800	665,865	727,600	731,200
Douglas	28,659	54,573	71,700	92,174	127,800	128,800
Fayette	11,364	29,043	62,800	91,263	106,000	106,700
Fulton	605,210	589,904	670,800	816,006	951,500	957,900
Gwinnett	72,349	166,808	356,500	588,448	752,800	757,300
Henry	23,724	36,309	59,200	119,341	190,700	192,800
Rockdale	18,152	36,747	54,500	70,111	84,600	85,000

Source: ARC

In the past decade the Atlanta MSA has become one of the ten largest in the country in terms of population. The Atlanta MSA moved from being the 12th largest MSA in 1990 all the way to 8th in 2008. The Atlanta MSA is one of only three regions to have added a million people between 2000 and 2008. The current population of the 10-county ARC planning area is over 4 million people, larger than 24 states. The 20-county population is larger than 29 states, including Colorado and Alabama. Figure 4 provides details on population growth trends in the ten most population metro regions in the country.

Figure 4: Population of 10 Most Populous Metropolitan Statistical Areas

MSA	2000 - 2008 Growth		2008		2000	
	Pop Increase	Rank	Population	Rank	Population	Rank
Atlanta	1,128,304	2	5,376,285	8	4,247,981	11
Boston	131,514	10	4,522,858	10	4,391,344	10
Chicago	471,308	7	9,569,624	3	9,098,316	3
Dallas	1,138,462	1	6,300,006	4	5,161,544	5
Houston	1,012,736	3	5,728,143	6	4,715,407	8
Los Angeles	507,181	6	12,872,808	2	12,365,627	2
Miami	407,208	8	5,414,772	7	5,007,564	6
New York	683,796	4	19,006,798	1	18,323,002	1
Philadelphia	151,324	9	5,838,471	5	5,687,147	4
Washington DC	561,947	5	5,358,130	9	4,796,183	7

Source: US Census Bureau

Population - Age Characteristics

Currently the Atlanta is a very young area when compared to other metros in the nation. In fact, the Atlanta MSA has the second largest share, behind only Dallas, of those aged 25 to 39, generally referred to as “Generation X,” when compared to 26 other metro areas with a population larger than two million. Conversely, the Atlanta MSA currently has the lowest share of population over the age of 65, but this is the fastest-growing age group in the 20-county Atlanta region. In 2005, roughly eight percent of the 20-county Atlanta region’s population was 65 and older. By 2040, 20 percent of the population will be older than 65. Figure 5 below provides detail of population by age between 2005 and 2040.

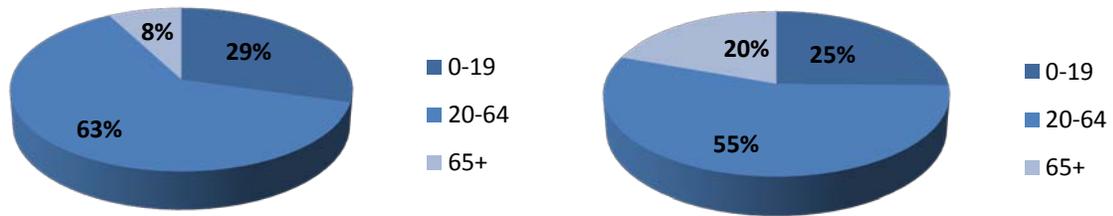
Figure 5: Population by Age (2005 - 2040) – 20-County Region

Age Group	2005	2010	2020	2030	2040	Change 2005 - 2040	
						Total	Percent
Ages 0-4	396,414	414,149	442,919	490,330	533,587	137,173	35%
Ages 5-9	361,303	418,465	442,795	479,621	530,190	168,887	47%
Ages 10-14	366,006	383,372	451,588	478,054	524,430	158,424	43%
Ages 15-19	333,101	361,331	433,081	458,838	497,831	164,730	49%
Ages 20-24	318,909	339,248	388,210	452,810	481,711	162,802	51%
Ages 25-29	359,858	383,230	431,366	496,321	522,685	162,827	45%
Ages 30-34	408,558	393,298	433,436	481,121	546,379	137,821	34%
Ages 35-39	417,772	437,773	445,601	494,366	560,943	143,171	34%
Ages 40-44	424,770	436,095	439,083	478,616	527,446	102,676	24%
Ages 45-49	383,948	436,843	463,958	471,459	520,653	136,705	36%
Ages 50-54	322,649	388,028	447,920	451,513	490,926	168,277	52%
Ages 55-59	277,901	321,828	433,705	461,320	470,120	192,219	69%
Ages 60-64	188,760	272,464	373,831	432,089	438,599	249,839	132%
Ages 65-69	126,060	178,349	293,395	396,918	426,445	300,385	238%
Ages 70-74	92,763	114,156	230,210	318,885	373,264	280,501	302%
Ages 75-79	70,950	80,218	139,321	232,667	319,248	248,298	350%
Ages 80-84	51,024	56,669	79,645	164,101	232,548	181,524	356%
Ages 85+	44,194	58,331	83,283	138,921	259,318	215,124	487%
Total	4,944,940	5,473,847	6,453,347	7,377,950	8,256,323	3,311,383	67%
Ages 0-19	1,456,824	1,577,317	1,770,383	1,906,843	2,086,038	629,214	43%
Ages 20-64	3,103,125	3,408,807	3,857,110	4,219,615	4,559,462	1,456,337	47%
Ages 65+	384,991	487,723	825,854	1,251,492	1,610,823	1,225,832	318%
% 65+	7.8%	8.9%	12.8%	17.0%	19.5%		

Source: ARC

As shown in Figure 7 below approximately 63 percent of the population was of an independent working age (here defined as ages 20 – 64) in 2005. By 2040, that percentage will drop to 55 percent, meaning that there will be roughly one worker for each dependent.

Figure 5: Workers and Dependents 2005 (Left) and 2040 (Right)

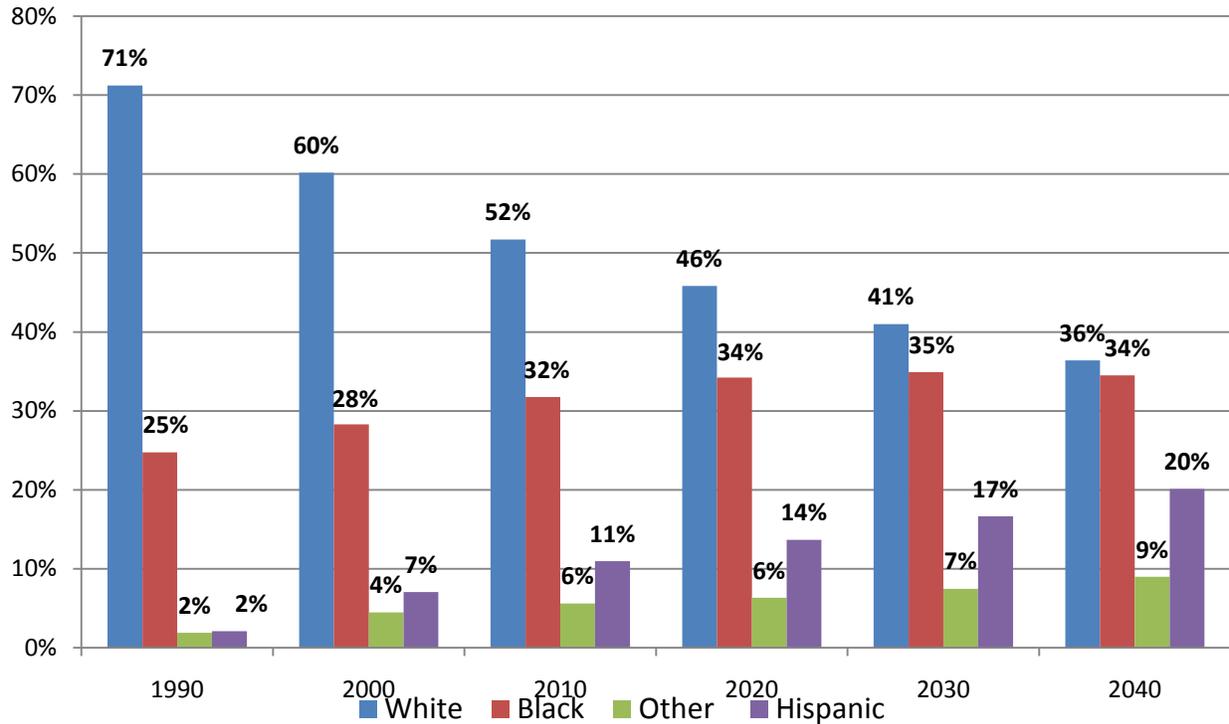


Source: ARC

Population – Race and Ethnicity

The Census Bureau anticipates that by 2027 most of U.S. population growth will be driven by immigration rather than by natural increase (more births than deaths). As shown in Figure 8 below, ARC’s forecast reflects this estimate, particularly in the White-non Hispanic population. Over the next 30 years, Black and White natural population change decreases, with White non-Hispanic becoming negative in the latter years of the planning horizon. Population increases in the region that can be attributed to natural increase will be largely dependent on the Hispanic population. This trend has already begun as nearly 75 percent of all growth since 2000 has come from non-whites.

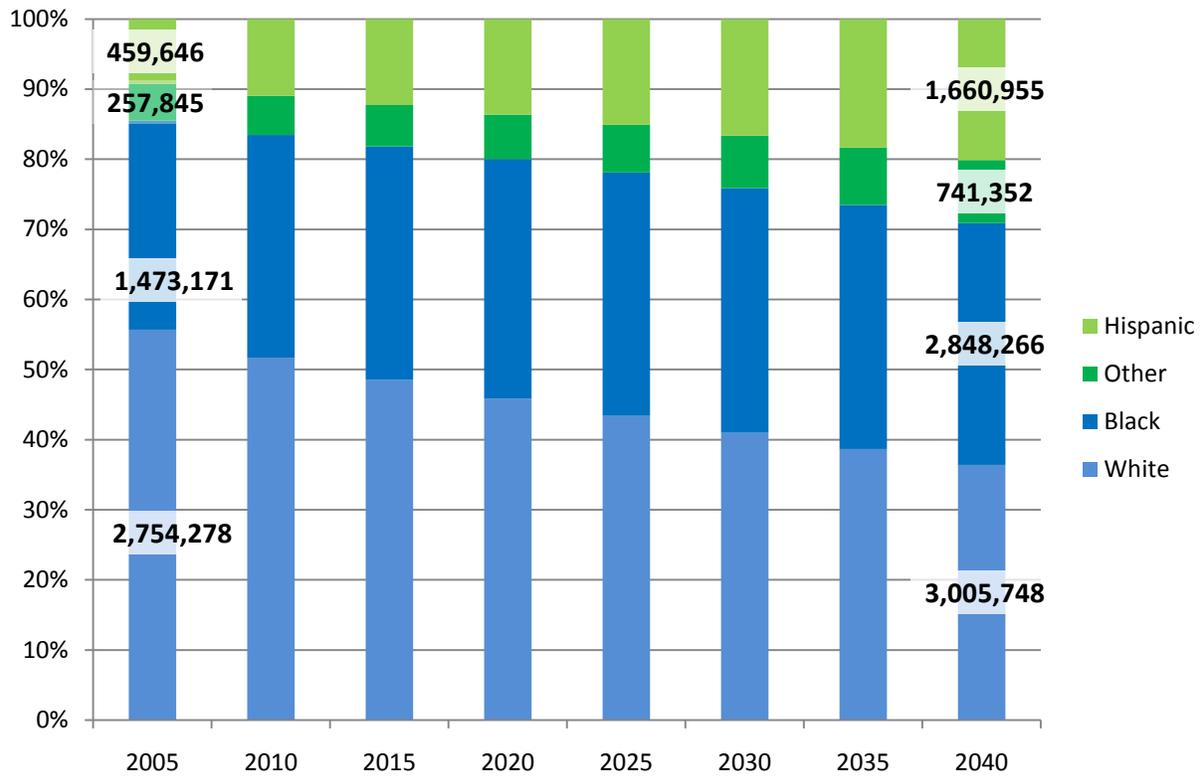
Figure 6: Share of Population by Race/Ethnicity (1990 - 2040)



Source: ARC

The Atlanta region has historically been a bi-ethnic region – White and Black, with Whites comprising the majority. By 2015 or so, there will no longer be a majority racial or ethnic group. Whites will maintain a plurality throughout the forecast horizon, their share, however, will decline from roughly 56 percent in 2005 to 36 percent in 2040. Meanwhile, the Hispanic share will increase from roughly nine percent today to 20 percent by 2040. Figure 9 below shows this change through the forecast period.

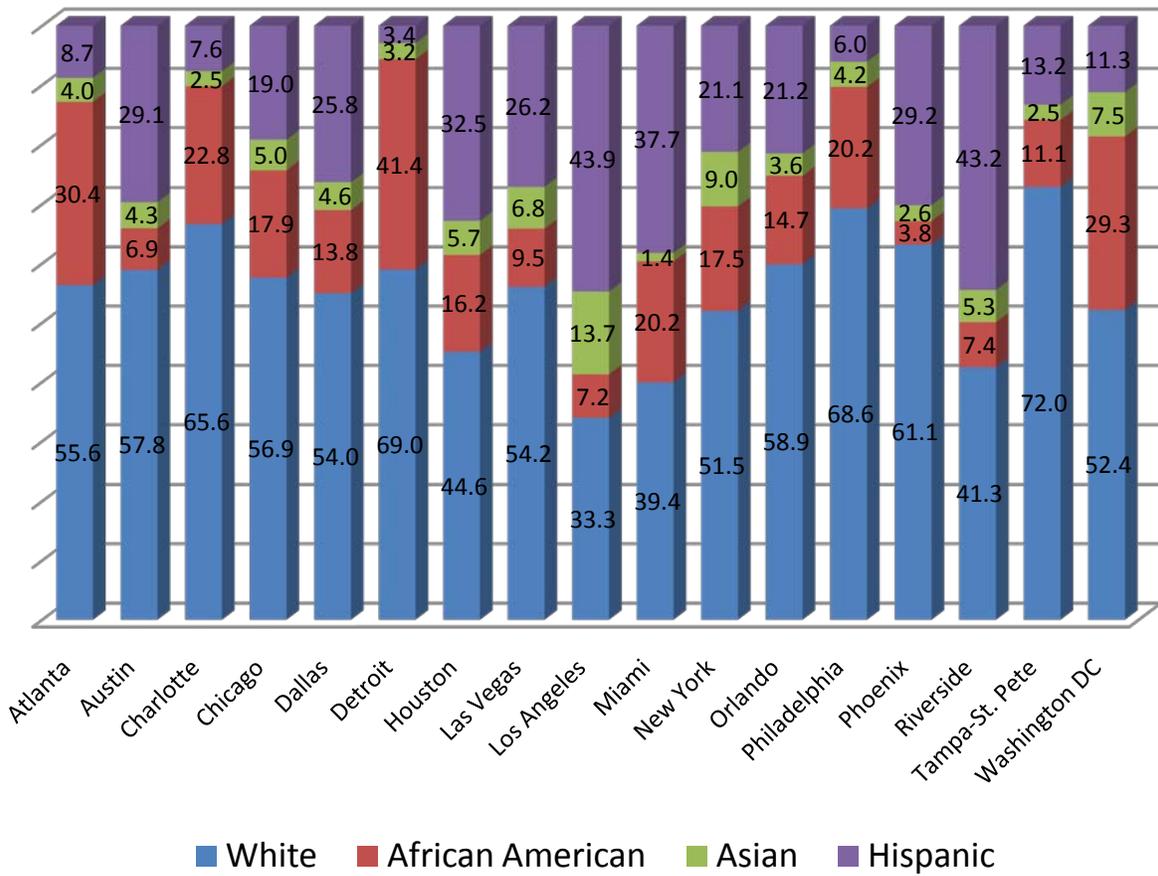
Figure 7: Population Forecasts by Race/Ethnicity



Source: ARC

Figure 10 below compares the racial and ethnic composition of the Atlanta region to other areas around the country. Figure 11 compares the number of foreign-born persons in metro areas around the country.

Figure 8: Racial/Ethnic Compositions of Regions Across United States (2007)



Source: US Census Bureau – 2007 ACS Estimates

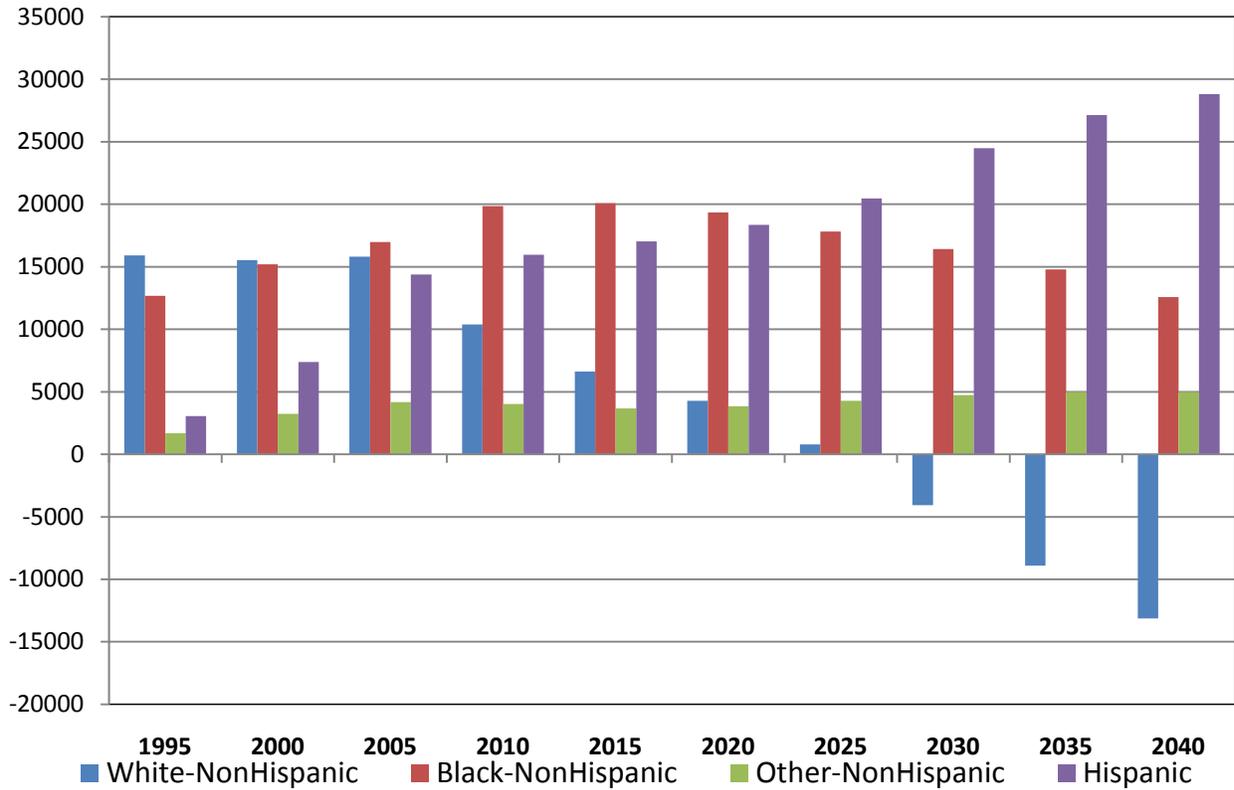
Figure 9: Metro Areas Ranked by Foreign-Born Population

Rank	Metro	2007 ACS Estimates	
		Total Population	Foreign-Born Population
1	New York	18,815,988	5,328,891
2	Los Angeles	12,875,587	4,488,563
3	Miami	5,413,212	2,005,178
4	Chicago	9,522,879	1,679,074
5	San Francisco	4,203,898	1,245,007
6	Houston	5,629,127	1,204,817
7	Dallas	6,144,489	1,092,361
8	Washington DC	5,306,125	1,088,949
9	Riverside	4,081,371	911,982
10	Phoenix	4,179,427	736,068
11	Boston	4,482,857	713,529
12	San Diego	2,974,859	674,084
13	Atlanta	5,271,550	671,356
14	San Jose	1,803,549	671,106
15	Philadelphia	5,827,962	508,977
16	Seattle	3,309,347	508,248
17	Detroit	4,467,592	388,920
18	Las Vegas	1,836,333	408,796
19	Sacramento	2,091,120	361,231
20	Tampa	2,723,949	335,183

Source: US Census Bureau – 2007 ACS Estimates

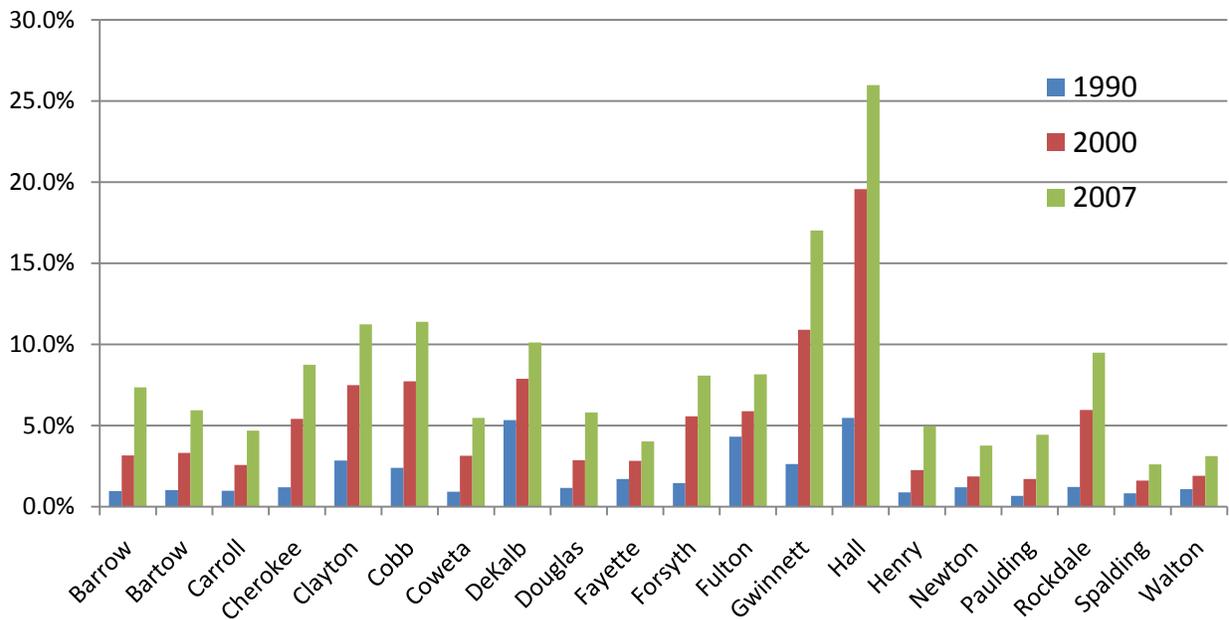
Figure 12 below shows the contributions of regional population growth between 1995 and 2040. It demonstrates that by 2025 the region’s growth will be largely driven by the growth of the Hispanic population. All counties in the region are experiencing growth in the Hispanic population as can be seen in Figure 13 that follows Figure 12.

Figure 10: Contributions to Regional Population Growth in Each 5-Year Increment



Source: ARC

Figure 11: Percent of Hispanic Population by County (1990 - 2007)



Source: ARC

As can be seen in Figure 14, population growth in the United States as a whole is largely being driven by Hispanic and Other-NonHispanic growth. This holds true for growth in the Atlanta region as well between 2000 and 2040.

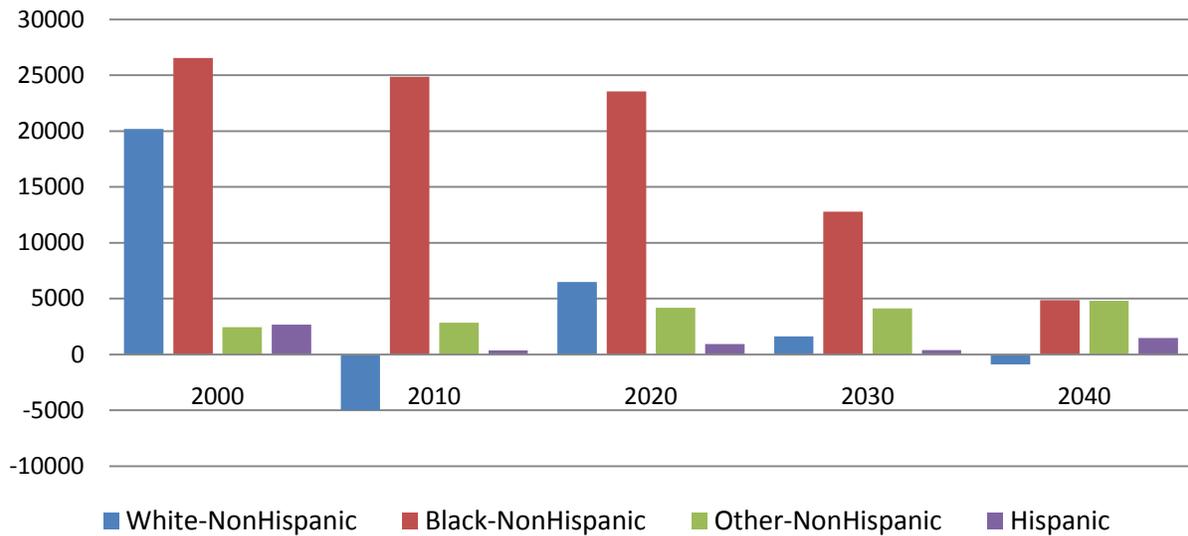
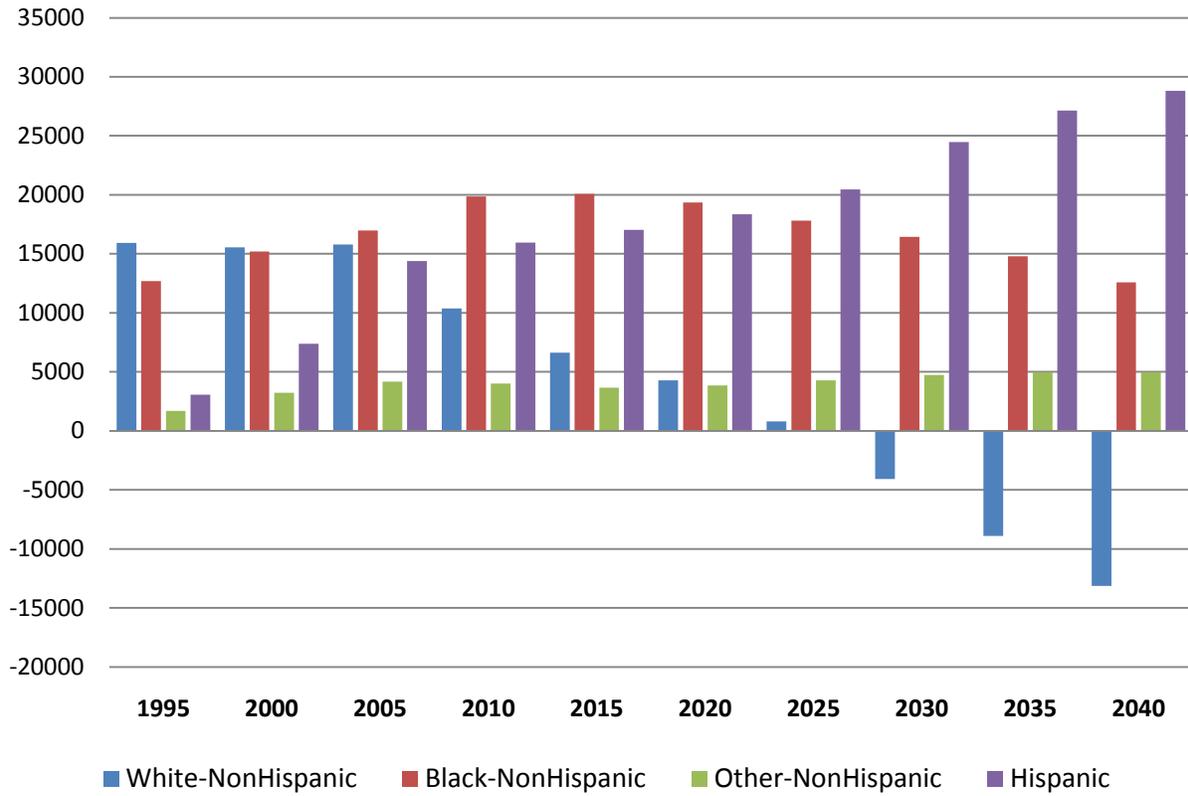
Figure 12: Composition of Population Growth (US and Atlanta Region)

	2000	2000 Share	2040	2040 Share	Change 2000 to 2040	% Change
United States						
All Races	282,194,313		406,813,875		124,619,562	44%
White-NonHispanic	195,775,813	69%	203,397,734	50%	7,621,921	4%
Black-NonHispanic	34,416,113	12%	49,502,664	12%	15,086,551	44%
Other-NonHispanic	16,349,771	6%	42,031,555	10%	25,681,784	157%
Hispanic	35,652,613	13%	111,881,914	28%	76,229,301	214%
20-Cty Area						
All Races	4,263,255		8,256,322		3,993,067	94%
White-NonHispanic	2,565,731	60%	3,005,749	36%	440,018	17%
Black-NonHispanic	1,205,788	28%	2,848,267	34%	1,642,479	136%
Other-NonHispanic	191,166	4%	741,352	9%	550,186	288%
Hispanic	300,570	7%	1,660,954	20%	1,360,384	453%

Source: US Census Bureau and ARC

Figure 15 on the following page details the two contributing factors to population growth in the region over the forecast period (natural increase and economic migration). Hispanic population growth in the region will largely be the result of natural increase. Conversely White-NonHispanic natural growth becomes negative in the latter part of the forecast period.

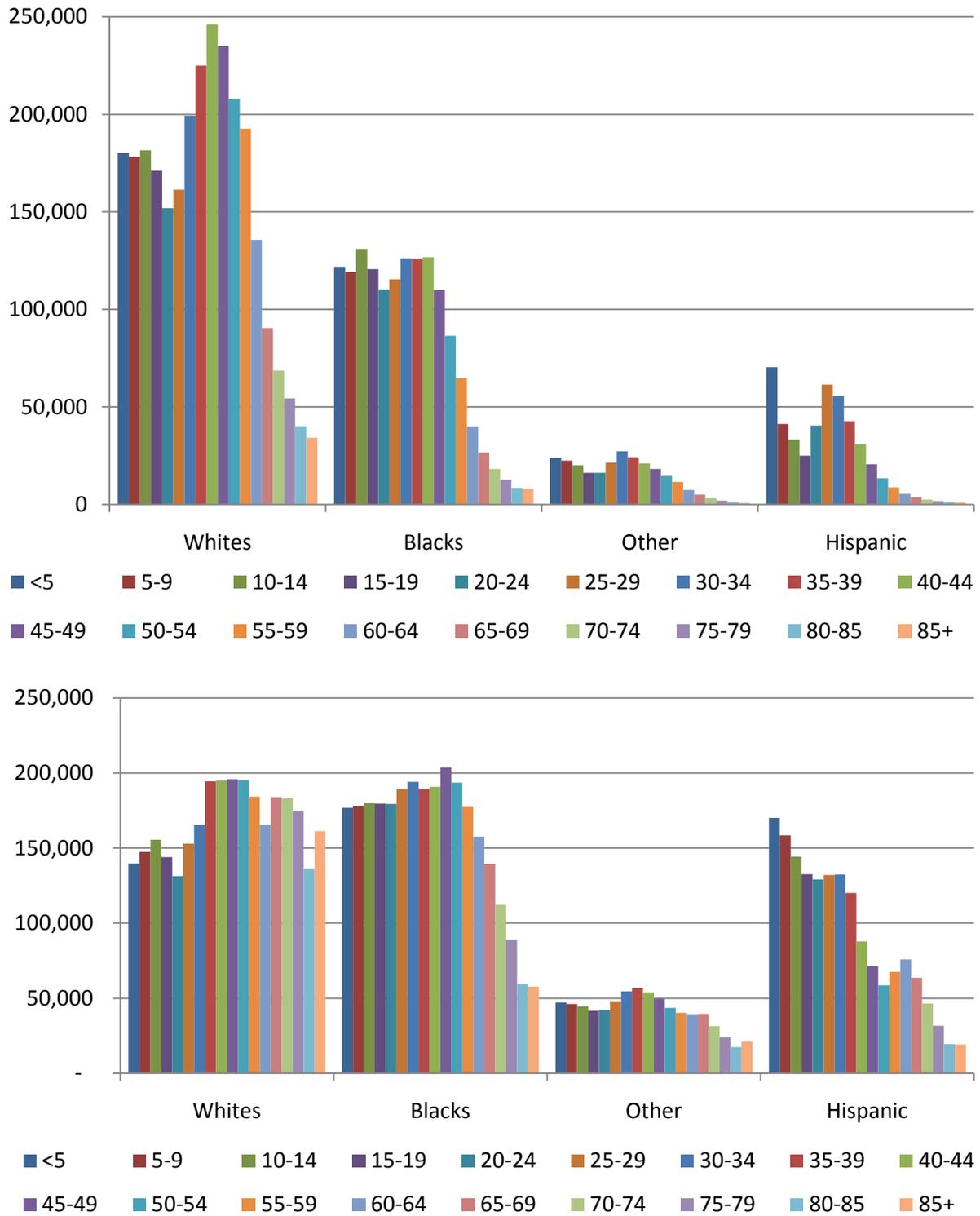
**Figure 13: Natural Population Change 1995 - 2040 (20-County Forecast Area) – Above
Net Economic Migration Change (Single Year) – 2000 - 2040**



Source: ARC

Race and ethnicity growth trends help shape the aging trends and vice versa. Figure 16 on the following page compares the region's age structure by race/ethnicity in 2005 and 2040. In 2005 the age structure for each race or ethnicity is shaped similarly, with spikes in the prime working age groups, followed by steep declines in the older age groups. By 2040, the shape of the structures change – numbers in each age group even out, except for the very old. The story is different for Hispanics, however. By 2040, the age structure for Hispanics will look very similar to what it looks for the Atlanta region as a whole in 1970 – with population in the youngest age groups surpassing the older age groups.

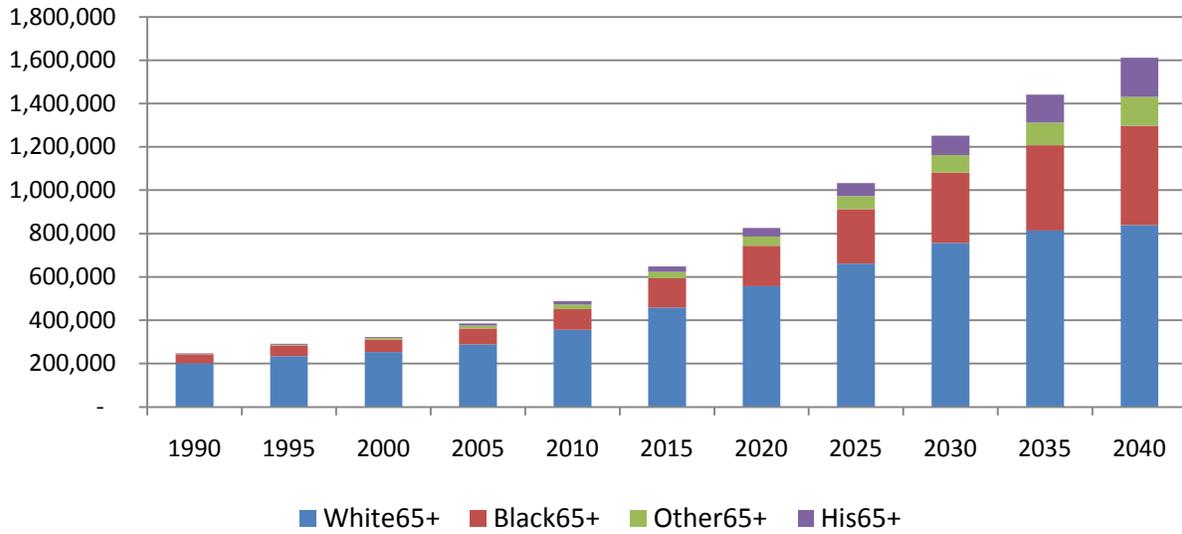
Figure 14: Age Structure by Race Ethnicity - 2005 (Above) and 2040 (Below)



Source: ARC

The transition to a region with a larger share of older adults not only impacts long term care services, but will also challenge the built environment and infrastructure in place to serve it. Figure 17 below demonstrates the magnitude of the challenge ahead. The region will transition to a region of just over 200K persons over 65 in 1990 to having more than 1.6 million older adults in 2040.

Figure 15: Growth in Population 65+ (By Race/Ethnicity)



Source: ARC

Appendix: Housing

Housing Characteristics and Growth Trends

The Atlanta region has experienced tremendous growth and an influx of new residents over the past decades. As shown in Figure 1, the majority of housing units in the 10-county region (78 percent) have been built since 1970, with the bulk of those units (702,198) being constructed from 1980 – 2000. Specifically, more than 20 percent of the entire housing stock in the 10-County area was constructed during 2000 – 2007; 20.5 percent was constructed from 1990 – 1999; 21 percent was constructed from 1980 – 1989; and 14.5 percent was constructed during the 70’s. The overall the housing stock in the metro region is fairly new, and the majority is less than 30 years old.

Figure 1: Age of Housing Stock – 10-County Region

	Total Units	Built 2005 or later	Built 2000 to 2004	Built 1990 to 1999	Built 1980 to 1989	Built 1970 to 1979	Built 1960 to 1969	Built 1950 to 1959	Built 1940 to 1949	Built 1939 or earlier
Cherokee County	78,912	9,633	16,922	20,991	17,520	8,700	2,014	1,178	879	1,075
Clayton County	105,986	6,378	18,338	16,356	21,168	19,233	15,008	6,168	2,358	979
Cobb County	278,096	13,165	40,795	62,649	73,032	41,900	26,932	12,254	4,554	2,815
DeKalb County	306,133	12,654	30,007	42,541	61,060	54,936	47,615	34,303	11,104	11,913
Douglas County	48,509	4,775	11,857	9,470	9,001	8,582	2,249	1,691	352	532
Fayette County	38,955	2,009	5,790	10,698	11,419	7,046	1,258	161	113	461
Fulton County	431,617	27,498	50,622	75,191	73,268	53,753	56,275	45,003	16,735	33,272
Gwinnett County	283,711	19,018	57,762	78,529	73,541	38,967	9,713	3,802	1,013	1,366
Henry County	71,270	9,111	20,657	22,189	10,702	4,578	1,668	1,234	187	944
Rockdale County	31,165	2,079	5,753	6,146	6,727	6,093	2,318	606	714	729
Region	1,674,354	106,320	258,503	344,760	357,438	243,788	165,050	106,400	38,009	54,086

Source: U.S. Census Bureau, 2007 American Community Survey

Between 2000 and 2008 every county in the 20-county region experienced over a 15 percent increase in housing units. As Figure 2 demonstrates, total housing units in the 10-county region increased from 1,331,264 units in 2000 to 1,678,398 in 2008, or 26 percent. Likewise, the total number of households in the 10-County region increased 21.5 percent to 1,533,196 households existing in 2008. Henry County experienced the greatest percentage increase in both housing units and households during this time, indicating a strong influx of new residents between 2000 and 2008. The County’s housing units increased 65 percent, from 43,166 units in 2000 to 71,314 units in 2008. Similarly, Henry County experienced a 63 percent increase in households, increasing from 41,373 households in 2000 to 67,596 households in 2008. Fulton County added the greatest number of new housing units, increasing the county’s housing stock by 85,776 units to a total of 434,408 units in 2008. Fulton County and Gwinnett County both experienced a significant growth of over 60,000 new households during 2000-2008, the largest quantity household increase of the 10-Counties.

Figure 2: Housing Units and Households – 10- & 20-County Regions

County	2008 Housing Units	2000 Housing Units	Total Change	Percent Change	2008 Households	2000 Households
Cherokee	79,966	51,937	28,029	54.0%	74,017	49,495
Clayton	107,337	86,461	20,876	24.1%	99,739	82,243
Cobb	278,391	237,522	40,869	17.2%	255,878	227,487
DeKalb	300,663	261,231	39,432	15.1%	276,775	249,339
Douglas	50,806	34,825	15,981	45.9%	47,028	32,822
Fayette	39,568	32,726	6,842	20.9%	37,240	31,524
Fulton	434,408	348,632	85,776	24.6%	382,422	321,242
Gwinnett	284,698	209,682	75,016	35.8%	262,974	202,317
Henry	71,314	43,166	28,148	65.2%	67,596	41,373
Rockdale	31,247	25,082	6,165	24.6%	29,527	24,052
"Core" 10	1,678,398	1,331,264	347,134	26.1%	1,533,196	1,261,894
% of 20-county	80.2%	81.7%	75.0%	NA	79.8%	81.8%
Barrow	25,165	17,304	7,861	45.4%	23,409	16,354
Bartow	36,286	28,751	7,535	26.2%	33,880	27,176
Carroll	43,982	34,067	9,915	29.1%	40,163	31,568
Coweta	44,389	33,182	11,207	33.8%	41,772	31,442
Forsyth	61,267	36,505	24,762	67.8%	57,215	34,565
Hall	64,482	51,046	13,436	26.3%	59,290	47,381
Newton	37,213	23,033	14,180	61.6%	35,322	21,997
Paulding	45,420	29,274	16,146	55.2%	43,730	28,089
Spalding	26,783	23,001	3,782	16.4%	24,531	21,519
Walton	29,323	22,500	6,823	30.3%	27,802	21,307
"External" 10	414,310	298,663	115,647	38.7%	387,114	281,398
% of 20-county	19.8%	18.3%	25.0%	NA	20.2%	18.2%
20-County Total	2,092,708	1,629,927	462,781	28.4%	1,920,310	1,543,292

Source: U.S. Census Bureau, 2007 American Community Survey

The region's external 10-counties experienced higher growth rate percentages than the internal 10-Counties, but the vast majority of growth was accommodated within the core counties. Forsyth County saw the highest growth in the number of new housing units and households of these external counties. Between 2000 and 2008 Forsyth County added 24,762 new housing units and 22,650 new households. Likewise, Forsyth County also experienced the highest percentage growth in housing units as well as households, with a 68 percent and 66 percent growth, respectively. Of these external counties, Spalding County experienced the smallest growth in terms of both housing units and households. The county added 3,782 new housing units, a 16 percent increase, and just over 3,000 new households, a 14 percent increase, between 2000 and 2008. A further breakdown of these changes in housing units and households for all cities found within the internal 10-county region can be seen in the Figure 3 below.

Figure 3: 2008 City (A - L) Housing Units and Households, 10-County Region

City	2008 Housing Units	2000 Housing Units	Total Change	Percent Change	2008 Households	2000 Households
Acworth	8,295	5,492	2,803	51.0%	7,565	5,218
Alpharetta	23,069	14,645	8,424	57.5%	21,067	13,843
Atlanta	226,677	186,998	39,679	21.2%	198,641	168,242
Auburn	2,445	2,225	220	9.9%	2,347	2,159
Austell	2,824	2,161	663	30.7%	2,581	2,051
Avondale Estates	1,257	1,235	22	1.8%	1,182	1,198
Ball Ground	356	284	72	25.4%	300	247
Berkeley Lake	646	618	28	4.5%	617	607
Braselton	1,695	451	1,244	275.8%	1,504	419
Brooks	220	218	2	0.9%	198	201
Buford	4,441	4,009	432	10.8%	3,965	3,824
Canton	8,705	2,885	5,820	201.7%	8,066	2,713
Chamblee	3,607	2,780	827	29.7%	3,297	2,721
Chattahoochee Hills	1,119	978	141	14.4%	965	950
Clarkston	2,734	2,560	174	6.8%	2,451	2,417
College Park	8,557	8,449	108	1.3%	7,453	7,854
Conyers	5,735	4,395	1,340	30.5%	5,240	4,059
Dacula	1,663	1,354	309	22.8%	1,550	1,303
Decatur	9,344	8,513	831	9.8%	8,509	8,068
Doraville	3,331	3,140	191	6.1%	3,130	3,061
Douglasville	12,647	7,910	4,737	59.9%	11,349	7,275
Duluth	11,515	9,151	2,364	25.8%	10,463	8,789
East Point	17,277	15,505	1,772	11.4%	15,014	14,454
Fairburn	4,766	1,969	2,797	142.1%	3,942	1,847
Fayetteville	6,330	4,642	1,688	36.4%	5,845	4,405
Forest Park	7,582	7,187	395	5.5%	6,953	6,790
Grayson	955	301	654	217.3%	895	292
Hampton	2,477	1,567	910	58.1%	2,379	1,449
Hapeville	2,697	2,538	159	6.3%	2,308	2,375
Holly Springs	3,230	1,161	2,069	178.2%	2,989	1,109
Johns Creek	26,223	21,014	5,209	24.8%	23,768	20,444
Jonesboro	1,635	1,612	23	1.4%	1,481	1,515
Kennesaw	12,019	8,762	3,257	37.2%	11,048	8,196
Lake City	982	978	4	0.4%	917	945
Lawrenceville	10,176	7,675	2,501	32.6%	9,426	7,469
Lilburn	4,204	4,011	193	4.8%	3,891	3,912
Lithonia	915	910	5	0.5%	796	820
Locust Grove	2,007	883	1,124	127.3%	1,820	816
Loganville	3,374	2,086	1,288	61.7%	3,234	1,966
Lovejoy	2,109	605	1,504	248.6%	1,946	496

Figure 3 (cont.): 2008 City (M - W) Housing Units and Households, 10-County Region

City	2008 Housing Units	2000 Housing Units	Total Change	Percent Change	2008 Households	2000 Households
Marietta	27,570	25,399	2,171	8.5%	24,672	23,994
McDonough	7,769	3,146	4,623	146.9%	7,259	3,016
Milton	13,486	6,556	6,930	105.7%	11,806	6,059
Morrow	2,183	1,772	411	23.2%	2,013	1,672
Mountain Park	301	264	37	14.0%	241	232
Nelson	342	261	81	31.0%	298	239
Norcross	3,707	2,784	923	33.2%	3,432	2,702
Palmetto	1,810	1,225	585	47.8%	1,613	1,160
Peachtree City	13,331	11,490	1,841	16.0%	12,341	11,004
Pine Lake	333	287	46	16.0%	301	268
Powder Springs	5,485	4,186	1,299	31.0%	5,131	4,071
Rest Haven	65	65	-	0.0%	51	49
Riverdale	5,720	4,533	1,187	26.2%	5,360	4,386
Roswell	34,516	31,389	3,127	10.0%	32,275	30,304
Sandy Springs	45,360	42,745	2,615	6.1%	40,136	39,220
Smyrna	23,869	19,715	4,154	21.1%	21,378	18,455
Snellville	7,145	5,251	1,894	36.1%	6,752	5,144
Stockbridge	9,158	3,953	5,205	131.7%	8,259	3,699
Stone Mountain	2,564	2,561	3	0.1%	2,343	2,421
Sugar Hill	6,024	4,047	1,977	48.9%	5,691	3,960
Suwanee	5,257	3,233	2,024	62.6%	4,836	3,030
Tyrone	2,423	1,417	1,006	71.0%	2,300	1,356
Union City	8,590	5,354	3,236	60.4%	7,314	4,962
Villa Rica	5,455	1,812	3,643	201.0%	4,602	1,478
Waleska	112	112	-	0.0%	107	112
Woodstock	9,704	4,078	5,626	138.0%	8,914	3,845

Figure 4 presents data on dwellings in the region considered substandard in 2007, meaning the housing units lack complete plumbing and kitchen facilities. The total number of housing units in the region that lacked complete plumbing and/or kitchen facilities is approximately two percent of the region’s housing supply (38,683 units). Of those units, 15,531 units (54 percent) were located in Fulton County and 6,890 units (24 percent) were located in Gwinnett County. Henry County, who has the newest housing stock in the region with a median built year of 1992, had the smallest percentage of substandard housing units (just over 1 percent).

Figure 4: Substandard Housing Units

	Total Units	Lacking complete plumbing facilities	Lacking complete kitchen facilities	1.5 or more persons per room
Cherokee County	78,912	714	945	328
Clayton County	105,986	801	2,559	123
Cobb County	278,096	810	887	1,065
DeKalb County	306,133	2,256	2,853	1,019
Douglas County	48,509	471	398	119
Fayette County	38,955	465	409	79
Fulton County	431,617	5,973	9,558	1,009
Gwinnett County	283,711	1,452	5,438	1,029
Henry County	71,270	314	728	174
Rockdale County	31,165	390	1,262	191
Region	1,674,354	13,646	25,037	5,136

Source: U.S. Census Bureau, 2007 American Community Survey

Slumping Housing Market

From 2000 – 2006, the 10-county Atlanta region permitted an average 50,450 residential units each year. During that time single-family structures were the most common permit type (72 percent of all permits) and duplexes as the least common permit type (less than one percent). Of all the permits issued during this time period (00-06) only 27 percent were issued for multifamily projects. Figure 5 demonstrates the significant drop in residential building permits issued in the 10-county over the past few years, an indicator of the declining housing and credit market.

Figure 5: Residential Housing Permits Issued, by Housing Type, 10-County Region

	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Units	22,469	48,638	49,073	50,716	47,786	55,405	52,556	49,208	33,055	14,452
<i>Units in Single-Family Structures</i>	16,689	32,907	34,306	35,257	37,613	39,429	41,639	35,808	19,824	7,431
<i>Units in All Multi-Family Structures</i>	5,780	15,731	14,767	15,459	10,173	15,976	10,917	13,400	13,231	7,021
<i>Units in 2-unit Multi-Family Structures</i>	274	84	100	160	162	214	102	158	120	40
<i>Units in 3- and 4-unit Multi-Family Structures</i>	21	302	170	165	97	114	66	249	439	152
<i>Units in 5+ Unit Multi-Family Structures</i>	5,485	15,345	14,497	15,134	9,914	15,648	10,749	12,993	12,672	6,829

Source: State of the Cities Data System

The slumping housing market can also be seen in slowing home sales. Figure 6 provides residential home sales in the 10-county region for the years 2006, 2007 and 2008 by sales type (sale of a new home/resale of an existing home). In 2008 the region's new home sales declined by over 40 percent from their 2006 levels, with only 13,220 new homes being sold.

Figure 6 : Recent Home Sales (10-County Region)

	2006			2007			2008		
	Total	New	Resale	Total	New	Resale	Total	New	Resale
Cherokee County	6,648	3,214	3,434	5,159	2,377	2,782	3,291	1,236	2,055
Clayton County	5,279	1,944	3,335	4,515	1,688	2,827	3,724	595	3,129
Cobb County	15,592	4,125	11,467	12,471	3,107	9,364	8,912	1,706	7,206
DeKalb County	13,883	3,295	10,588	11,807	2,482	9,325	9,825	1,426	8,399
Douglas County	3,677	2,013	1,664	2,750	1,345	1,405	1,787	469	1,318
Fayette County	2,240	566	1,674	1,649	313	1,336	1,159	198	961
Fulton County	25,985	10,748	15,237	20,534	7,081	13,453	16,441	3,864	12,577
Gwinnett County	21,662	8,285	13,377	15,235	5,046	10,189	10,467	2,671	7,796
Henry County	6,487	3,206	3,281	4,310	1,860	2,450	2,956	810	2,146
Rockdale County	2,145	960	1,185	1,579	652	927	980	245	735
Region	103,598	38,356	65,242	80,009	25,951	54,058	59,542	13,220	46,322

Source: Smart Numbers

A further indicator of the tarnished housing market, and the effects felt by many households, can be seen in the 2007 American Community Survey occupancy and vacancy data displayed in Figure 7 below. This data indicates approximately a 12 percent vacancy rate for all housing units in the 10-County area in 2007, more than double the 2000 vacancy rate of 5 percent. The trends recognized in this data are significant, and illustrate the effects the housing market rise and fall has had on households in the region. Vacancy rates from 1990 – 2000 steadily decrease, but then jump sharply through 2007 as a significant amount of homes in the region begin facing foreclosure. Excess housing inventory coupled with an initial tightening of the credit market

further restricted many would be homebuyers from obtaining a mortgage, simultaneously contributing to rising vacancy rates.

Figure 7: Occupancy/Vacancy Status for all Housing Units, 10-County Region

	1990			2000			2007		
	Occupied	Vacant	% Vacant	Occupied	Vacant	% Vacant	Occupied	Vacant	% Vacant
Cherokee County	31,309	2,531	7.5%	49,495	2,442	4.7%	74,054	4,858	6.2%
Clayton County	65,523	6,403	8.9%	82,243	4,218	4.9%	88,874	17,112	16.1%
Cobb County	171,288	18,584	9.8%	227,487	10,035	4.2%	256,506	21,590	7.8%
DeKalb County	208,690	22,830	9.9%	249,339	11,892	4.6%	270,369	35,764	11.7%
Douglas County	24,277	2,218	8.4%	32,822	2,003	5.8%	42,084	6,425	13.2%
Fayette County	21,054	1,374	6.1%	31,524	1,202	3.7%	36,997	1,958	5.0%
Fulton County	257,140	40,363	13.6%	321,242	27,390	7.9%	359,279	72,338	16.8%
Gwinnett County	126,971	10,637	7.7%	202,317	7,365	3.5%	256,562	27,149	9.6%
Henry County	20,012	1,263	5.9%	41,373	1,793	4.2%	65,016	6,254	8.8%
Rockdale County	18,337	1,626	8.1%	24,052	1,030	4.1%	26,858	4,307	13.8%
Region	944,601	107,829	10.2%	1,261,894	69,370	5.2%	1,476,599	197,755	11.8%

Source: U.S. Census Bureau, 2007 American Community Survey

Residential Foreclosures in the Atlanta Region

Similar to the national trend, the beginning of the decade saw developers throughout the region constructing ample housing inventory designed to meet the demand of a seemingly ever expanding housing market fueled through a lax credit market. Many people who would not traditionally be eligible found themselves qualifying for home mortgages, the majority of which were subprime and designed to reset to much higher rates after a couple of years. Once these mortgages begin to reset, a considerable number of homeowners found themselves faced with foreclosure. The region's widespread foreclosures have resulted in the Atlanta region ranking high among the nation's hardest hit metropolitan locations for foreclosures. While the state of Georgia ranks seventh highest in the nation's state foreclosure rates, the 20-county Atlanta region is responsible for 80 percent of Georgia's foreclosures.

As Figure 8 demonstrates, since the year 2000 the region's internal ten counties have experienced over a 420 percent increase in the number of foreclosures filed from 2000-2008. To be expected, foreclosure filings significantly peaked from 2005-2008 as widely issued subprime mortgages began to reset and the region experienced a significant period of job loss.

Figure 8: 10-County Region Foreclosure Filings by Year

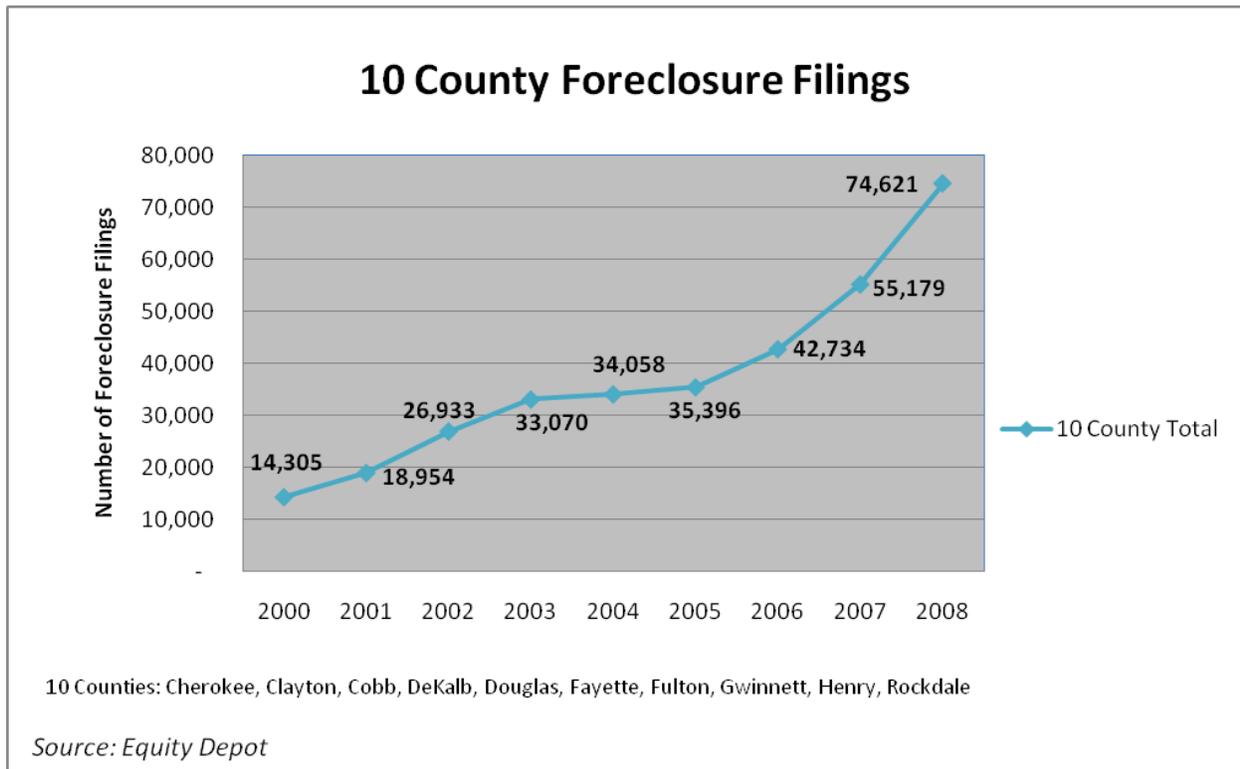


Figure 9 provides foreclosure filings by county. All counties in the region have been impacted by a dramatic increase in foreclosure filings. The rate of residential homes facing foreclosure in each county has steadily risen.

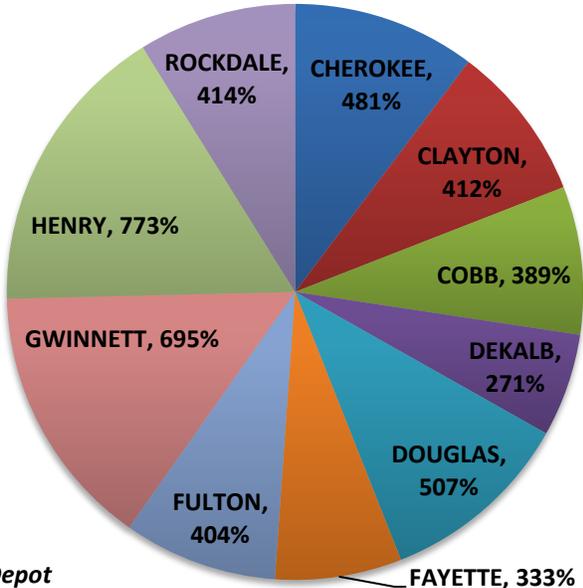
Figure 9: 10-County Foreclosure Filings by Year

County	2000	2001	2002	2003	2004	2005	2006	2007	2008
CHEROKEE	452	707	961	1,131	1,145	1,180	1,348	1,660	2,625
CLAYTON	1,465	1,991	2,817	3,404	3,706	3,739	4,555	5,765	7,495
COBB	1,675	2,234	3,235	3,781	3,762	3,882	4,567	5,565	8,187
DEKALB	3,687	4,989	6,955	8,157	8,124	8,149	9,327	11,080	13,677
DOUGLAS	463	569	753	1,041	1,136	1,214	1,292	1,928	2,811
FAYETTE	295	306	454	561	570	561	684	852	1,276
FULTON	3,661	4,657	6,502	8,111	8,061	8,847	11,437	15,553	18,465
GWINNETT	1,677	2,306	3,561	4,735	5,130	5,122	6,130	8,191	13,332
HENRY	549	803	1,185	1,509	1,663	1,914	2,344	3,223	4,793
ROCKDALE	381	392	510	640	761	788	1,050	1,362	1,960
10-CO TOTAL	14,305	18,954	26,933	33,070	34,058	35,396	42,734	55,179	74,621

Source: Equity Depot

As Figure 10 illustrates, all counties in the region have experienced at least a 250 percent increase in the number of foreclosure filings between 2000 and 2008, with the majority of counties experiencing upwards of a 400 percent increase. The most significant increase is seen in Henry County; over an eight year time frame the county saw a 773 percent rise in the number of foreclosures reported.

Figure 10: Percent Change in Foreclosure Filings, by County



Source: Equity Depot

Foreclosure rates across the region have resulted in a widely unsteady housing market flooded with unsold units, cleared and vacant lots, and foreclosed and abandoned homes. While all counties in the region have experienced tremendous growth in their residential development over the past decade, this burst housing bubble and consequential foreclosure phenomenon have contributed to a current market for residential product in the region that is as weak and constrained as it has been in recent memory.

Housing Affordability

The price of shelter carries multifaceted consequences for a household. Rather than just affecting the size or quality of a home a family lives in it, housing affordability also determines the stability of a household, the income remaining at the end of the month to meet other needs and the community in which one lives, which consequently affects available school and employment options. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care. Severely cost burdened households are those paying 50 percent or more of their income on housing costs, and may be in danger of homelessness. Figure 11 below provides a breakdown of cost burdened and severely cost burdened households for owner occupied and renter occupied housing units within the ten-county Atlanta region in 2007.

Figure 11: Share of Cost Burdened and Severely Cost Burdened Households (2007)

JURISDICTION	OWNERS - COST BURDENED		RENTERS - COST BURDENED	
	Number	Percentage of County's Total Owner-Occupied Housing	Number	Percentage of County's Total Rental-Occupied Housing
CHEROKEE COUNTY	22,405	37.1%	6,460	47.4%
CLAYTON COUNTY	20,475	35.9%	18,015	56.6%
COBB COUNTY	55,947	30.3%	33,030	46.1%
DEKALB COUNTY	55,585	33.5%	52,683	50.3%
DOUGLAS COUNTY	10,149	32.5%	5,093	47.0%
FAYETTE COUNTY	9,684	31.8%	4,239	65.1%
FULTON	68,520	32.1%	67,142	46.1%
GWINNETT COUNTY	62,756	33.3%	31,168	45.7%
HENRY COUNTY	17,696	33.6%	6,362	51.4%
ROCKDALE COUNTY	4,588	24.7%	4,494	54.4%

JURISDICTION	OWNERS - SEVERELY COST BURDENED		RENTERS - SEVERELY COST BURDENED	
	Number	Percentage of County's Total Owner-Occupied Housing	Number	Percentage of County's Total Rental-Occupied Housing
CHEROKEE COUNTY	7,076	11.7%	3,077	22.6%
CLAYTON COUNTY	7,936	13.9%	9,349	29.4%
COBB COUNTY	18,147	9.8%	15,895	22.2%
DEKALB COUNTY	22,692	13.7%	25,678	24.5%
DOUGLAS COUNTY	3,869	12.4%	2,385	22.0%
FAYETTE COUNTY	3,115	10.2%	1,386	21.3%
FULTON	25,708	12.0%	31,008	21.3%
GWINNETT COUNTY	22,867	12.1%	15,054	22.1%
HENRY COUNTY	4,895	9.3%	2,319	18.7%
ROCKDALE COUNTY	1,271	6.8%	2,527	30.6%

Source: US Census, 2007 American Community Survey

As the table shows, a rather substantial share of the region’s owners and renters are cost burdened. In all ten counties at least a quarter of the population that owns their home finds itself spending more than 30 percent of their income on housing. Considering the renter populations in the ten counties paints an even bleaker picture – at least 45 percent, increasing up to 65 percent in Fayette County, of this population are considered cost burdened by their rental costs. In the majority of the region, ten percent or more of households who own their home are spending more than 50 percent of their income on housing costs. In all counties, with the exception of Henry, 20 percent or more of the renter population is severely cost burdened, spending 50 percent or more of their income on rental costs.

Workforce housing can be defined a number of ways. A rule of thumb is that those households earning between 60 and 120 percent of the region’s median income are likely in need of workforce housing options. Low and moderate income households can benefit from existing housing subsidies that workforce households do not qualify for. The definition of workforce housing exists independently from low and moderate income households earning 60 percent or less of the county median income. The U.S. Department of Housing and Urban Development (HUD) defines a home as affordable if it costs the household no more than 30 percent of its annual income. Figure 12 uses the HUD standard to evaluate the extent to which workforce households in the region are priced out of the ownership market.

Figure 12: Income and Housing Affordability by County

County	One & Two Person Household	Multi-Family & Attached Housing Units	Median Home Value (2007)	Median Gross Rent (2007)	County Median Income (2007)	Workforce Households (Earn Between 60-120% AMI)	Income needed to afford mortgage**	Income needed to afford rent*
CHEROKEE	49%	15%	\$ 204,400	\$ 864	\$ 60,786	\$36,472 - \$72,943	\$ 68,133	\$ 34,560
CLAYTON	56%	33%	\$ 132,000	\$ 865	\$ 43,568	\$26,141 - \$52,282	\$ 44,000	\$ 34,600
COBB	59%	31%	\$ 219,800	\$ 906	\$ 64,817	\$38,890 - \$77,780	\$ 73,267	\$ 36,240
DEKALB	63%	40%	\$ 197,700	\$ 882	\$ 51,706	\$31,024 - \$62,047	\$ 65,900	\$ 35,280
DOUGLAS	55%	15%	\$ 160,300	\$ 870	\$ 55,626	\$33,376 - \$66,751	\$ 53,433	\$ 34,800
FAYETTE	58%	14%	\$ 254,700	\$ 966	\$ 76,789	\$46,073 - \$92,147	\$ 84,900	\$ 38,640
FULTON	67%	49%	\$ 267,800	\$ 890	\$ 58,837	\$35,302 - \$70,604	\$ 89,267	\$ 35,600
GWINNETT	51%	26%	\$ 201,800	\$ 921	\$ 63,818	\$38,291 - \$76,582	\$ 67,267	\$ 36,840
HENRY	49%	15%	\$ 177,800	\$ 913	\$ 62,899	\$37,739 - \$75,479	\$ 59,267	\$ 36,520
ROCKDALE	56%	19%	\$ 189,600	\$ 841	\$ 55,247	\$33,148 - \$66,296	\$ 63,200	\$ 33,640

Source: U.S. Census Bureau, 2007 American Community Survey

*Afforded rent calculated as monthly income * .30

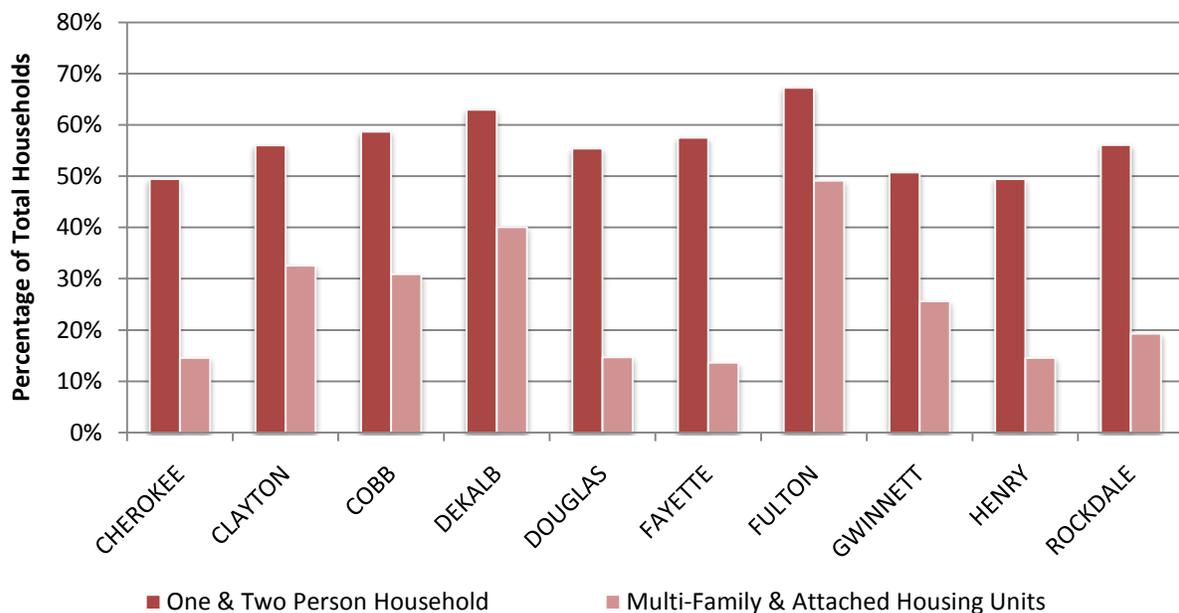
**Afforded mortgage amount calculated as yearly income * 3

Workforce households in each county earning between 60 and 90 percent of their county’s area median income (AMI), would be unable to afford a home priced at the county’s median home value. In DeKalb County and Fulton County workforce households altogether may be priced out of the ownership market, as households earning anywhere between 60 percent and 120 percent of these county’s AMI would be unable to purchase a home priced at or above the county’s median home value.

These data do suggest that the region’s rental inventory is generally at a rate that is affordable to the jurisdiction’s workforce, although in five of the ten counties those earning closer to 60 percent of AMI could face difficulties finding affordable rental shelter. And while the majority of the workforce who earn towards the higher bracket of the workforce income range may be eligible to rent a unit based on the county’s median rent prices, whether or not local zoning and developmental regulations are allowing enough rental units to be developed to meet current and future demand is not known.

Figure 13 also illustrates that more than half of the region’s households are made up of one or two person households. In fact only two counties were under 50%, and they both have 49% of their households that are two persons or less. These one and two person households are more likely to seek smaller dwelling units such as townhomes, condos or apartments. In all ten counties there is a significant mismatch between the share of the population made up of these smaller households and the housing stock available in the county as multifamily or attached housing units as shown in Figure 13.

Figure 13: Smaller Households & Non-Attached Residential Supply



Source: U.S. Census, 2008 American Community Survey 1-Year Estimates

Another aspect of this mismatch deals with the region’s senior population who comprise a significant share of these smaller households. Not only does this population generally desire housing smaller than single family homes designed for families, but these individuals also have special needs that our cities, counties and neighborhoods are not typically designed for. Communities designed for aging adults should provide housing options, transportation services and community amenities that facilitate active living and maximize independence.

As shown in Figure 14, these older adult populations comprise approximately 15 percent and upwards of each county's population. Between the years of 2000 and 2005 this population increased by at least 20 percent in almost all counties (excluding DeKalb), and upwards of 45 percent, indicating the older adult population in the Atlanta region is growing at a tremendous rate.

The bottom portion of the chart displays data on the supply of special needs housing found within each county. While some counties are more effectively supplying housing designed for these populations, as a whole the region will face high demand on these homes and communities as the share of this population continues to increase. The Atlanta Regional Commission's Aging Division is working with partners throughout the region to transform cities, counties and neighborhoods into Lifelong Communities – places that provide a full range of options to residents while insuring a high quality of life where individuals can live throughout their lifetime.

Figure 14: Older Adult Populations in the Region

	Cherokee	Clayton	Cobb	DeKalb	Douglas	Fayette	Fulton	Gwinnett	Henry	Rockdale
55+ Population	29,134	39,004	116,879	116,998	18,342	23,868	160,671	101,776	24,403	15,545
55 + as % of County Population	15.8	14.5	17.6	17.25	16.2	22.9	17.5	24.9	14.5	19.8
% change in 55+, 2000 - 2005	45.8	33.9	35.5	17.9	26.3	41.6	24.9	45.8	34.7	23.4
Average Years in Home	14.36	19.42	17.54	21.86	17.97	15.99	21.02	13.94	17.05	17.84
Independent Retirement Communities - Non-subsidized	1	3	7	10	0	1	22	8	0	1
Independent Retirement Communities - Subsidized	3	1	8	14	1	0	41	4	1	0
CCRC	0	0	1	1	0	0	5	0	0	0
Housing Purchase/Age Designated	7	3	13	1	3	1	5	6	6	0
Housing Authorities	1	1	1	3	1	0	5	1	1	1
Personal Care Homes	21	79	118	292	24	14	159	224	17	23
Nursing Homes	3	4	14	18	1	2	21	9	2	2

Source: Office of Regulatory Services, Healthcare Facilities Division, DCA & UGA Carl Vinson Institute 2006 Survey

- 1) Continuing Care Retirement Communities (CCRC) - Residential facilities, also called "lifecare," which offer a continuum of care designed to meet residents' needs as they change. Under a contractual agreement, various types of accommodations and service/amenities can be arranged. Residents may be able to move from independent living to personal care/assisted living to nursing home care, depending upon the scope of the contract.
- 2) Housing Purchase/Age Designated Communities – Independent active adult housing communities where purchasers must be 55 years of age or older.
- 3) Housing Authorities - Local housing programs that provide information about eligibility and vacancies in the subsidized housing under their jurisdictions, accept Section 8 applications, provide Section 8 certificates, and/or administer public housing projects.
- 4) Personal Care Homes - Programs that provide housing in a group setting for elderly or disabled individuals. In these facilities, the owner or manager provides or arranges for the provision of housing, food service, and one or more personal services. Individuals residing in these facilities must be ambulatory with or without assistive devices.
- 5) Nursing Homes - Inpatient health care facilities that provide nursing and custodial care over an extended period of time for individuals who need 24-hour care and supervision according to applicable laws and regulations.

When considering whether or not a jurisdiction is affordable to the workforce, it is also important to consider the home prices and rents that are supported by sector specific wages. Figure 15 details the monthly and yearly incomes afforded to both the top five highest and lowest paying job sectors in the Atlanta region. From these wages the mortgage that could be afforded, as well as the monthly rent an employee of this sector could afford was calculated. Comparing this data with the 10-county median rents and median home prices is an indicator of where these sector specific employees could afford to live.

Figure 15: Sales and Rents Supported by Local Wages

The five highest-paying job sectors in metro Atlanta, according to the Census Bureau's Quarterly Workforce Indicators programs, are (based on 3rd quarter, 2007)				
SECTOR	MONTHLY INCOME	YEARLY INCOME	MORTGAGE AFFORDED*	RENT AFFORDED**
FINANCE	\$ 6,039	\$ 72,468	\$ 217,404	\$ 1,811.70
INFORMATION	\$ 5,991	\$ 71,892	\$ 215,676	\$ 1,797.30
PROFESSIONAL, TECHNICAL AND BUSINESS SERVICES	\$ 5,911	\$ 70,932	\$ 212,796	\$ 1,773.30
WHOLESALE TRADE	\$ 5,611	\$ 67,332	\$ 201,996	\$ 1,683.30
MANAGEMENT COMPANIES	\$ 5,209	\$ 62,508	\$ 187,524	\$ 1,562.70
The five lowest-paying job sectors in metro Atlanta, according to the Census Bureau's Quarterly Workforce Indicators programs, are (based on 3rd quarter, 2007):				
SECTOR	MONTHLY INCOME	YEARLY INCOME	MORTGAGE AFFORDED*	RENT AFFORDED**
ACCOMMODATION AND FOOD SERVICES	\$ 1,637	\$ 19,644	\$ 58,932	\$ 491
RETAIL TRADE	\$ 2,475	\$ 29,700	\$ 89,100	\$ 743
ARTS, ENTERTAINMENT, AND RECREATION, ADMINISTRATIVE SUPPORT/WASTE MGMT.	\$ 2,771	\$ 33,252	\$ 99,756	\$ 831
EDUCATION SERVICES	\$ 3,106	\$ 37,272	\$ 111,816	\$ 932
	\$ 3,402	\$ 40,824	\$ 122,472	\$ 1,021
County	Median Home Value (2007)	Median Gross Rent (2007)		
CHEROKEE	\$ 204,400	\$ 864		
CLAYTON	\$ 132,000	\$ 865		
COBB	\$ 219,800	\$ 906		
DEKALB	\$ 197,700	\$ 882		
DOUGLAS	\$ 160,300	\$ 870		
FAYETTE	\$ 254,700	\$ 966		
FULTON	\$ 267,800	\$ 890		
GWINNETT	\$ 201,800	\$ 921		
HENRY	\$ 177,800	\$ 913		
ROCKDALE	\$ 189,600	\$ 841		

* Afforded Mortgage Amount Calculated as Yearly Income x3

** Afforded Rent Calculated as Monthly Income x.30

Figure 15 above indicates that the top five highest paying sectors could afford to rent in any of the ten counties, assuming there were rental units available. However, even some of these top five wages fall short of affording to own a home in any county, when compared to the 2007 median home prices found in the ten counties. For example the highest paying job sector, finance, could comfortably afford a \$217,400 mortgage. This wage would still fall short of the median home price in Fulton, Fayette, and Cobb counties.

Looking at the wages afforded to the region's lowest paying job sectors offers extremely limited options. All five of these sectors fall short of affording the median home price in any of the ten counties. And while education and the administrative support/waste management employment sector should be able to afford rental housing within any of the ten counties the remaining three job sector wages fall short of being able to afford rental housing in any of the ten counties, without having to spend more than 30 percent of their monthly income on rent alone.

Housing Affordability: Housing & Transportation Costs

Housing affordability is most commonly understood as the extent to which a household's income can cover the price of residential housing. However, the cost of transportation is becoming ever more prominent in a household's budget as today's development patterns require increased use of the automobile, and people have increasingly chosen to live farther from their jobs. Because of these factors many argue the affordability of housing should consider not only the price of a mortgage or rent, but also the transportation costs associated with a home's location. So while housing is typically considered affordable if it accounts for roughly 30 percent or less of a household's monthly budget, new data suggests that the high cost of transportation in the Atlanta area should not longer be ignored when considering the price of housing.

According to the Center for Neighborhood Technology's 2007 report, *No Time to Waste— the Case for Increasing Housing and Transportation Affordability in the Atlanta Region through Mixed Income Communities*, and illustrated through Figure 16 below, 90 percent of households in the region that earn less than \$35,000 a year pay at least 18 percent for transportation costs. This statistic, coupled with the households that are paying at least 30 percent of their income on housing costs alone (75 percent of households, according to CNT), and it results in approximately 75 percent of households paying at least 48 percent of their income on housing and transportation costs combined.

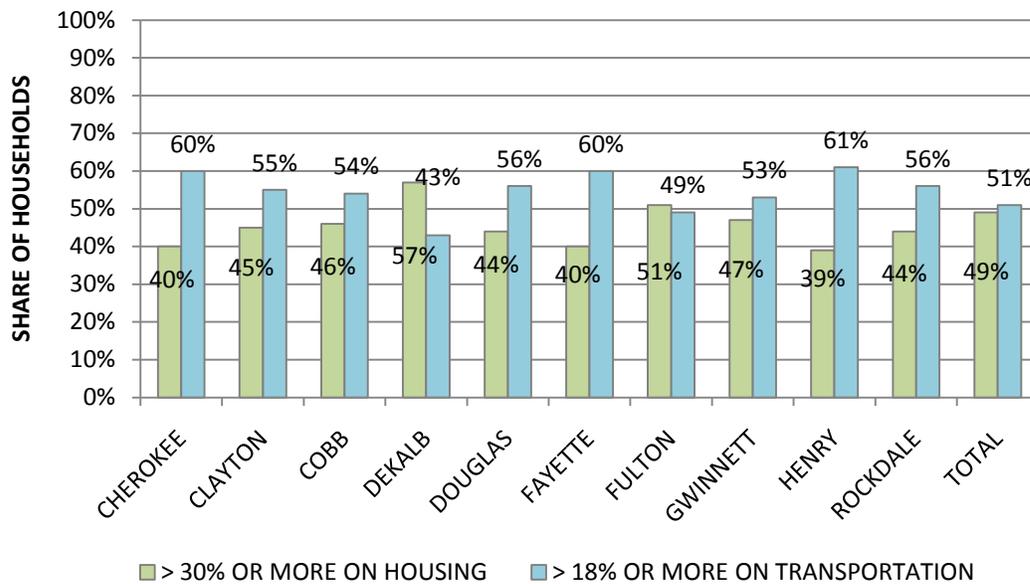
Figure 16: Household Transportation Costs for Households Earning Less Than \$35K Per Year



SOURCE: *No Time to Waste*, CNT, 2007

Figure 17 below illustrates that a substantial share of the region’s households earning less than \$50,000 face similar burdens. Of these households, 51 percent face transportation costs equal to 18 percent or more of their income. Similarly, 49 percent of households earning less than \$50,000 annually are spending 30 percent or more of the income on housing costs.

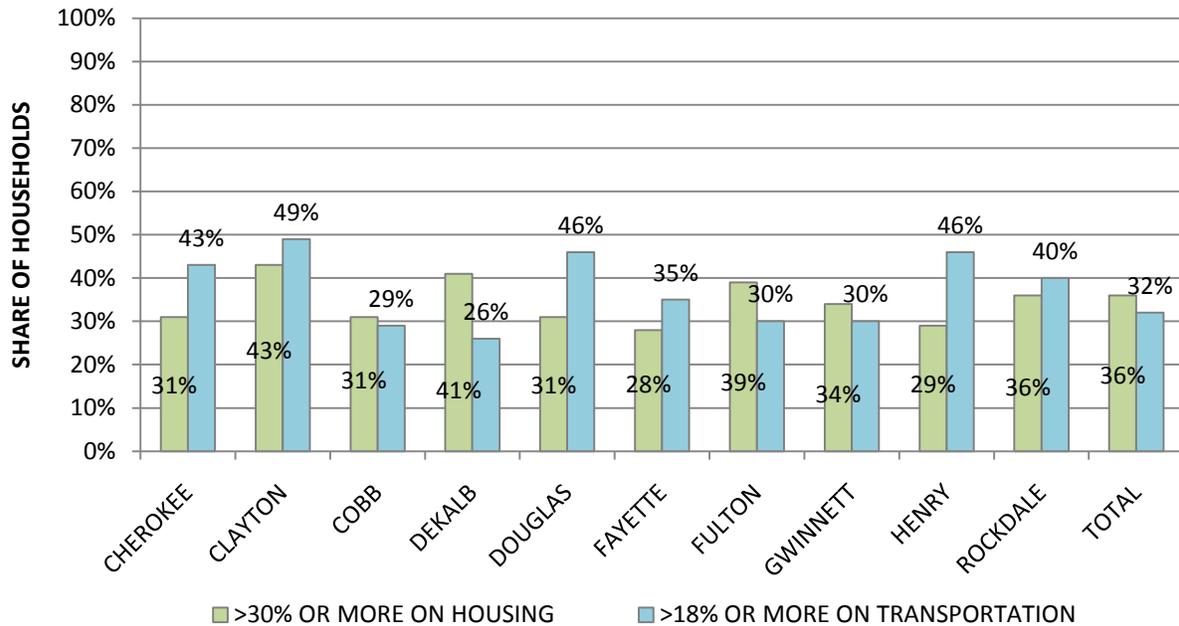
Figure 17: Housing and Transportation Costs for Households Earning Less than \$50K Per Year



SOURCE: *No Time to Waste*, CNT, 2007

This phenomenon is not isolated to those households earning less than \$50,000. For all households in the 10-county region, CNT found that 36 percent are paying upwards of 30 percent of their income for housing, while 32 percent of households in the region also have high transportation cost burdens, as shown in Figure 18.

Figure 18: Housing and Transportation Costs for All Households



SOURCE: *No Time to Waste*, CNT, 2007

The Center for Neighborhood Technology (CNT) and the Center for Transit Oriented Development (CTOD) have developed a tool that uses a Housing + Transportation Affordability Index to compare metro regions around the nation. As is shown in Figure 19 below many metro areas around the country are facing difficult challenges in terms of providing housing and transportation choices that are affordable.

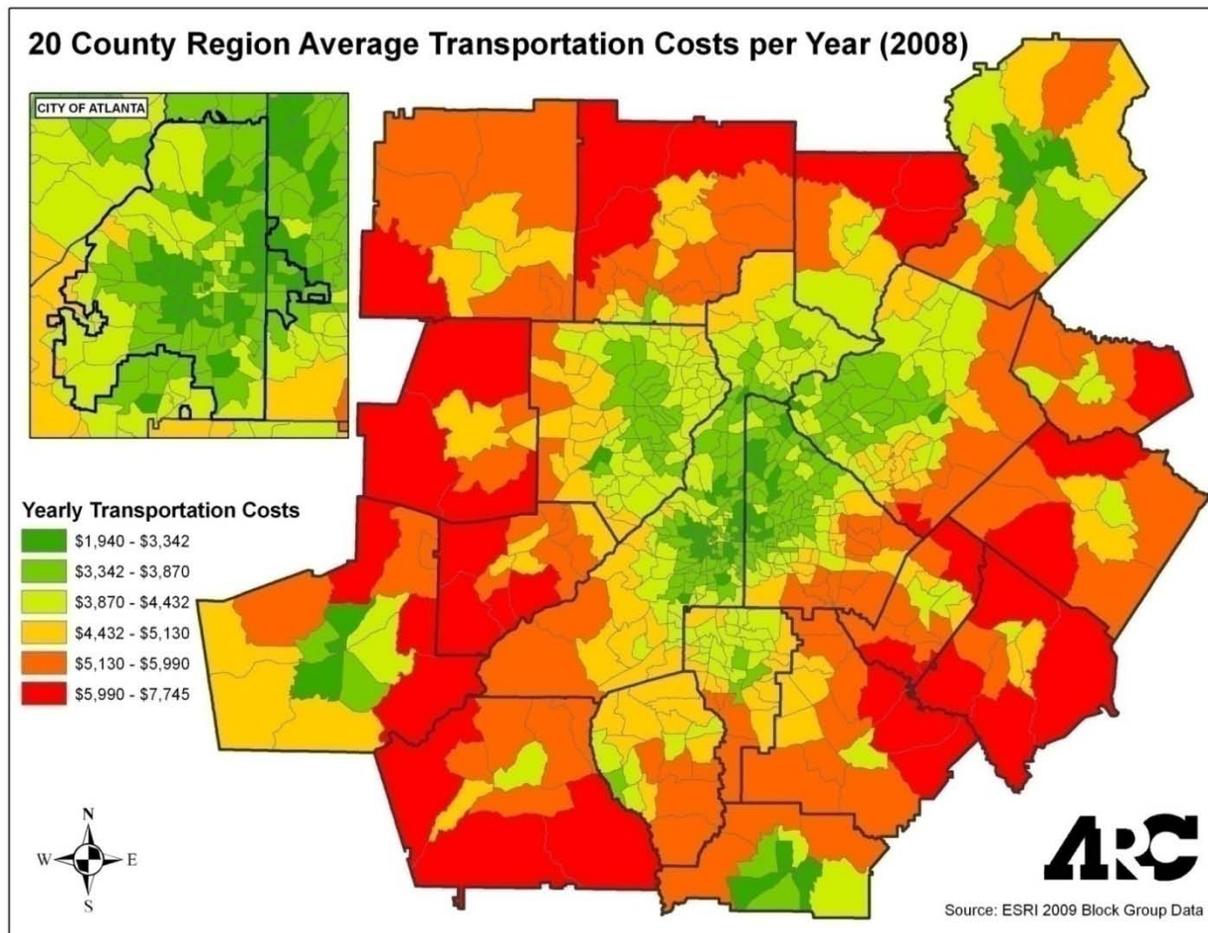
Figure 19: Housing and Transportation Costs - Regional Comparison

Metropolitan Area	Total Housing Costs (% of Income, on average)	Total Housing + Transportation Costs (% of Income, on average)
Atlanta	26%	47%
Major U.S. Cities		
Los Angeles	34%	55%
New York	34%	52%
San Francisco	32%	49%
Boston	28%	48%
Chicago	28%	48%
Philadelphia	27%	47%
Sun-Belt Comparison		
Miami	36%	59%
Houston	25%	49%
Phoenix	27%	49%
Charlotte	25%	49%
Dallas-Fort Worth	26%	47%
Washington D.C., Baltimore	26%	45%

Source: Center for Neighborhood Technology (*cnt.org*)

Figure 20 below is a map that displays the average household’s yearly transportation cost at the Census Block Group level for the 20-county Atlanta region. The map shows that farther a household is from the region’s core the more a household’s yearly transportation costs rise. With the exception of three employment centers seen in Hall, Carroll and Spalding County, the region’s external counties annually pay a substantial amount more than the region’s internal counties in transportation costs. So while households living in the region’s outer suburbs experience some of the region’s lowest housing costs, the yearly transportation costs associated with living in these areas are substantially greater than other areas of the region. Some county’s households paying an average of over \$5,000 –\$7,745 on transportation costs alone, with no consideration given to the amount of time lost commuting.

Figure 20: Yearly Transportation Costs (20-County Region)



The data available on housing affordability and transportation cost burdens imposed on the region's households indicate that the cost of shelter only presents half the picture for affordability in the region. While living great distances from employment centers and incurring long and costly commutes in exchange for less expensive housing prices has traditionally been the trend for Atlanta, in the face of rising energy costs and amplified traffic congestion this pattern is proving unsustainable. In contrast, data suggests that considering one's location efficiency, defined by CNT as evaluating not just the cost of housing but also the transportation costs associated with place, may be the most sustainable and thorough way of assessing the costs of shelter for the region, as well as considering the most appropriate location of new residential development in the future. Through CNT's definition of location efficiency compact neighborhoods with walkable streets, better access to transit, and a wide variety of stores and services have high location efficiency. These locations require less time, money, and greenhouse gas emissions for residents to meet their everyday travel requirements – a savings that quickly can add up for households and communities.

Appendix: Economic Opportunity

Total Employment

In 2008, the core 5 counties of the region (Clayton, Cobb, DeKalb, Fulton and Gwinnett) had 77% of the 20 county region's total jobs at 1,805,191 compared to a 20 county total of 2,357,835. For the decade, Gwinnett leads the region in overall growth, adding over 28,000 jobs. Henry County has also shown strong job growth since 2000 adding almost 20,000 jobs. Hall County remains a dynamic employment center outside the 10-county region. Clayton, DeKalb, Fulton, Rockdale and Spalding counties each posted job losses between 2000 and 2008. Figure 1 below documents total employment by count in 2000 and 2008 (counties in ARC's 10-County planning area are bolded).

Figure 1: Total Employment

County	2000	2008
Barrow	11,770	15,508
Bartow	29,613	33,516
Carroll	30,783	38,704
Cherokee	31,661	47,561
Clayton	141,368	120,613
Cobb	304,904	326,951
Coweta	25,786	33,220
DeKalb	333,681	307,116
Douglas	32,255	40,698
Fayette	31,796	39,677
Forsyth	39,451	61,542
Fulton	769,258	727,740
Gwinnett	294,461	322,771
Hall	63,167	74,536
Henry	30,514	49,986
Newton	17,606	21,386
Paulding	11,383	21,236
Rockdale	33,349	31,980
Spalding	22,667	22,482
Walton	14,030	18,604

Source: ARC and Georgia Department of Labor

Unemployment

The unemployment rate in Georgia is currently over ten percent. As Figure 2 shows some counties within the region are experiencing an unemployment rate that is twice as high as they did 10 years ago. Although the unemployment rate does rise and fall throughout the past 10 years, the unemployment rate within the Atlanta region, has been trending upward.

Figure 2: 1999-2009 20 County Unemployment Rates

County	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Barrow	4.7	2.5	2.8	4	4.2	4.4	4.6	4.5	4.1	4.3	6.6	11.1
Bartow	4	3.4	3.4	4.1	4.8	4.7	5	5.4	4.8	4.8	7.2	13.3
Carroll	4.1	4.2	3.5	5.3	5.1	4.8	4.7	5.5	4.6	4.8	7	10.8
Cherokee	2.1	1.8	2.5	3.2	3.8	3.9	3.6	4.1	3.5	3.6	5.6	9.5
Clayton	4.2	3.4	3.5	4.3	5.7	6	5.8	7.2	5.5	5.4	7.8	12.3
Cobb	2.7	2.5	2.8	3.7	4.4	4.3	4.3	5.1	4.1	4	5.8	9.6
Coweta	4.3	2.4	2.9	3.6	4	4.4	4.1	4.7	4.1	4	5.9	10.0
DeKalb	4	3.8	3.3	4.5	5.4	5.4	5.7	6.4	4.9	4.8	6.5	10.7
Douglas	3.1	2.7	2.9	3.4	4.5	4.7	4.8	6.2	4.7	4.6	6.8	11.4
Fayette	3.6	1.7	2.7	2.9	3.5	3.7	3.7	4.8	3.8	3.9	5.4	8.4
Forsyth	1.7	1.6	2.3	3.3	3.9	3.5	3.4	3.6	3.2	3.5	5.1	8.6
Fulton	4	3.7	3.5	4.6	5.4	5.3	5.1	6	4.8	4.8	6.8	10.7
Gwinnett	2.4	2.2	2.7	3.7	4.4	4.3	4.3	4.8	4	4	5.8	9.4
Hall	2.6	2.3	2.8	3.7	4	3.8	4	4.4	3.6	3.6	5.7	9.1
Henry	2.9	2	2.7	3.3	4.2	4.3	4.6	5.1	4.5	4.3	6.4	10.4
Newton	3.3	2.9	3.1	3.9	4.7	5.1	5.1	5.9	5.2	5.1	7.8	12.6
Paulding	2.5	2.1	2.7	3.2	3.9	3.9	4.3	4.5	3.9	4.1	6.6	10.7
Rockdale	2.7	2.2	3.1	3.6	4.7	4.8	5.3	5.8	4.8	4.8	7.2	12.0
Spalding	4	3.9	4.4	4.7	5.7	5.7	5.8	6.4	6.2	5.6	8.7	15.4
Walton	3.4	2.7	2.9	3.6	4.1	3.9	4.7	4.6	4.5	4.2	6.6	11.0

Source: US Bureau of Labor Statistics

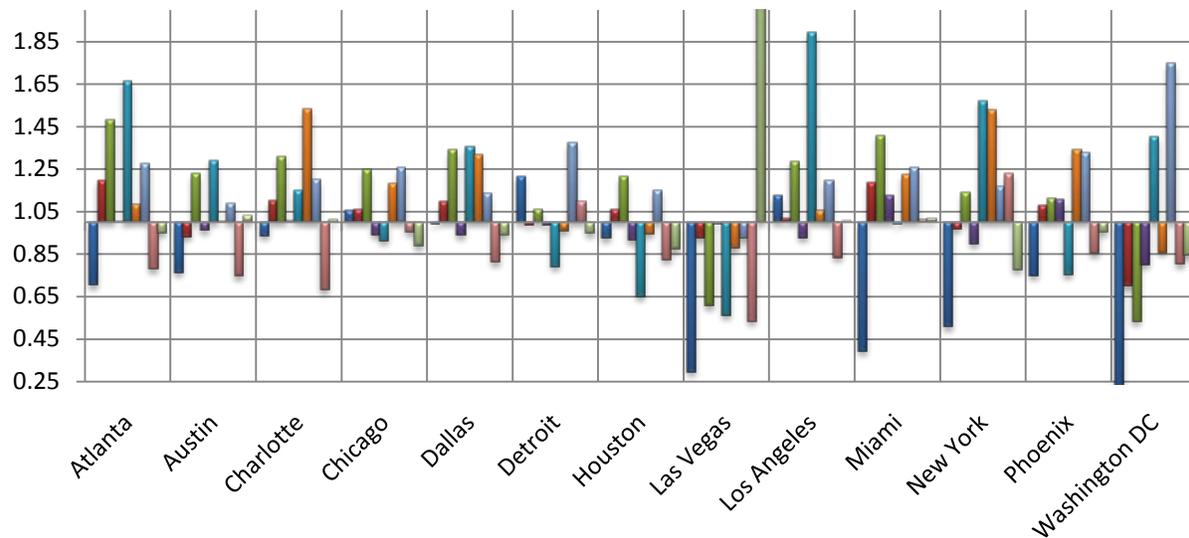
Economic Base

Location quotients are typically used to judge the relative strength of metro area economies by comparing job compositions in individual metro areas to the nation as a whole. A value above 1.0 means that an area has a higher concentration of jobs in a particular sector than does the nation. For example, Atlanta's location quotient for Information jobs is 1.66, meaning that Information jobs in Atlanta comprise a greater share (66 percent greater) of its total job base than in the nation as a whole.

As Figure 3 below shows, the Atlanta region's strengths are in Transportation, Trade and Utilities, Wholesale Trade, Information Services, and Professional Business. Unlike many other metro regions throughout the United States, the Atlanta region's economic base is diverse with strong levels of employment in a variety of fields. The region currently has very low levels of

employment opportunities in Education and Health Care fields. This area is expected within the future to be a booming industry and currently it is not a major sector of the Atlanta region's economy. This sector has been one of the few sectors that have added jobs in the current recession.

Figure 3: National Regional Location Quotient



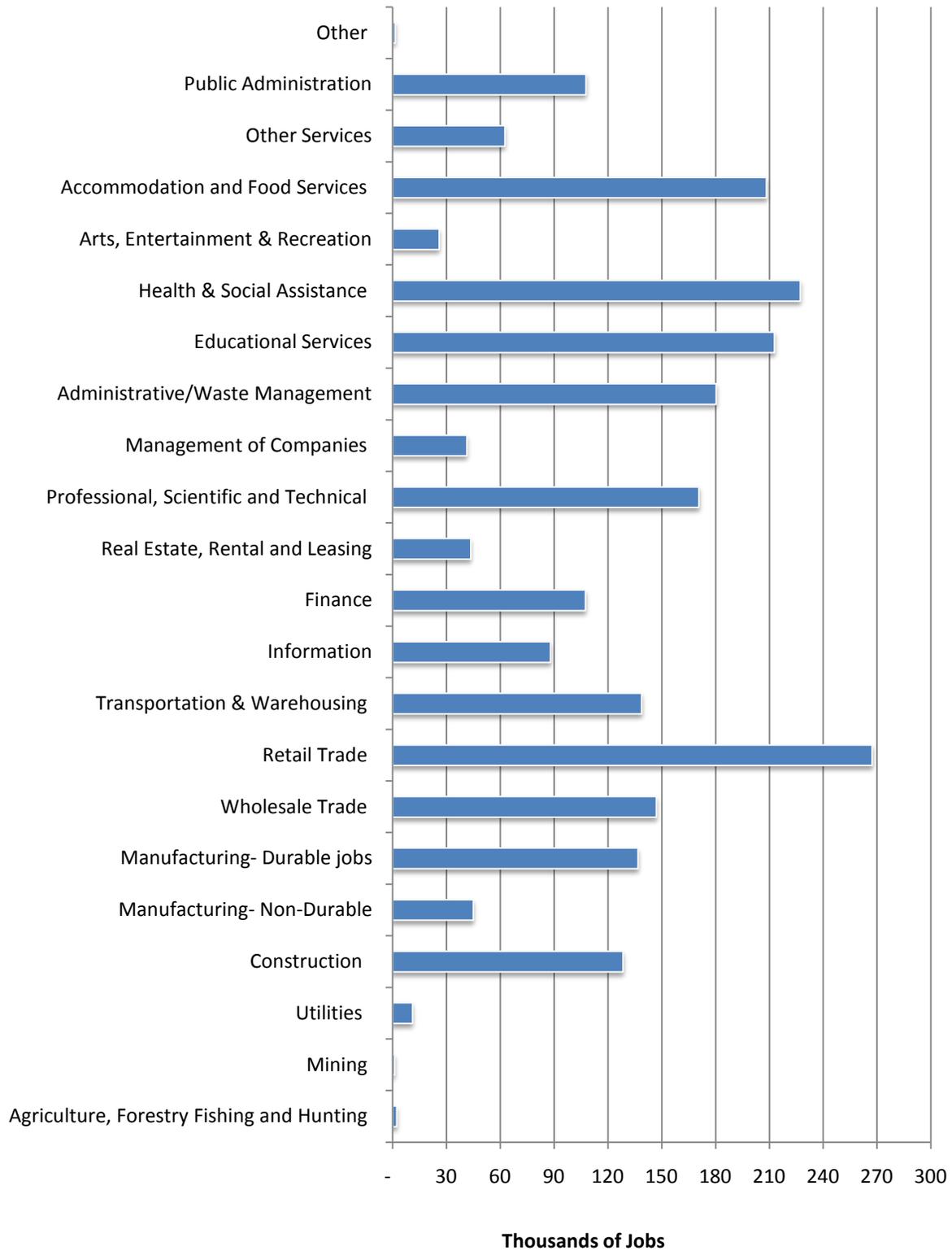
- Manufacturing
- Retail
- Professional Business Services
- Transportation Trade and Utilities
- Information Services
- Education/Health
- Wholesale Trade
- Finance
- Leisure Services

Employment Sectors

Currently the region's largest employment sector is Retail Trade with 11.3% of the region's workforce employed in that sector. As shown in Figure 4 shows other large sectors include: Education and Health and Social Assistance. However, the region's national strengths are in Transportation, Trade and Utilities; Wholesale Trade, Information Services, and Professional Business. The employment sector with the largest growth by 2040 will be in the Health Care and Social Assistance sector. This is in large part due to the magnitude of overall population growth in the region and specifically the region's transition to a region with a greater share of older adults.

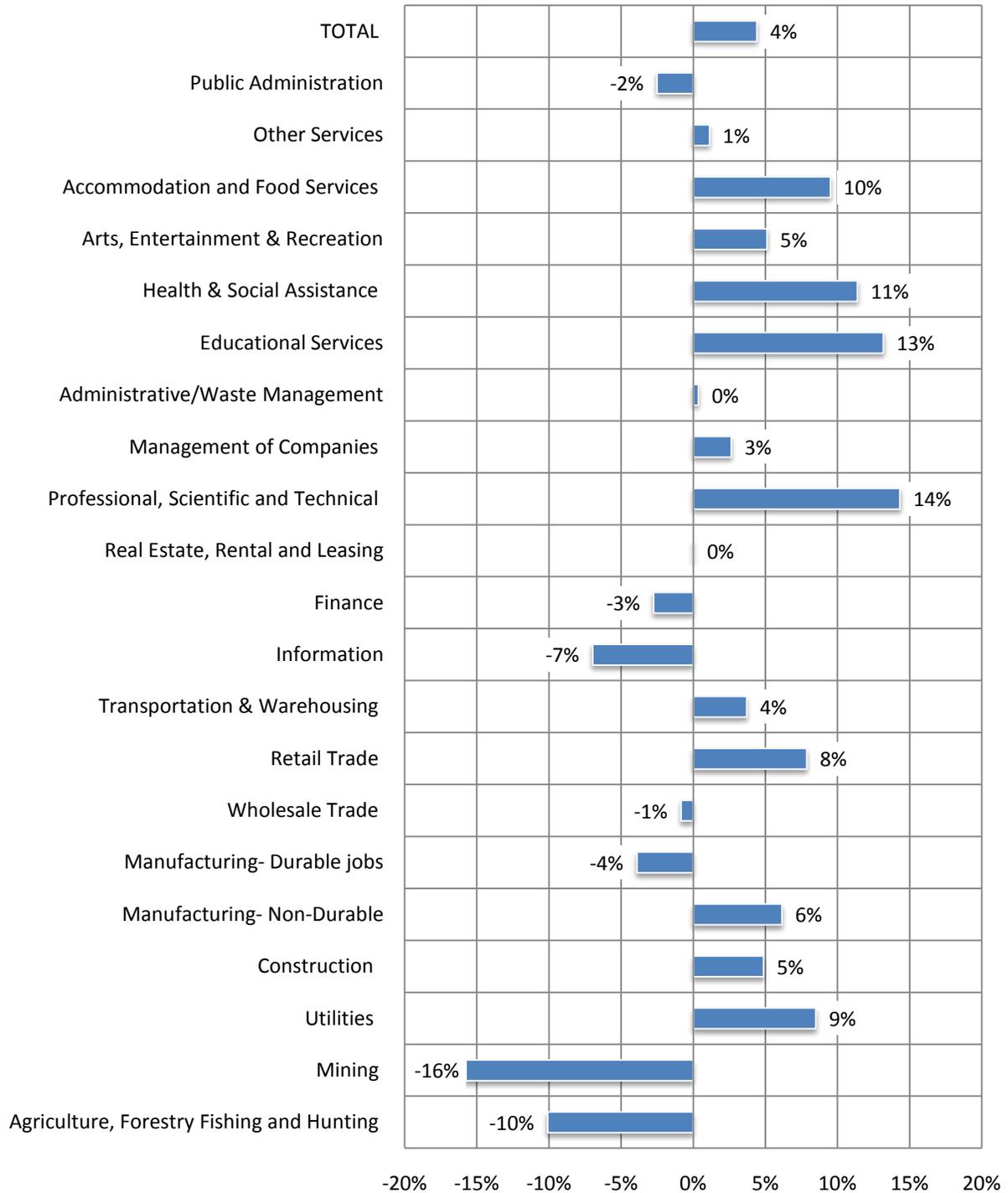
With the strengths in and Health and Social Assistance, Education, Professional Scientific and Technical Services, those sectors had the largest employment growth from 2005-2008. Figure 5 below shows which sectors added or lost jobs between 2005 and 2008. Figure 6 provides details on job growth by sector forecasted by ARC between 2005 and 2040.

Figure 4: Total Jobs by North American Industry Classification System (NAICS) Category (2008)



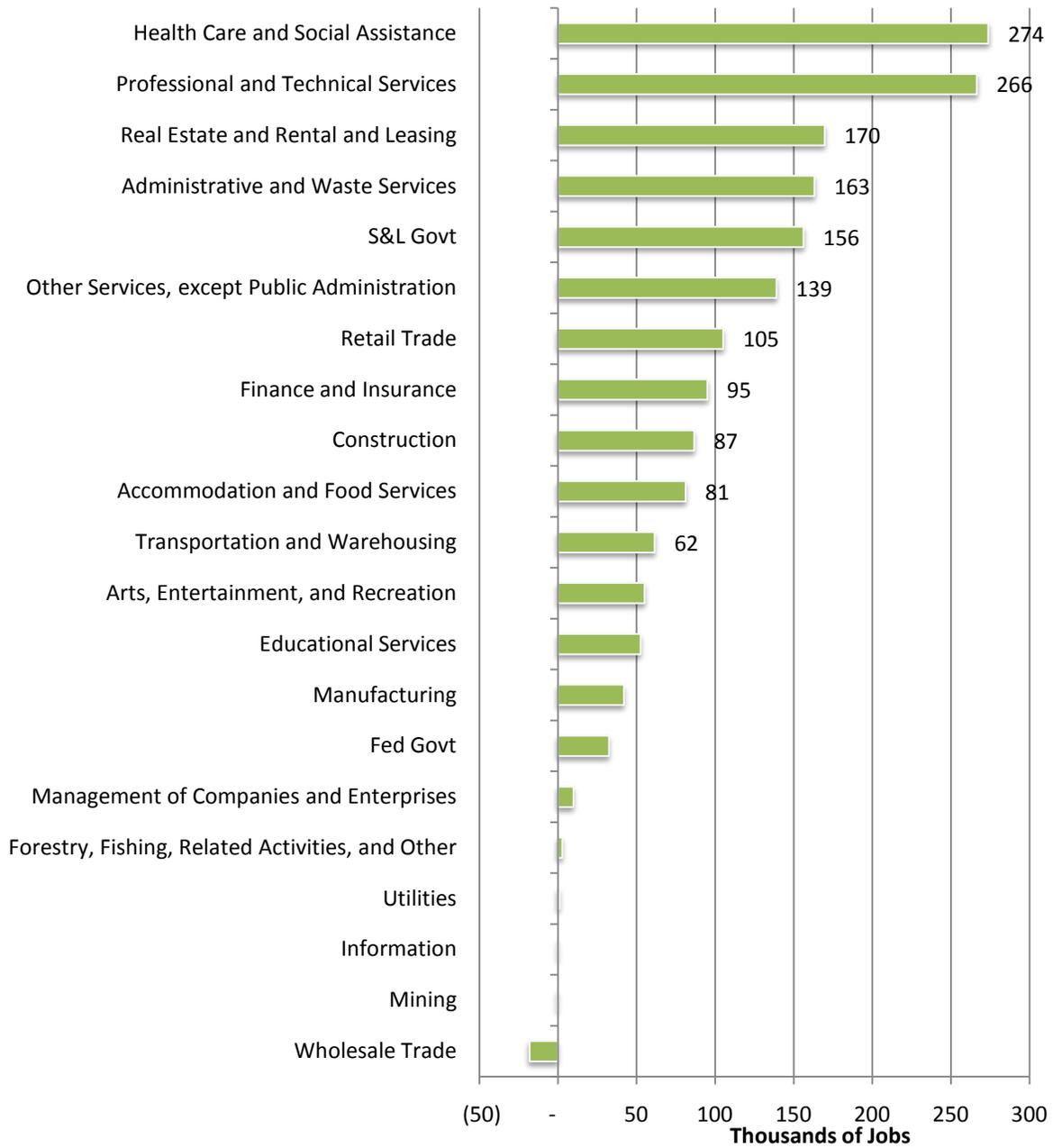
Source: ARC and Georgia Department of Labor

Figure 5: Job Category Change 2005-2008



Source: ARC and Georgia Department of Labor

Figure 6: Job Category Growth 2005-2040

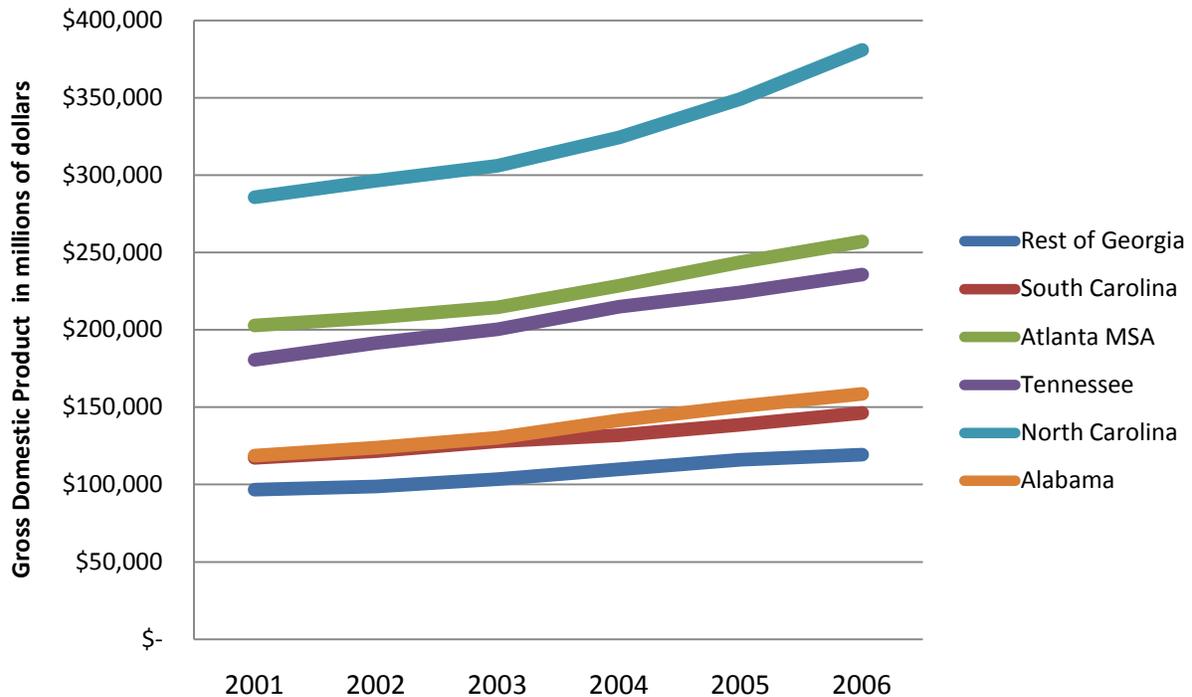


Source: ARC

Gross Domestic Product

Gross domestic product (GDP) is the output of goods and services produced by labor and property located in the Atlanta MSA. GDP is a useful tool of comparing the economies of regions versus states. Metro Atlanta is a large component of not only the State of Georgia's economy but the Southeast as well. As can be seen in Figure 7, unlike North Carolina, Atlanta has not experienced a large expansion in its GDP over the last few years, but rather our growth rate has been similar to the other states within the Southeast.

Figure 7: Southeastern States Gross Domestic Product



Source: Bureau of Economic Analysis

Educational Attainment

The Atlanta Region is fortunate to have 48 universities and technical schools within the region that offer a wide variety of programs and research. Over 220,000 students are enrolled at 4 year institutions within Atlanta, ranking the region as the 7th in student enrollment among the US urban areas. The Atlanta Regional Council for Higher Education estimates that these institutions create a \$10.8 billion dollar economic impact and 130,000 jobs within Georgia.

However, even with the large contribution of higher education to the Atlanta Region, the region still has issues with an educated work force. As can be seen in Figure 8, 13.5% of the population has not completed high school or a GED, and even with the large number of universities, and technical school, a large portion of our population does not have a bachelor's degree or advanced degree.

Figure 8: Educational Attainment

Geographic area	Percent of Population that completed		
	High School	Bachelor's Degree	Advanced Degree
Washington DC	89.6	47.3	22.2
Boston	89.8	41.8	18
San Francisco-Oakland	86.9	42.8	16.4
Seattle-Tacoma	91.2	36.2	12.8
San Diego	85.2	33.5	12.2
Chicago	85.3	32.3	12.2
Minneapolis	92.5	36.8	11.9
Atlanta	86.5	34.1	11.5
Pittsburgh	89.9	27.6	10.5
Detroit	86.8	26.4	10.4
Miami-Fort Lauderdale	82.3	28.5	10.0
Charlotte	86.0	32.6	9.8
Dallas-Fort Worth	81.6	29.9	9.3
Phoenix	83.4	26.6	9.2

Source: 2007 American Community Survey

Employee Wages

Figure 9 shows that average employee earnings per job has increased throughout the region from 2000-2007. However in some counties the wages are slowly decreasing. In the external counties wages are increasing a higher rate as more higher-paying jobs move into those counties.

Figure 9: Average Employee Earnings

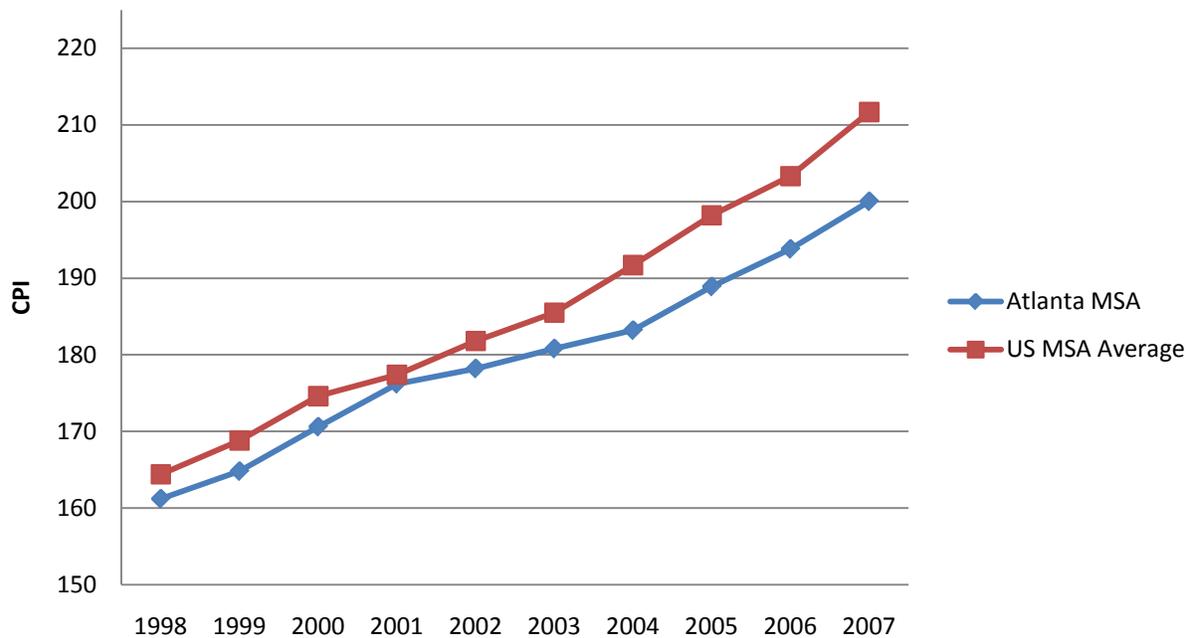
County	2000	2001	2002	2003	2004	2005	2006	2007
Barrow	\$2,297	\$2,340	\$2,389	\$2,431	\$2,579	\$2,635	\$2,753	\$2,771
Bartow	\$2,586	\$2,546	\$2,657	\$2,690	\$2,733	\$2,876	\$2,954	\$3,006
Carroll	\$2,455	\$2,608	\$2,693	\$2,759	\$2,814	\$2,846	\$2,970	\$3,097
Cherokee	\$2,446	\$2,539	\$2,613	\$2,684	\$2,754	\$2,922	\$2,930	\$2,944
Clayton	\$1,562	\$1,673	\$1,814	\$2,006	\$1,914	\$1,972	\$2,182	\$2,158
Cobb	\$3,458	\$3,481	\$3,508	\$3,598	\$3,704	\$3,814	\$3,936	\$4,037
Coweta	\$2,359	\$2,439	\$2,550	\$2,609	\$2,688	\$2,740	\$2,784	\$2,783
DeKalb	\$3,355	\$3,416	\$3,458	\$3,529	\$3,680	\$3,780	\$3,842	\$3,876
Douglas	\$2,396	\$2,674	\$2,497	\$2,512	\$2,554	\$2,672	\$2,716	\$2,769
Fayette	\$2,597	\$2,698	\$2,824	\$2,874	\$2,981	\$3,076	\$3,163	\$3,173
Forsyth	\$3,122	\$3,187	\$3,310	\$3,408	\$3,545	\$3,626	\$3,728	\$3,776
Fulton	\$3,855	\$3,961	\$4,062	\$4,163	\$4,275	\$4,544	\$4,657	\$4,897
Gwinnett	\$3,352	\$3,375	\$3,367	\$3,480	\$3,632	\$3,697	\$3,819	\$3,883
Hall	\$2,580	\$2,689	\$2,804	\$2,929	\$3,080	\$3,111	\$3,184	\$3,147
Henry	\$2,451	\$2,570	\$2,660	\$2,734	\$2,766	\$2,833	\$2,896	\$2,962
Newton	\$2,553	\$2,696	\$2,720	\$2,776	\$2,886	\$2,935	\$3,047	\$3,108
Paulding	\$2,372	\$2,503	\$2,609	\$2,670	\$2,737	\$2,765	\$2,766	\$2,752
Rockdale	\$2,713	\$2,698	\$2,814	\$2,887	\$3,050	\$3,070	\$3,114	\$3,088
Spalding	\$2,206	\$2,329	\$2,379	\$2,393	\$2,480	\$2,524	\$2,593	\$2,651
Walton	\$2,472	\$2,536	\$2,591	\$2,660	\$2,748	\$2,809	\$2,813	\$2,837

Source: US Census Bureau Quarterly Workforce Indicators

Consumer Price Index (CPI)

CPI is a measurement tool that allows comparisons of the average price of consumer goods in different areas. As is shown in Figure 10 the Atlanta region is still relatively affordable when compared to other metropolitan regions. While in 2001 the index was close to being equal, the gap has widened since then.

Figure 10: Consumer Price Index



Source: US Bureau of Labor Statistics

Major Companies and Employers

The Atlanta Region is fortunate to have large national firms represented on the Fortune 1000 list as some of the largest companies in the United States headquartered within the region. Figure 11 lists the current (2008) members of the Fortune 1000 with headquarters in the Atlanta region.

Figure 11: Fortune 1000 Companies

Company	Fortune 1000 Rank	Revenue (in Millions)
Home Depot	22	\$ 84,740
United Parcel Service	46	\$ 49,692
Coca-Cola	83	\$ 28,857
Coca-Cola Enterprises	118	\$ 20,936
Delta Air Lines	129	\$ 19,154
Southern	166	\$ 15,353
SunTrust Banks	193	\$ 13,465
Genuine Parts	243	\$ 10,843
AGCO	359	\$ 6,828
Newell Rubbermaid	378	\$ 6,411
BlueLinx Holdings	568	\$ 3,834
Georgia Gulf	645	\$ 3,176
Superior Essex	675	\$ 2,993
Exide Technologies	682	\$ 2,940
Mirant	708	\$ 2,815
Spectrum Brands	740	\$ 2,653
Acuity Brands	766	\$ 2,531
Graphic Packaging	773	\$ 2,505
AGL Resources	776	\$ 2,494
Rock-Tenn	811	\$ 2,316
Mueller Water Products	928	\$ 1,849

Source: 2008 Fortune Magazine

The Atlanta Region's largest employers include some of the same companies on the Fortune 1000 list but Figure 12 shows the importance of government and healthcare jobs within the Atlanta region. One troubling fact is the size of the workforce that the U.S. Army employs within the region at 7,888. This is a decrease of almost 38% from 2007. With the impending closure of both Fort Gillem and Fort McPherson the decrease will certainly increase.

Figure E-12: Top 25 Employers

Company	Number of Employees in the Region
Delta Air Lines	25,000
Wal-Mart Stores	24,423
Emory University	21,113
Gwinnett County Public Schools	20,822
AT&T	20,500
Cobb County School District	15,663
DeKalb County School System	14,013
United States Postal Service	10,284
Publix Super Markets	9,291
The Home Depot Inc.	9,000
Georgia Department of Human Resources	8,707
WellStar Health Systems Inc	8,556
Clayton County Public Schools	8,500
U.S. Army	7,888
DeKalb County Government	7,882
City of Atlanta	7,800
Georgia Institute of Technology	7,526
Lockhead Martin Corp.	7,171
United Parcel Service Inc.	6,930
Turner Broadcasting System Inc.	6,770
SunTrust Bank Inc.	6,745
Centers for Disease Control and Prevention	6,590
Atlanta Public Schools	6,500
The Kroger Co.	6,493
Piedmont Healthcare	6,013

Source: 2009 Atlanta Business Chronicle Book of Lists

Economic Resources and Agencies

The Atlanta region has over 50 different agencies, companies, authorities and groups working on promoting economic development within the region. Below is a sample of the many groups that are active in local economic development efforts around the region.

Cherokee County

Cherokee County Chamber of Commerce

Cherokee County Development Authority

Downtown Development Authority of Waleska

Downtown Development Authority of Woodstock

Clayton County

Clayton County Chamber of Commerce

Clayton County Development Authority

Downtown Development Authority of Forest Park

Cobb County

Cobb County Chamber of Commerce

Cobb County Department of Economic Development

Downtown Acworth Development Authority

Downtown Development Authority of Smyrna

Downtown/Industrial Development Authority of Austell

Downtown Marietta Development Authority

Downtown Powder Springs Development Authority

Kennesaw Downtown/Industrial Development Authority

DeKalb County

DeKalb County Chamber of Commerce

DeKalb County Department of Economic Development

Avondale Estates Development Authority

Downtown Development Authority of Decatur

Douglas County

Douglas County Chamber of Commerce

Douglas County Development Authority

Downtown Development Authority of Douglasville

Villa Rica Downtown Development Authority

Fayette County

Fayette County Chamber of Commerce

Fayette County Development Authority

Development Authority of Peachtree City

City of Fayetteville Downtown Development Authority

Fulton County

Airport Area Chamber of Commerce

Fulton County Development Authority

Fulton County Department of Planning/Economic Development

Greater North Fulton Chamber of Commerce

South Fulton Chamber of Commerce

College Park Business and Industrial Development Authority

Development Authority of Palmetto

Downtown Development Authority of Fairburn

Downtown Development Authority of Roswell

East Point Business and Industrial/Downtown Development Authority

Hapeville Development Authority

Union City Downtown Development Authority

Gwinnett County

Gwinnett County Chamber of Commerce

Development Authority of Gwinnett County

Downtown Development Authority of Lawrenceville

Downtown Development Authority of Snellville

Downtown/Industrial Development Authority of Buford

Henry County

Henry County Chamber of Commerce

Henry County Development Authority

City of Stockbridge Downtown Development Authority

Rockdale County

Conyers-Rockdale Chamber of Commerce

Conyers-Rockdale Development Authority

City of Atlanta

Atlanta Development Authority

Central Atlanta Progress

Midtown Alliance

Barrow County

Barrow County Chamber of Commerce

Bartow County

Cartersville-Bartow Chamber of Commerce

Carroll County

Carroll County Chamber of Commerce

Forsyth County

Cumming-Forsyth County Chamber of Commerce

Spalding County

Griffin-Spalding Chamber of Commerce

Hall County

Greater Hall Chamber of Commerce

Coweta County

Newnan-Coweta County Chamber of Commerce

Paulding County

Paulding County Chamber of Commerce

Walton County

Walton County Chamber of Commerce

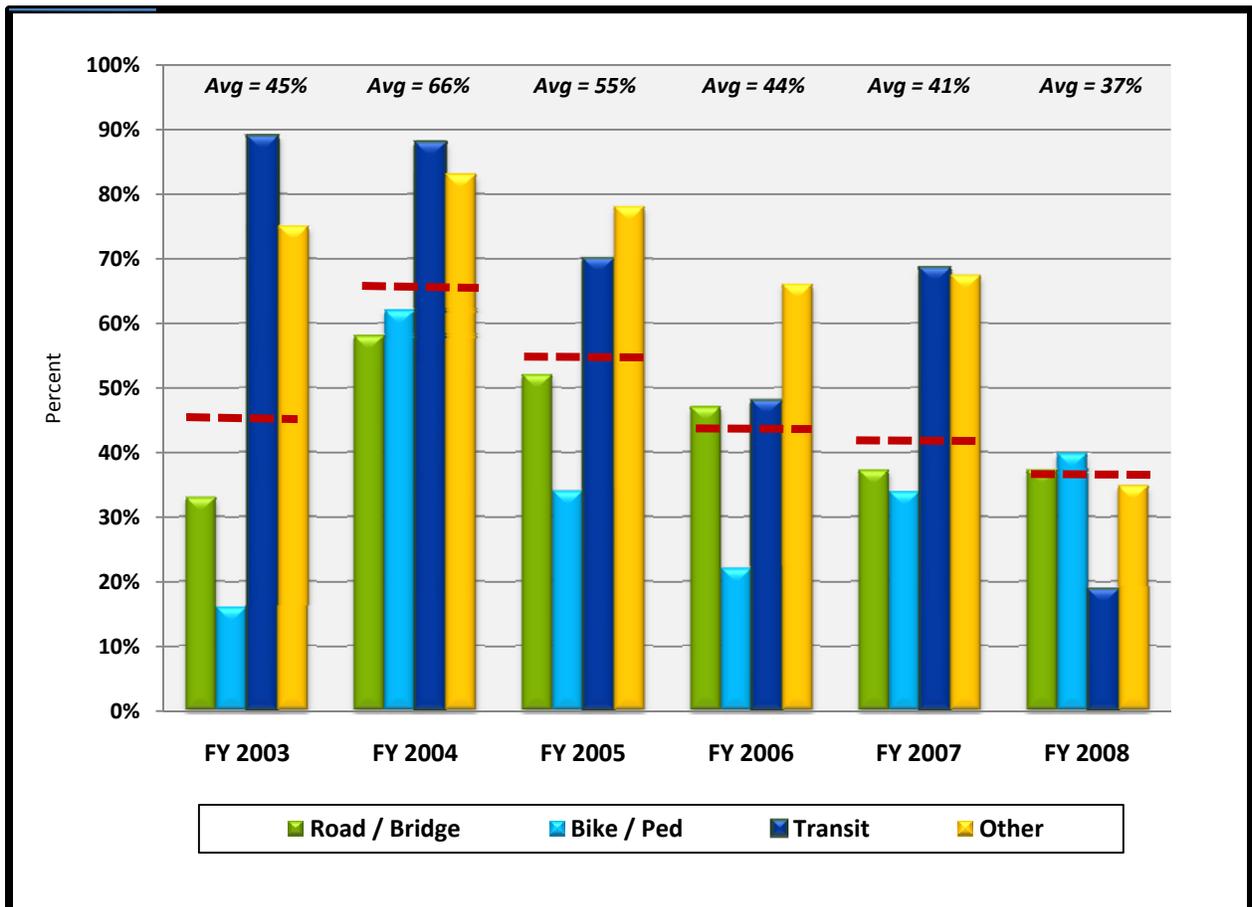
Appendix T-1: Additional Supporting Data

Project Delivery

Delays with the implementation of the 2000 TIP became apparent early in the decade. In response to direction among policy officials, ARC began monitoring the implementation rate of TIP commitments each year. This review confirmed what many policy makers suspected; regional projects were not meeting project delivery expectations. The inability to implement a project within promised timeframes increases costs due to inflation. Delays in one project often leads to delay in other projects, as the financial impact of delay forces other projects to be delayed so adequate funding resources can be made available.

The overall advancement continues to decline to a current all-time low of 37 percent in FY 2008. In FY 2008 (as shown in Figure 1 below), project implementation rates range between 35 to 40 percent. Transit projects lagged during the fiscal year with only a 19 percent advancement rate.

Figure 1: Project Advancement Rate by Year and Project Type: FY 2003 – FY 2008



Travel Demand and Costs

An important focus in evaluating travel trends is the home-based-work trip, the primary culprit of peak travel period congestion. The majority of the home-based-work (HBW) trips occur among the five core counties of Fulton, DeKalb, Gwinnett, Cobb, and Clayton. Home-based-work trips tend to have longer trip distances than home-based-other and non-home-based trips due to a variety of reasons, such as personal preferences that are made when choosing an area to live in or work. Figures 2 and 3 show HBW demand in 2010 and 2040.

Figure 2: Home-Based Work Travel Demand (2010)

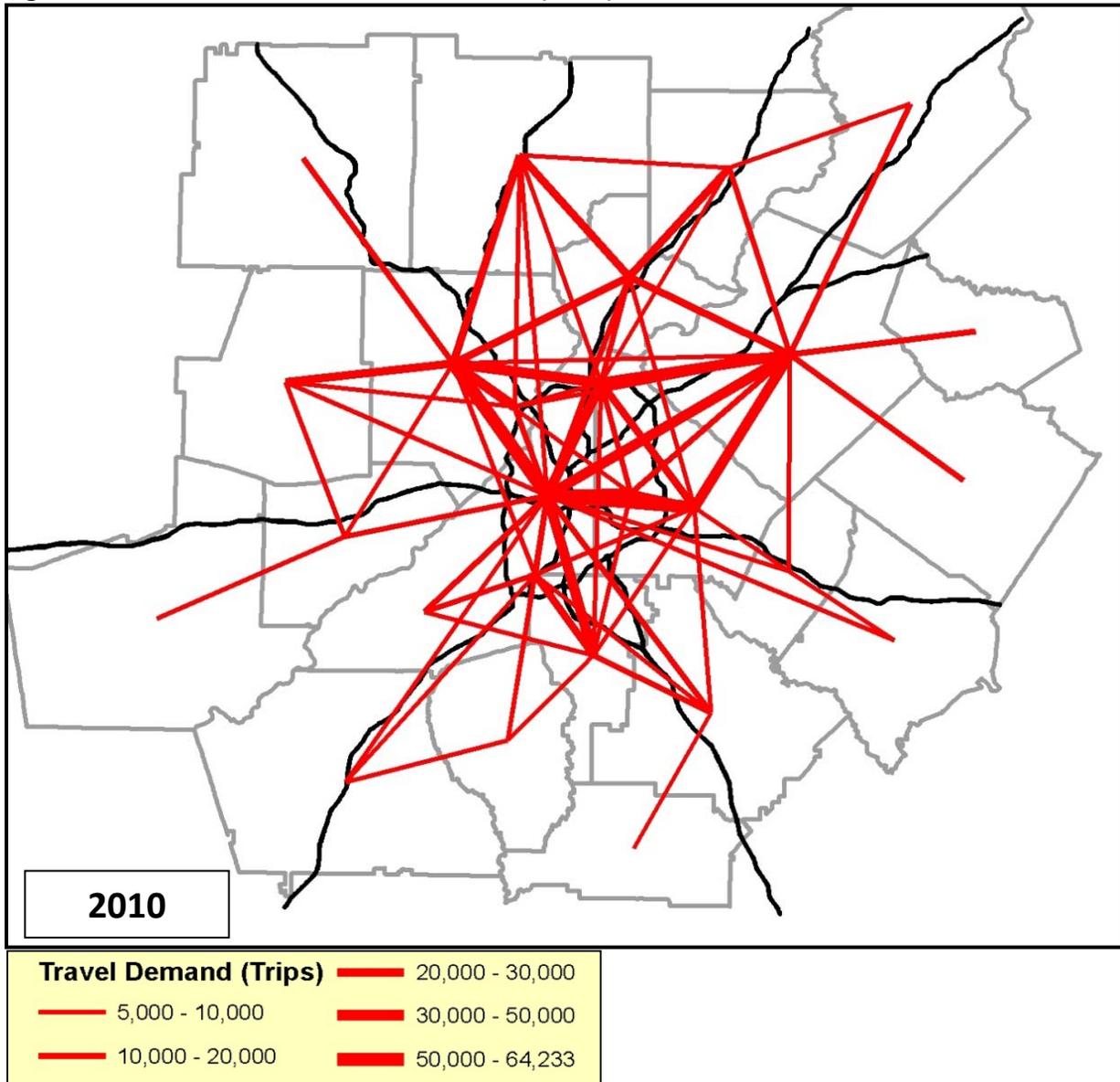
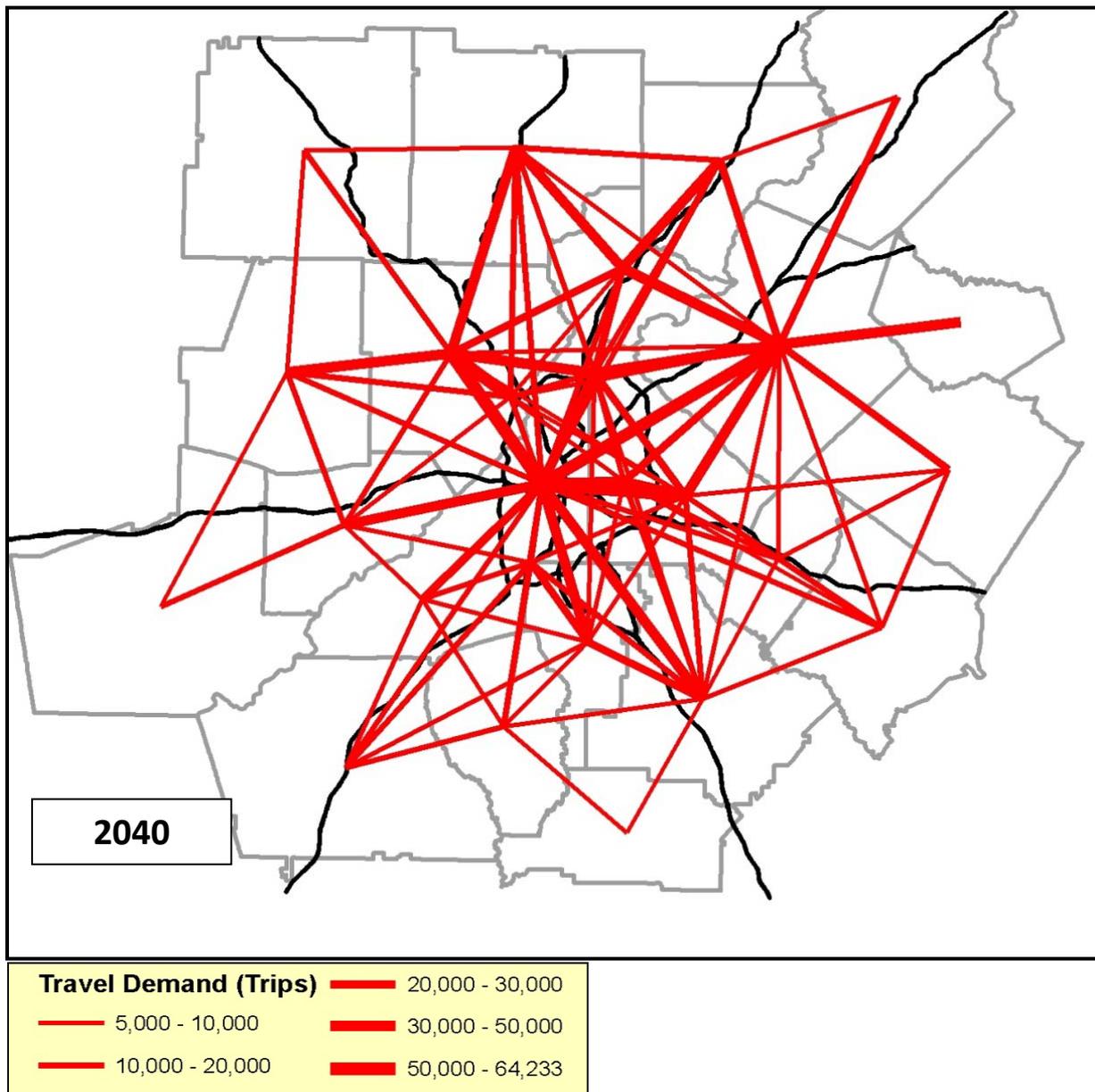


Figure 3: Home-Based Work Travel Demand (2040)



When comparing the 2010 HBW travel demand to 2040 HBW, the percent of internal trips increase for Coweta, Douglas, Forsyth, Gwinnett, Newton and the central business district in City of Atlanta. In addition, the lines are thicker between more counties showing an increase in movement throughout the region. By 2040, the counties on the south side of the region illustrated an increasing complexity of travel patterns and the emergence of significant trip movements similar to those found in the more heavily developed areas north of I-285 today.

Indicators of Costs of Congestion

Daily congested average speed is an indicator of the impact of congested travel conditions on the regional roadway network. This information is useful in comparing changes in travel conditions over time, reflecting the impacts of future growth and roadway and transit expansions.

Figure 4 shows the 2010 average daily speed of 27.1 mph is expected to decrease to 22.2 mph by the year 2040. However, the region is able to mitigate some of the expected increase in congestion as reflected by the 18.8 mph average speed in the 2040 NB. Maintaining average speeds to near current levels is an important consideration to make sure major employment centers maintain an acceptable service area.

Figure 4: Daily Congested Average Speed

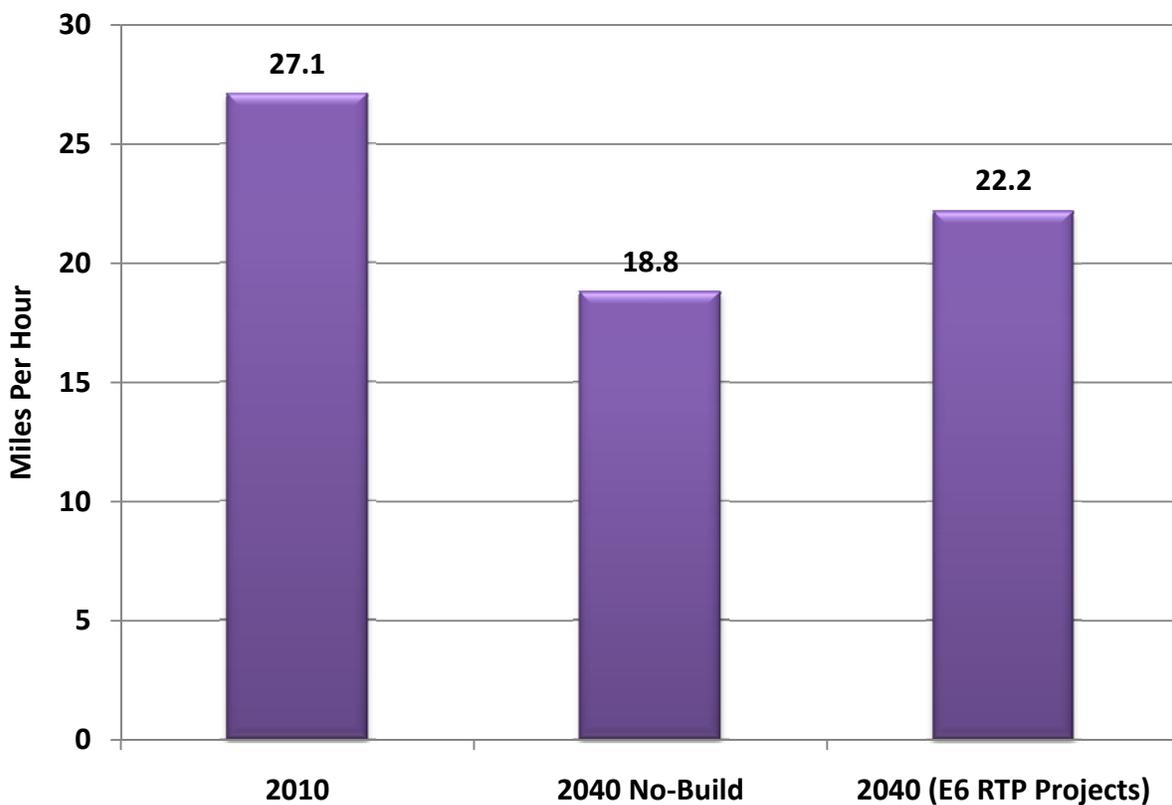
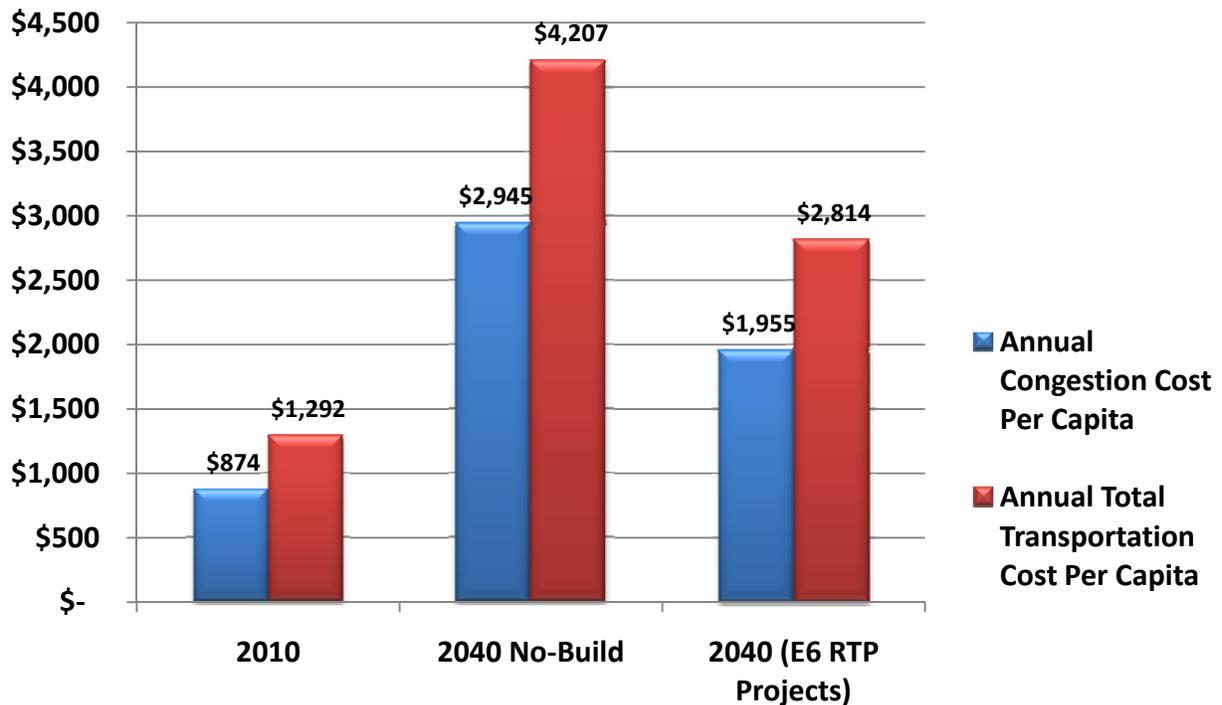


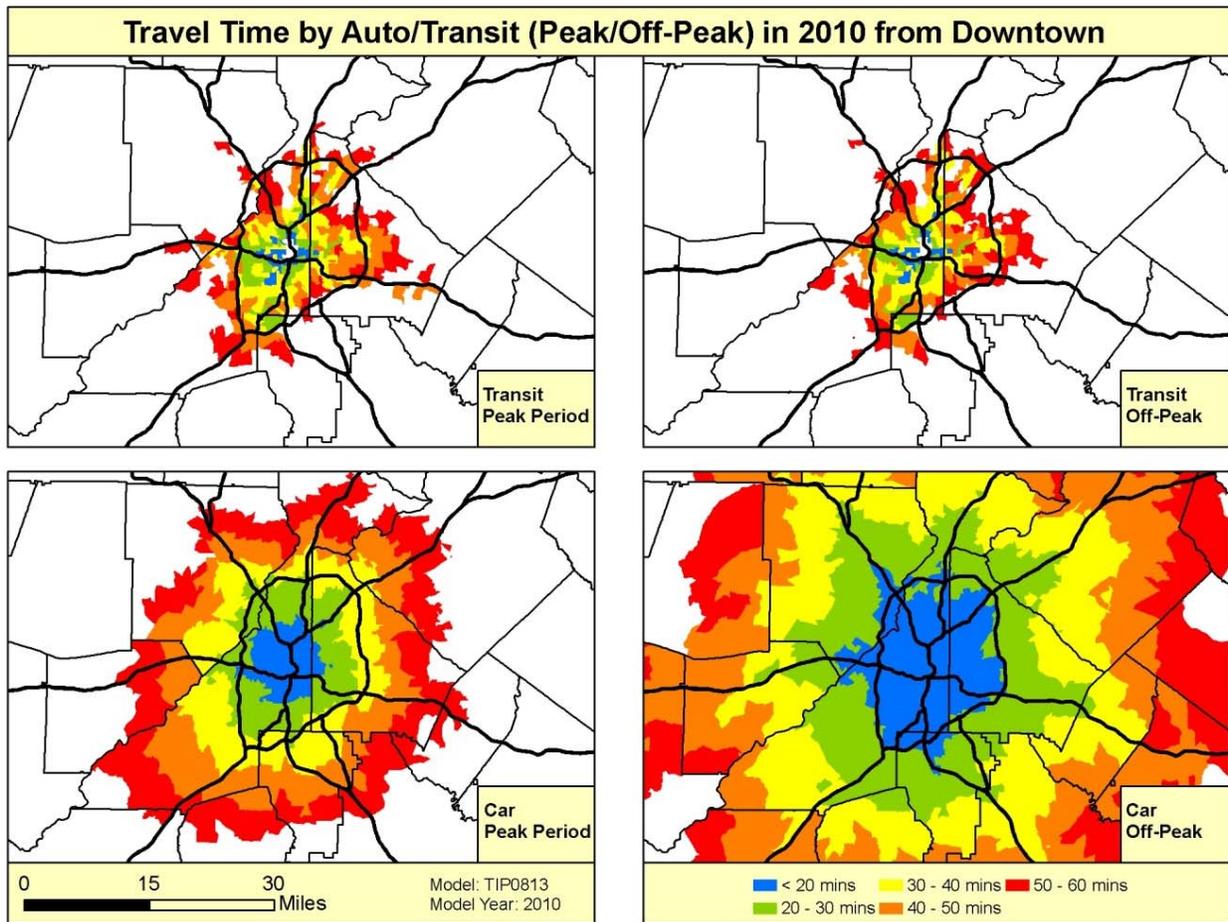
Figure 5: Congestion and Transportation Costs Per Capita



The cost impact of congestion on households and businesses is significant. Congestion costs are based on wasted time and fuel due. As shown in Figure 5 the annual cost of congestion will be \$874 per person in 2010. By 2040, this figure increases to \$1,955 in the E6 scenario and a staggering \$2,945 in the No-Build. As illustrated, similar magnitudes of changes are found when assessing the annual total transportation costs per capita.

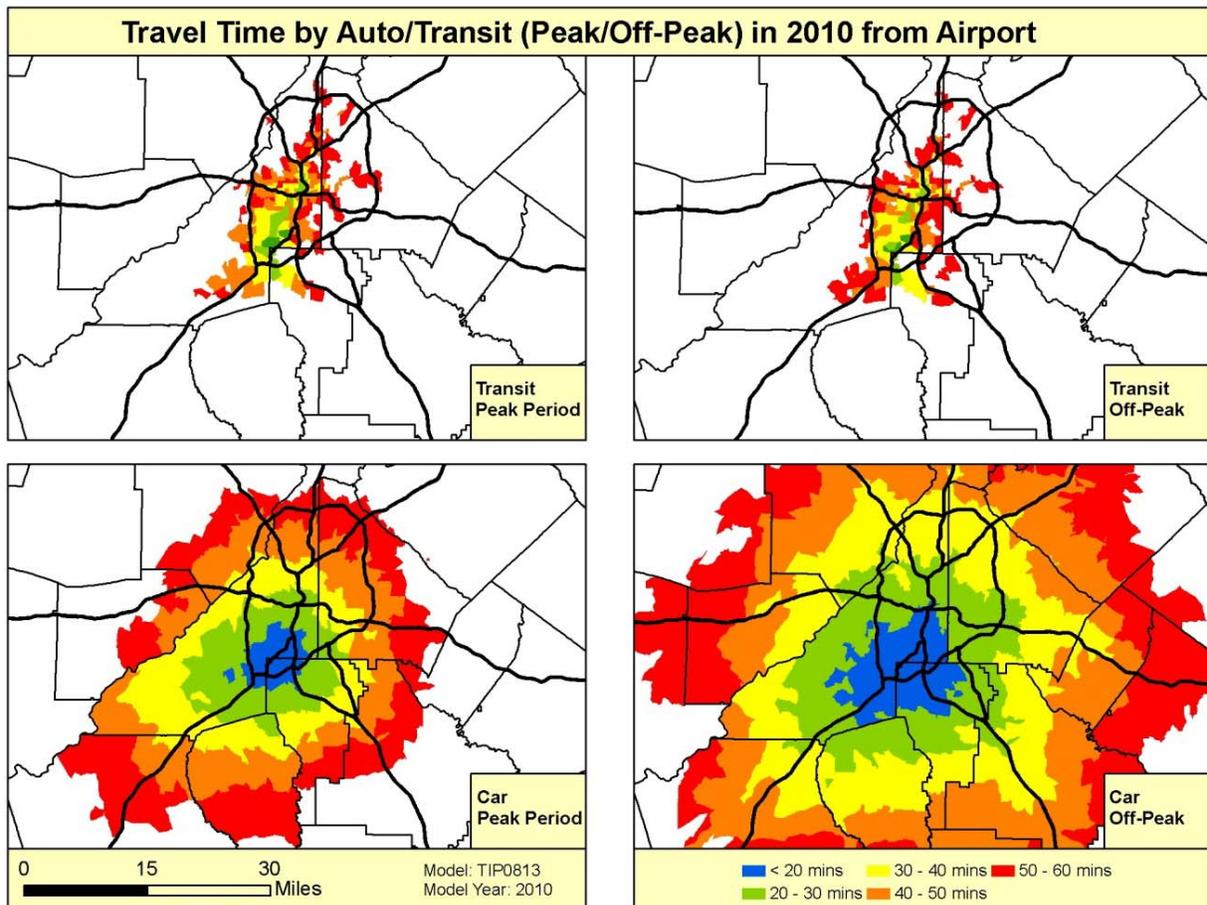
Many of the region's main job centers also pay a steep price due to congestion as their laborsheds shrink dramatically during peak travel periods as shown in Figure 6 and Figure 7. Downtown Atlanta experiences a significant decrease in its travel shed accessible in 40 minutes or less, decreasing from 3 million people that can access Downtown to 1.3 million during peak travel periods. The airport, a critical element in the region's overall economic viability, experiences a decrease in population able to get to the airport in 40 minutes from 2.07 million to 863,000. A key fact illustrated by the map is that while the roadway network is susceptible to congestion, the transit network is much less impacted.

Figure 6: Impact of Congestion on Travel Sheds (Downtown)



Source: ARC, 2009

Figure 7: Impact of Congestion on Travel Sheds (Airport)

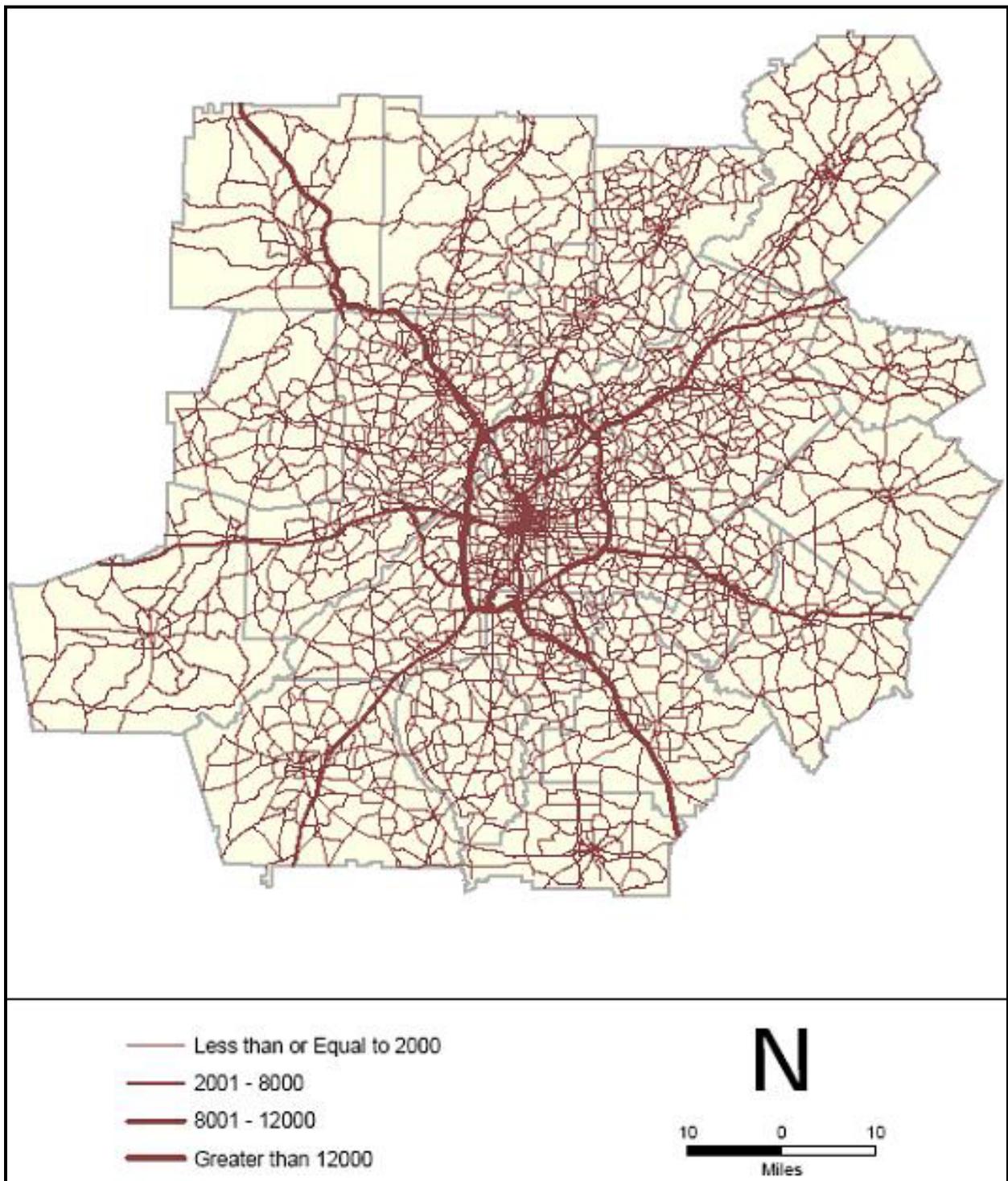


Source: ARC, 2009

Freight Facilities and Movements

Because of the heavy reliance on truck transportation, the highway system is instrumental in the efficient movement of freight in the Atlanta region (Figure 8). The Regional Freight Mobility plan identified criteria to guide the designation of priority corridors (shown in Figure 9). Designated truck route corridors will significantly improve freight mobility in the region.

Figure 8: Truck Flows in the Atlanta Region (2005)



Source: Wilbur Smith, 2009

Figure 9: Freight Priority Network



Source: ARC, 2009

As shown in Figure 10 Hartsfield-Jackson Atlanta International Airport is a crucial component in the region's overall freight network. This decade the airport has consistently had over 700,000 tons of freight come through the airport each year.

Figure 10: Freight - Atlanta Hartsfield-Jackson Atlanta International Airport



Vehicles and Vehicle Miles Traveled

In 2008, households in the Atlanta region averaged 2.00 registered vehicles as shown in Figure 11. Fulton County averaged the lowest with 1.55 and Walton County averaged the highest with 2.71 registered vehicles per household. The average number of registered vehicles per household in 2007 was 2.04.

Figure 11: Registered Vehicles per Household by County, 2008

County	Passenger*	Truck	Motorcycle	Total Vehicles	ARC 2008 HH	Reg. Vehicles per HH	Average HH Size
Barrow	40,401	18,607	2,128	61,136	23,409	2.61	2.77
Bartow	55,088	27,987	3,200	86,275	33,880	2.55	2.71
Cherokee	124,760	40,709	6,319	171,788	74,017	2.32	2.73
Clayton	157,886	34,904	2,628	195,418	99,739	1.96	2.79
Cobb	421,569	88,957	12,324	522,850	255,878	2.04	2.60
Coweta	67,212	26,196	3,394	96,802	41,772	2.32	2.77
DeKalb	379,966	59,697	22,552	462,215	276,775	1.67	2.57
Douglas	70,396	23,418	3,021	96,835	47,028	2.06	2.69
Fayette	72,348	21,322	2,755	96,425	37,240	2.59	2.82
Forsyth	102,260	30,479	4,385	137,124	57,215	2.40	2.86
Fulton	506,435	77,250	8,434	592,119	382,422	1.55	2.39
Gwinnett	467,229	107,591	12,048	586,868	262,974	2.23	2.83
Henry	109,809	37,227	4,528	151,564	67,596	2.24	2.80
Newton	59,669	23,436	2,358	85,463	35,322	2.42	2.72
Paulding	70,577	28,255	4,066	102,898	43,730	2.35	2.84
Rockdale	45,259	15,658	1,727	62,644	29,527	2.12	2.81
Spalding	36,058	15,700	1,488	53,246	24,531	2.17	2.62
Walton	48,641	24,460	2,376	75,477	27,802	2.71	2.78
18-County MPO Totals	2,835,563	701,853	99,731	3,637,147	1,820,857	2.00 (avg)	2.73 (avg)

Web reference: <http://motor.etax.dor.ga.gov/stats/renewalsstats.aspx>

Source: Georgia Department of Revenue Motor Vehicle Division (registration data as of 2/28/09); ARC Population and Housing Unit Estimates

In 2008, the average daily VMT in the Atlanta MPO area was 142,289,456, an increase of more than half of one percent from the previous year. The VMT per capita fell by 0.46, from 28.51 VMT per capita in 2007 to 28.05 in 2008. Figure 12 illustrates the general decline in VMT per capita in the region over the past decade.

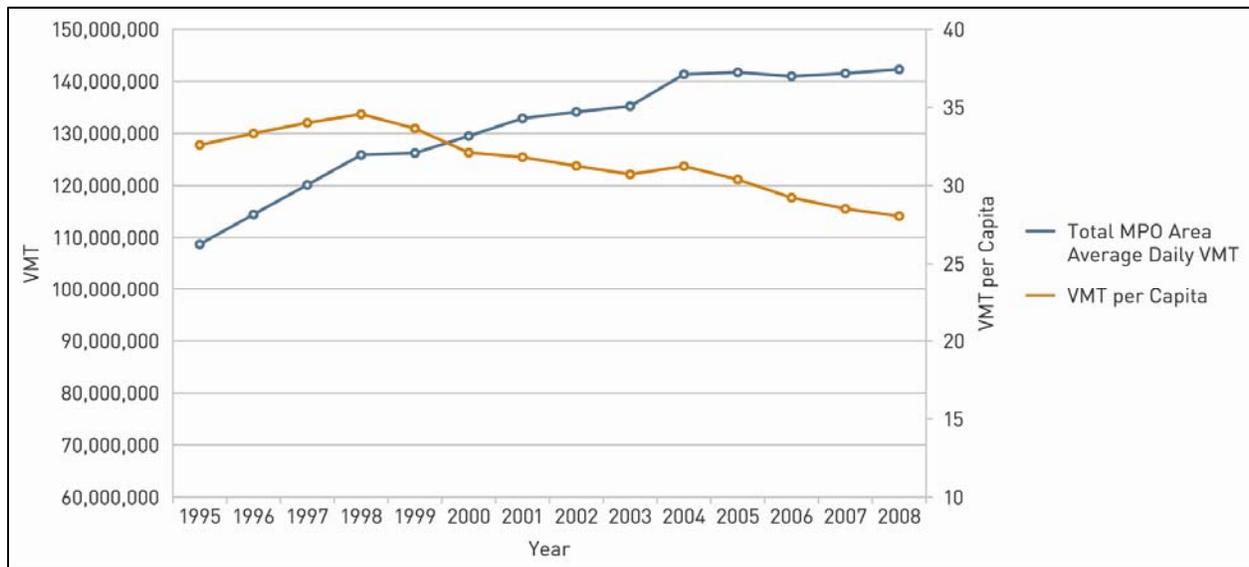
Figure 12: Average Daily Vehicle Miles Traveled in the Atlanta MPO Area, 1995-2008

Year	18-County Atlanta MPO Area	Percent Change from Previous Year	VMT per Capita
1995	108,730,647	n/a	32.60
1996	114,462,547	5.27%	33.33
1997	120,142,338	4.96%	34.01
1998	125,864,531	4.76%	34.57
1999	126,223,823	0.29%	33.65
2000	129,486,176	2.58%	32.10
2001	132,887,292	2.63%	31.81
2002	134,124,420	0.93%	31.25
2003	135,215,454	0.81%	30.72
2004	141,346,238	4.53%	31.23
2005	141,720,605	0.26%	30.39
2006	140,981,999	-0.52%	29.23
2007	141,520,280	0.38%	28.51
2008	142,289,456	0.54%	28.05

Source: GDOT Office of Transportation Data; U.S. Census Bureau Population Division

Although total regional VMT is increasing, much due to population growth, the VMT per capita is decreasing. This steady decrease since 1999 reflects the shortening of trip lengths associated with a more dense land use pattern – a major policy initiative of the ARC since the 2025 RTP adopted in 2000. Expanded regional transit use also contributes to the reductions in this important statistic.

Figure 13: Atlanta 18-County MPO Average Daily VMT Change, 1995–2008



Source: GDOT 445 Series Report; U.S. Census Bureau Population Division

In 2008 Bartow County had the highest average daily VMT per capita compared to other MPO counties, at 51. In 2008, the outer eight counties had a higher VMT per capita (29.5) when compared to the inner ten counties. Figure 14 shows VMT per capita, as well as the average VMT per capita for the 10-County planning area as well as the ten external counties.

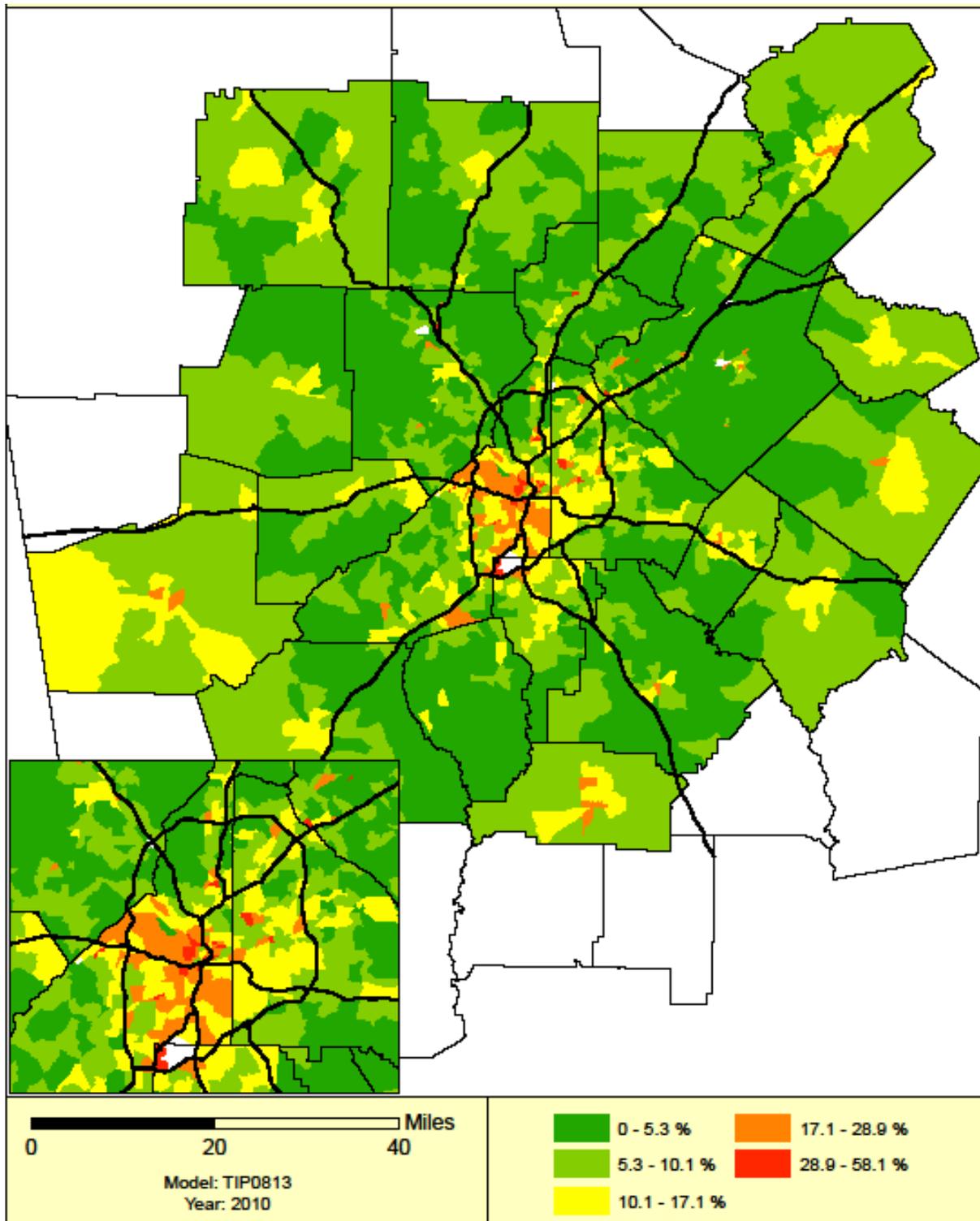
Figure 14: 2008 Daily VMT Per Capita By County

County	2008 Daily VMT	2008 Census Pop.	VMT Per Capita
Cherokee	5,213,278	210,529	24.8
Clayton	7,332,580	273,718	26.8
Cobb	18,282,853	698,158	26.2
DeKalb	20,469,024	739,956	27.7
Douglas	4,387,542	127,932	34.3
Fayette	2,972,534	106,465	27.9
Fulton	30,960,819	1,014,932	30.5
Gwinnett	19,505,372	789,499	24.7
Henry	6,171,912	191,502	32.2
Rockdale	2,769,683	83,222	33.3
10-County Atlanta RC Area	118,065,597	4,235,913	27.9
Barrow	1,680,537	70,073	24.0
Bartow	4,790,158	94,913	50.5
Coweta	3,677,950	122,924	29.9
Forsyth	3,805,485	168,060	22.6
Newton	3,018,708	98,542	30.6
Paulding	3,290,926	133,135	24.7
Spalding	1,809,453	63,913	28.3
Walton	2,150,644	85,813	25.1
18-County Atlanta MPO Area	142,289,456	5,073,286	28.0

Source: GDOT Office of Transportation Data; U.S. Census Bureau Population Division

The region does have significant concentrations of households without access to a vehicle. Concentrations of these households are shown in Figure 15 below. Given the development patterns in the region and limited transit options these communities may face significant transportation disadvantages. The majority of these areas are concentrated inside of I-285 and along interstate transportation corridors.

Figure 15: Zero Car Households



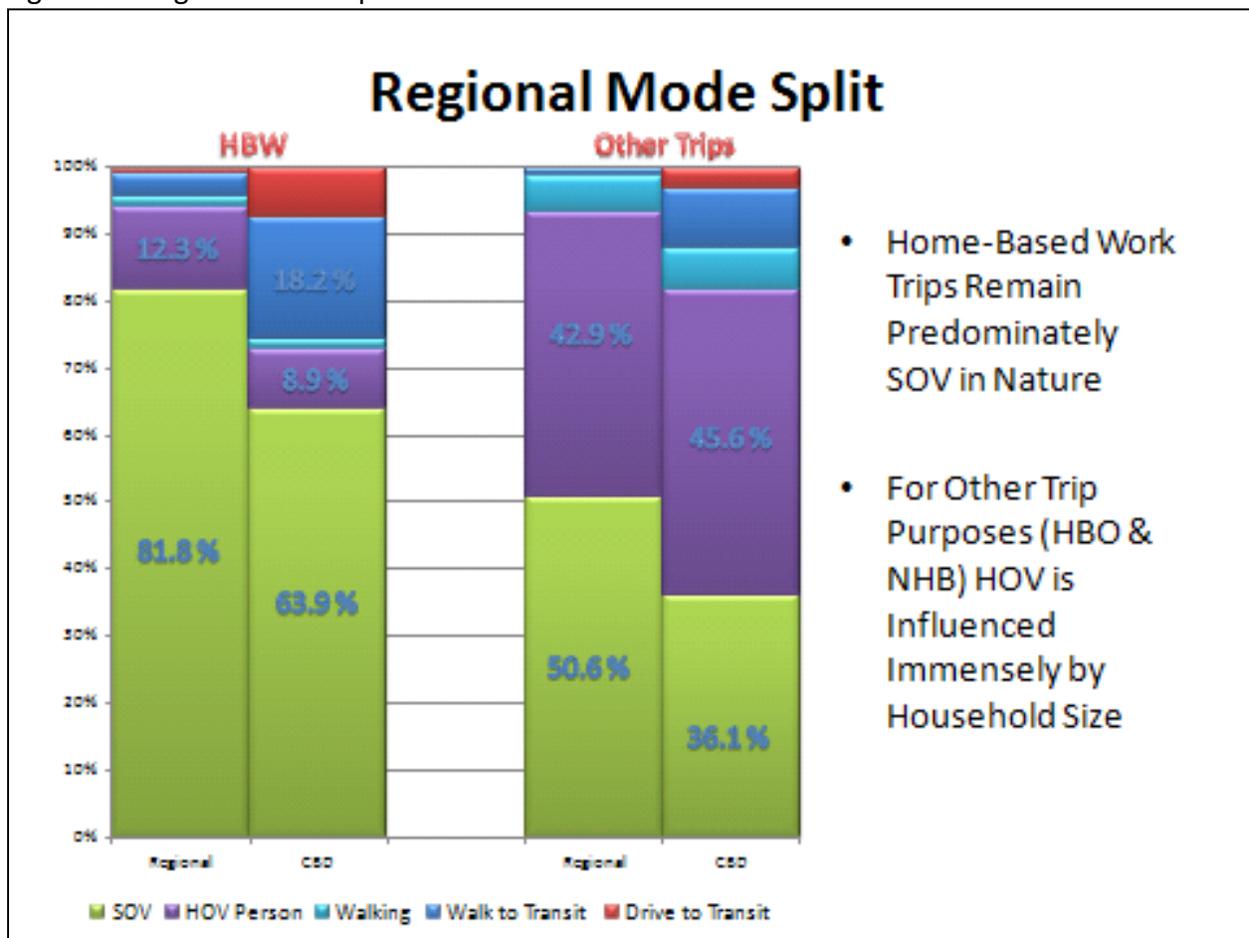
Source: ARC

Regional Mode Split and Transit/Walkability Measures

As Figure 16 shows home-based work trips remain predominately SOV in nature. Even the CBD, which has one of the highest transit mode splits in the region, sees nearly 64 % of its home based work trips arrive via SOV (CBD to the right of region in above). Regional transit usage remains a small share of the total trips, accounting for roughly 5 % of the total. The CBD sees approximately 25% of its home based work trips utilize transit.

Other trips purposes (trips that are not linked directly from home to work) experience a larger variation in mode split. Nearly half of these trips are accounted for by HOV vehicles. These trips are influenced by the household size of areas in the region.

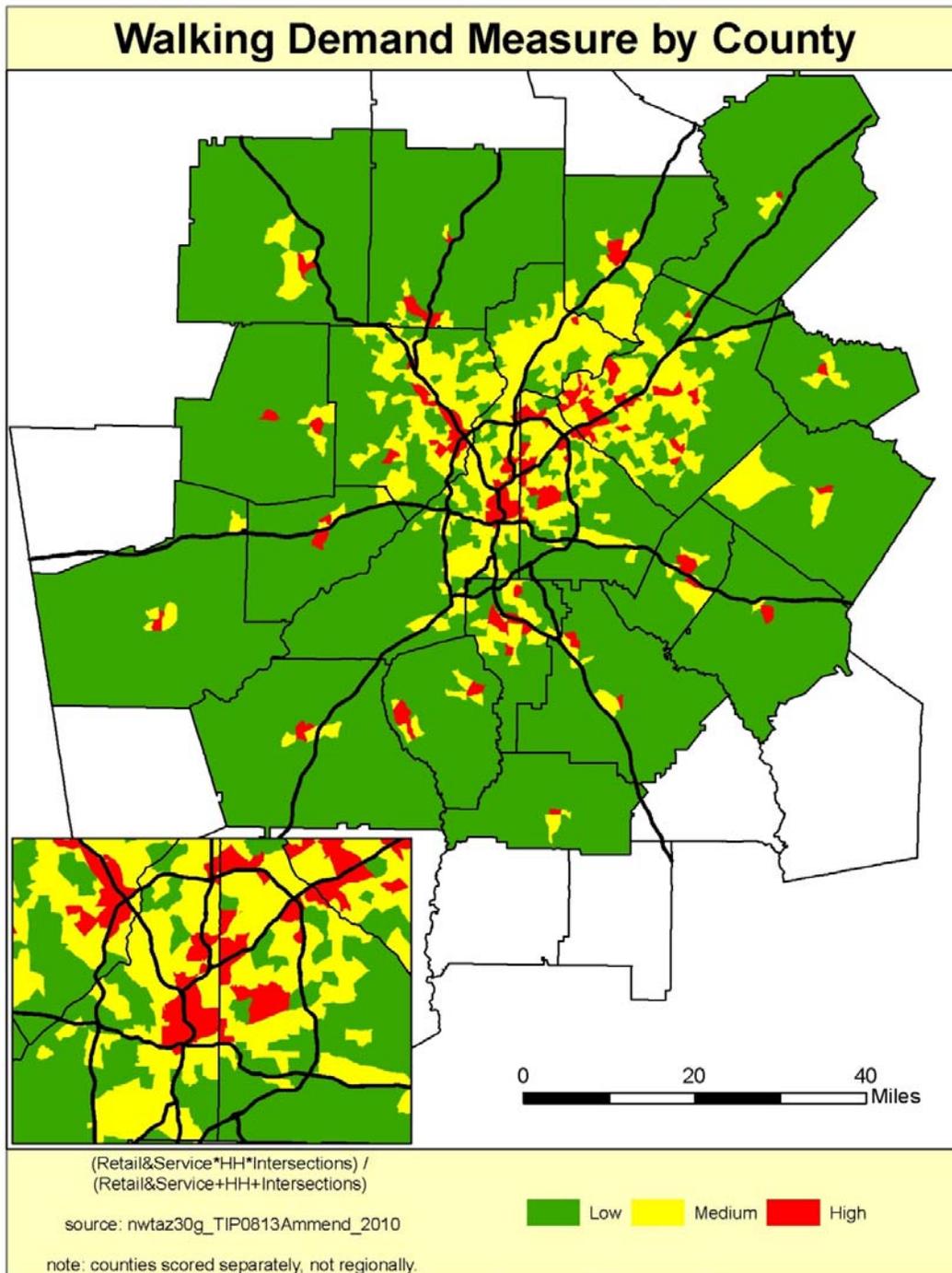
Figure 16: Regional Mode Split



Source: ARC, 2009

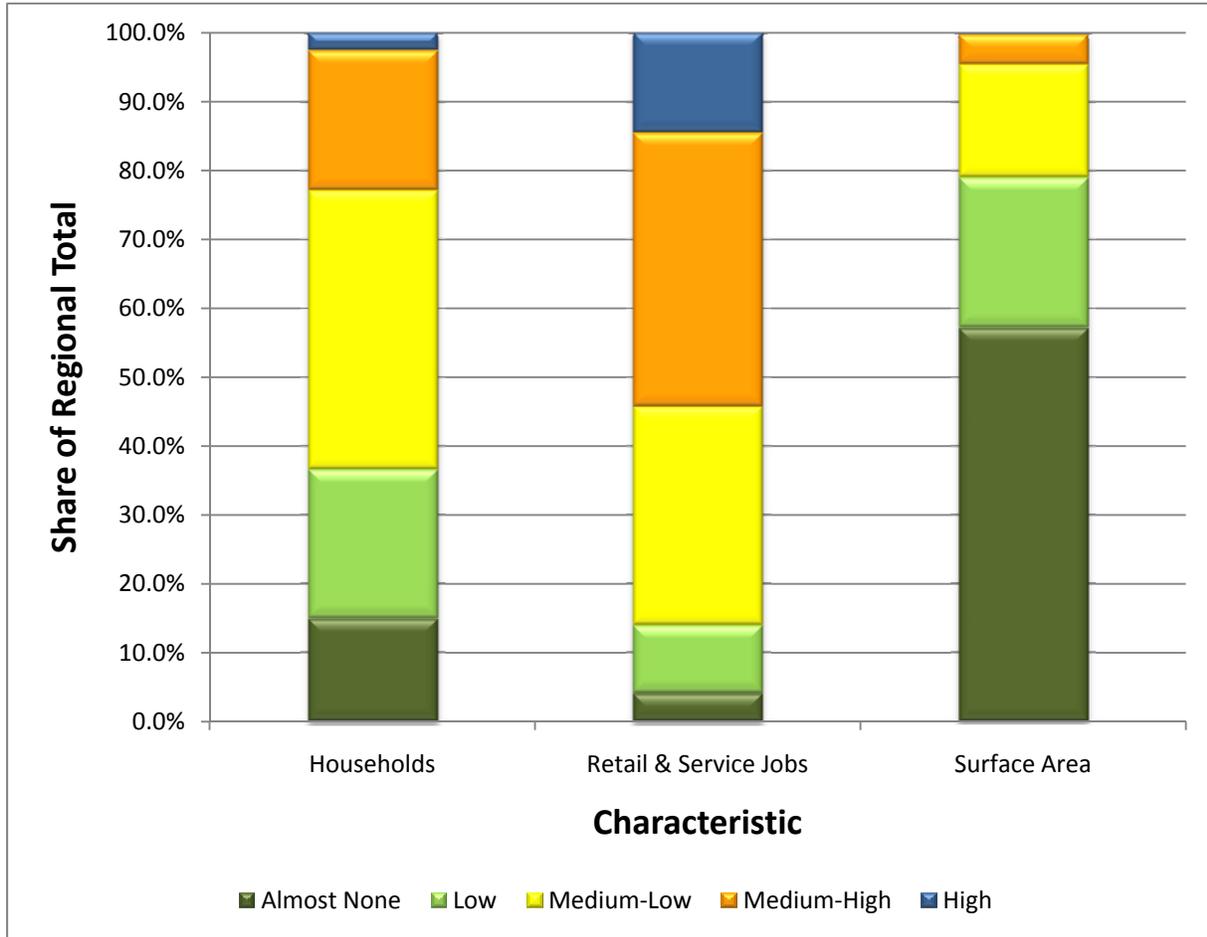
Previous maps in the Regional Assessment have shown the potential walking demand for the region (areas of the region ranked vs. each other). Figure 17 uses the same methodology but considers each county individually. The result illustrates the areas in each county that have the most potential for walking trips (compared to the rest of that county).

Figure 17: Walking Demand by County (Areas in County Ranked vs. Rest of County)



Source: ARC, 2009

Figure 18: Percent of Regional Households, Retail & Service Jobs by Potential Walkability (PWI) Score



Source: ARC, 2009

Figure 18 shows the share of regional totals that fall into the walking demand categories (by household, Retail and Service jobs and the region’s land area).

The measure evaluates the latent demand for pedestrian trips throughout the region based on local proximity to specific variables. The evaluated variables include service and retail employment, the number of households and the number of street intersections.

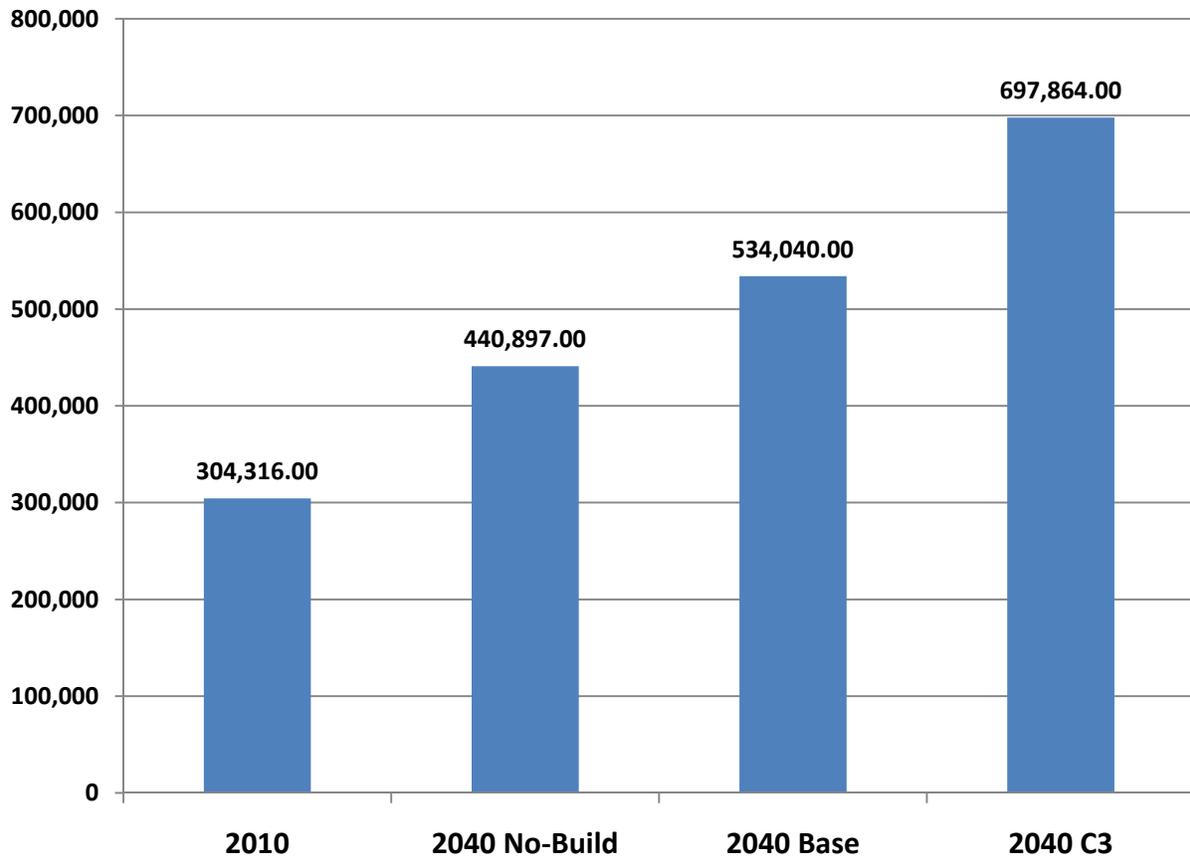
Currently, only 20 % of the region’s population lives in areas that score medium-high to high. These same areas account for over 50 % of the region’s retail and service employment and occupy less than 5 % of the region’s surface area. Consequently, walking is not a viable option for travel for most of the region’s residents.

Concept 3 was adopted by the ARC Board in December and now serves as the transit component of the region’s long-range Aspirations Plan.

Investment in transit in the region is expected to result in increased ridership. Key observations include:

- *Envision6's* transit concept will help increase the total number of unlinked transit trips by 64 percent.
- Additional funding for transit projects in the *Aspirations Plan (Concept 3)* increases the number of unlinked transit trips by 158 percent over the base case.

Figure 19: Daily Regional Transit Trips with Concept 3 Investments



Regional Air Quality Data

Trends in exceedances of the ozone standard were provided in the Regional Assessment. Unlike the ozone standard, there is no classification system for fine particulate matter. An area either meets the standard (attainment) or exceeds the standard (non-attainment). In April 2005, the USEPA designated a 20-county metro-Atlanta non-attainment area for failing to meet the fine particulate matter standard. Not all stations have data for every year because they either have been shut down or were not established until recently. Figures 20 and 21 highlights recent PM 2.5 measurements by site and region projections in the future.

Figure 20: PM 2.5 Mass Concentration Annual Average (Arithmetic Mean)

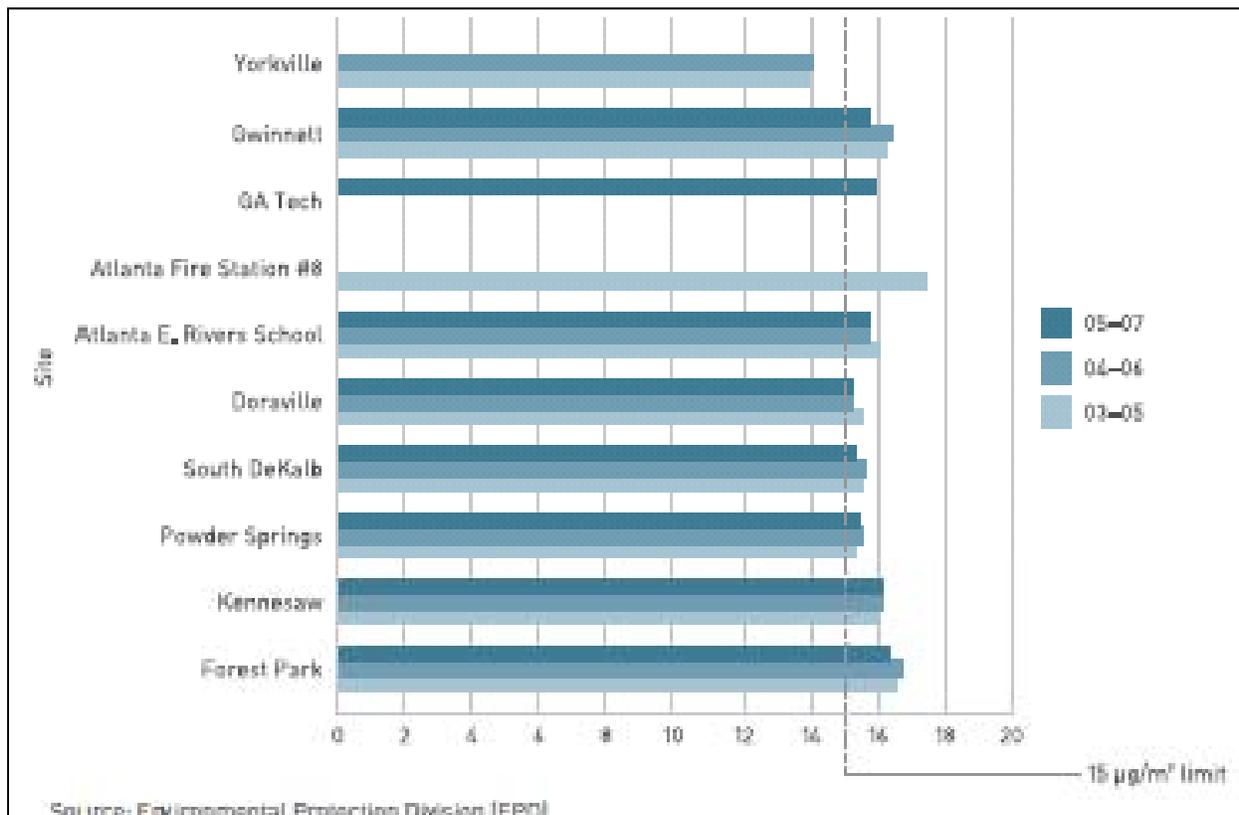
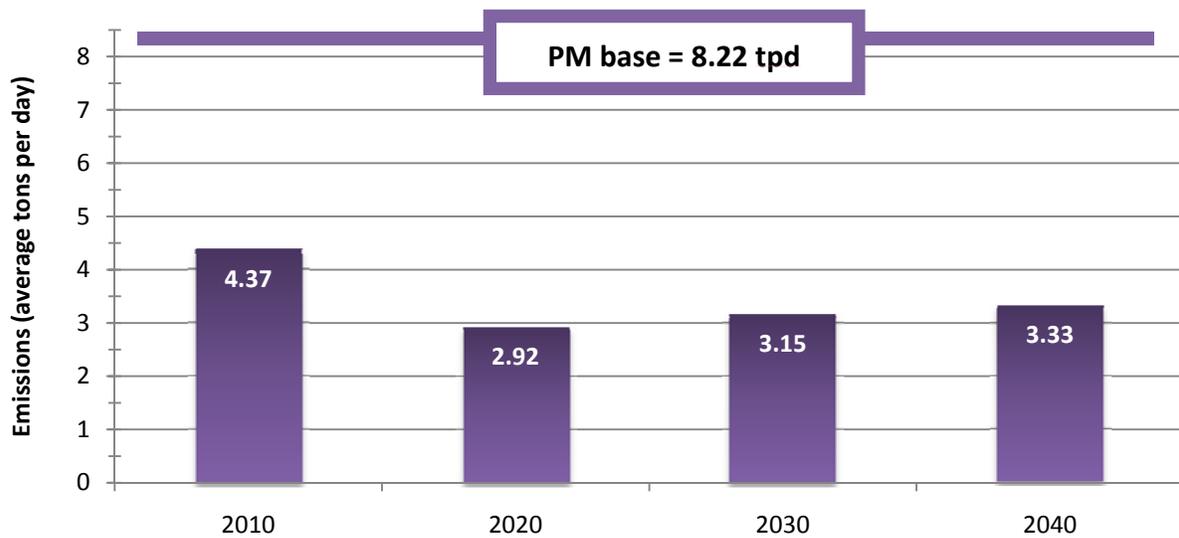


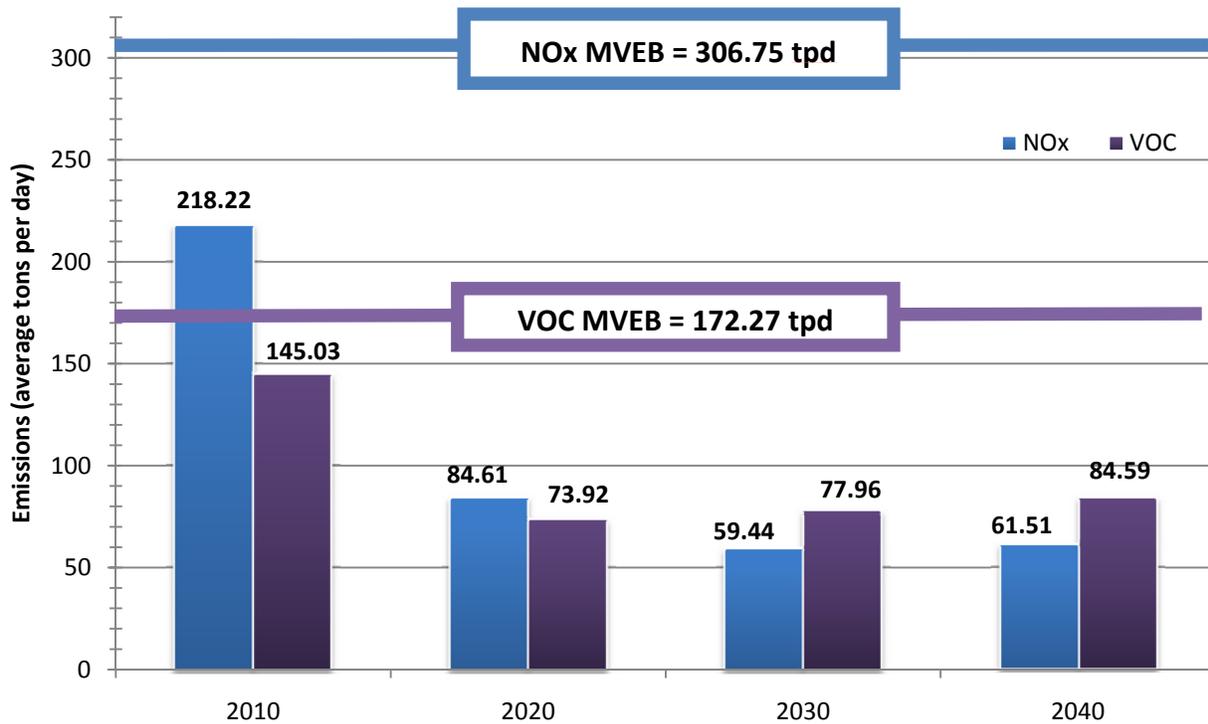
Figure 21: Regional Emissions Analysis, PM2.5 Standard (Direct PM2.5)



The key performance measures for the transportation sectors contributions to improved air quality are tons per day of transportation-related pollutants (PM 2.5, VOC and NOx).

Envision6, the Atlanta region’s current long-range transportation plan, received a positive conformity determination under the eight-hour ozone standard and under the PM2.5 standard on October 10, 2007 and again in June 2009. Figure 22 documents the Motor Vehicle Emissions Budget for the region and projected emissions through 2040.

Figure 22: Regional Emissions Analysis (20-County), Motor Vehicle Emissions Budget Test, 8-Hour Ozone Standard



Although the air pollution controls implemented in response to the ozone problem in Atlanta have contributed greatly to improved air quality and significant reductions in the level of ozone precursor emissions, additional focus is now being placed on particulate matter pollution as new federal standards are implemented and additional research becomes available on possible detrimental health and environmental effects.

The Atlanta region is facing many factors that drive a rise in greenhouse gas emissions at a time when national policies are considering strategies for reducing all GHG emissions. The Atlanta Regional Commission (ARC) has begun to look at reductions of transportation-based GHG emissions.

Safety

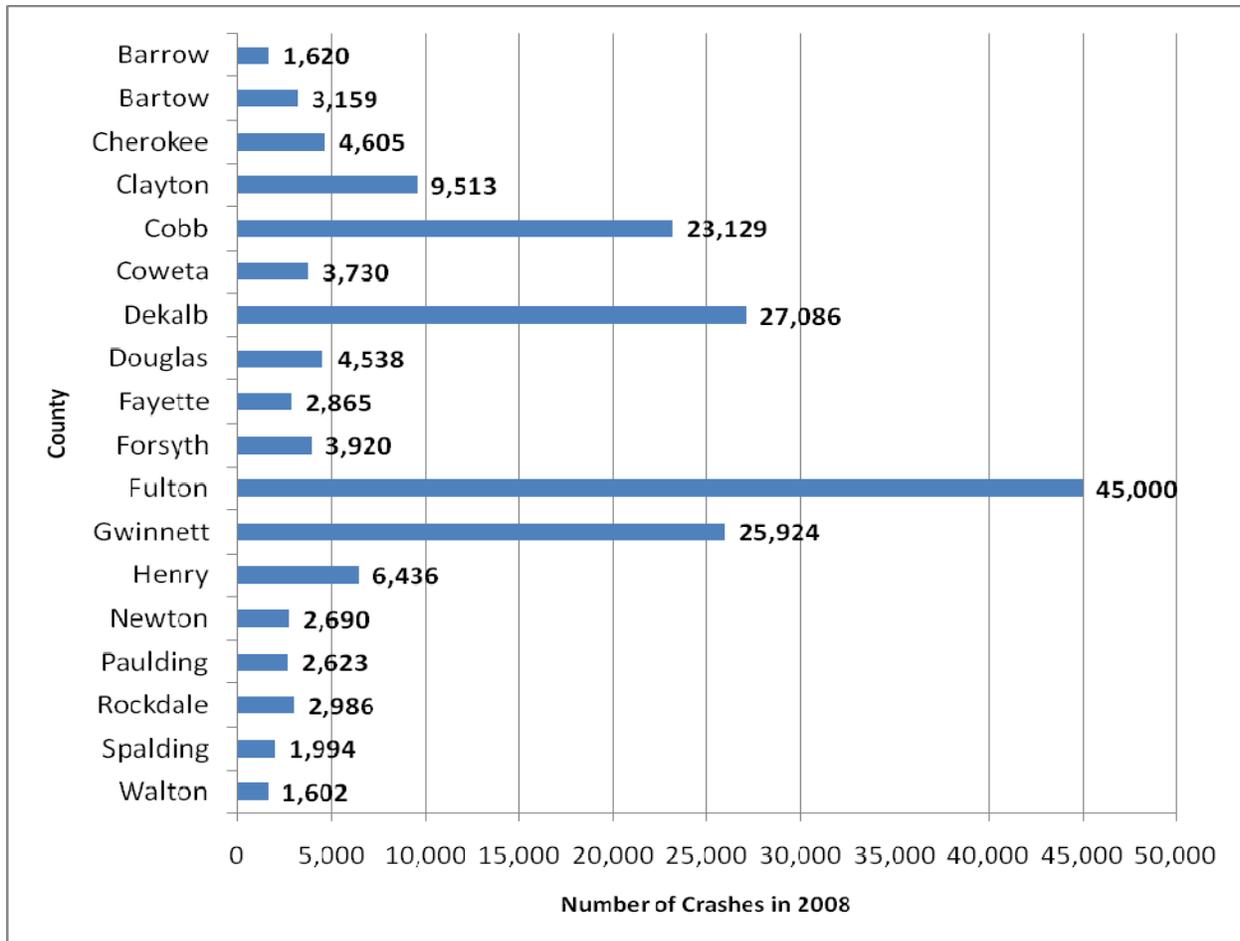
Compared with the State of Georgia, the 18-county Atlanta region has a higher crash rate and slightly higher injury rate, but a lower fatality rate per 100 million. During the past three years, total vehicle crashes in the Atlanta region have decreased more than 13%, from 200,500 crashes in 2005 to 173,420 in 2008. Figure 23 provides details as to how the region compares to State as a whole.

Figure 23: Atlanta 18-County MPO Area and Georgia Incident Totals and Rates

		State	Region
Crash Rate (2008)		282	317
Injury Rate (2008)		107	108
Fatality Rate (2008)		1.4	1.0
# Crashes	2000	310,122	173,627
	2005	347,652	200,500
	2008	306,191	173,420
	<i>% change (05-08)</i>	-11.93%	-13.51%
# Injuries	2000	130,799	65,861
	2005	139,055	72,300
	2008	115,606	59,187
	<i>% change (05-08)</i>	-16.86%	-18%
# Fatalities	2000	1,570	583
	2005	1,744	655
	2008	1,502	521
	<i>% change (05-08)</i>	-13.88%	-20.46%
# Fatal Crashes	2000	1,404	518
	2005	1,594	600
	2008	1,385	476
	<i>% change (05-08)</i>	-13.11%	-21%

Cobb, DeKalb, Fulton and Gwinnett counties each had significantly more crashes than the other MPO counties. Fulton County ranked the highest with approximately 45,000 total crashes. Figure 24 reports crash data for all counties within the 18-county MPO planning area.

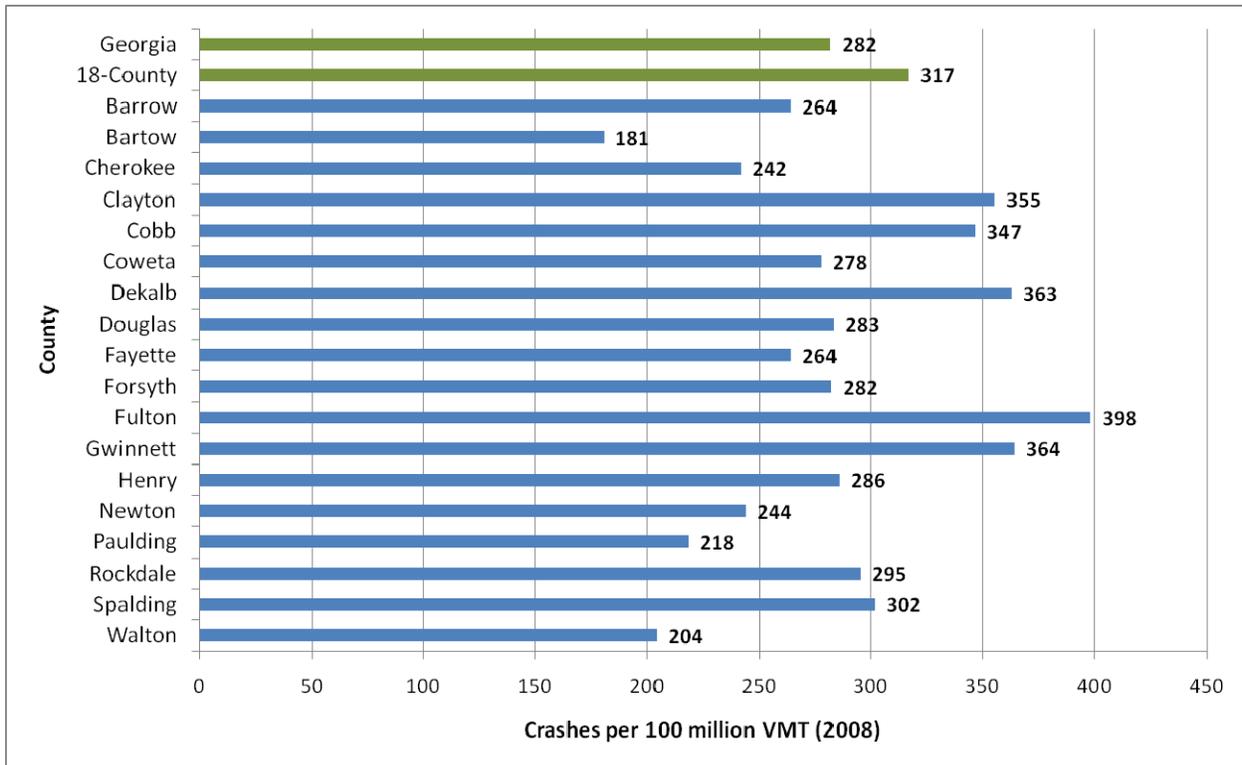
Figure 24: Atlanta 18-County MPO Area Number of Crashes, 2008



Several counties in the region have significant safety problems. Clayton, Cobb, DeKalb, Fulton, and Gwinnett Counties ranked in the top 5 out of 18 counties, with over 300 crashes per 100 million VMT in 2008. These top five counties show reduction in crash rates since 2003 when they all had crash rates over 400. Even with the decreasing crashes, these statistics suggest that long-range safety goals and policies need to be put in place to support safety planning as a high priority in the long-range and short-range transportation planning processes.

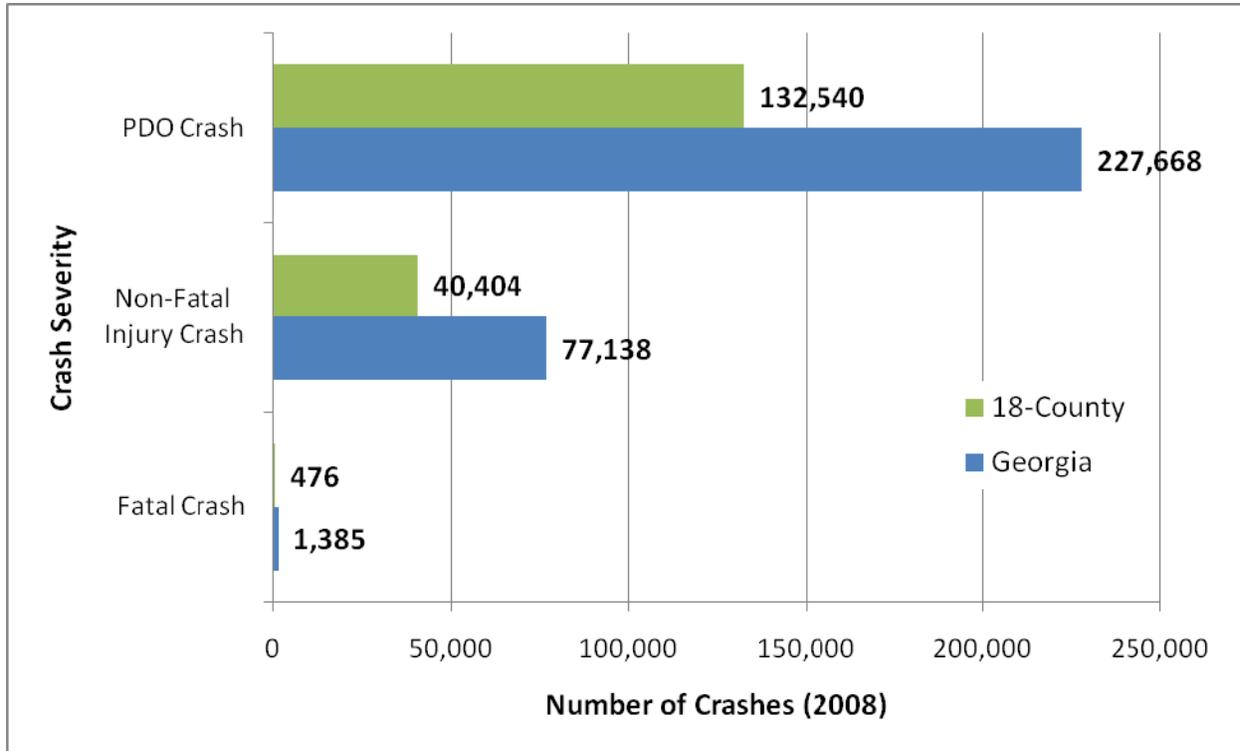
Figure 25 shows crash rates for each county in the 18-county MPO area and also shows that the region's crash rate per 100 million VMT is higher than the State.

Figure 25: Atlanta 18-County MPO Area Crash Rate per 100 Million VMT, 2008



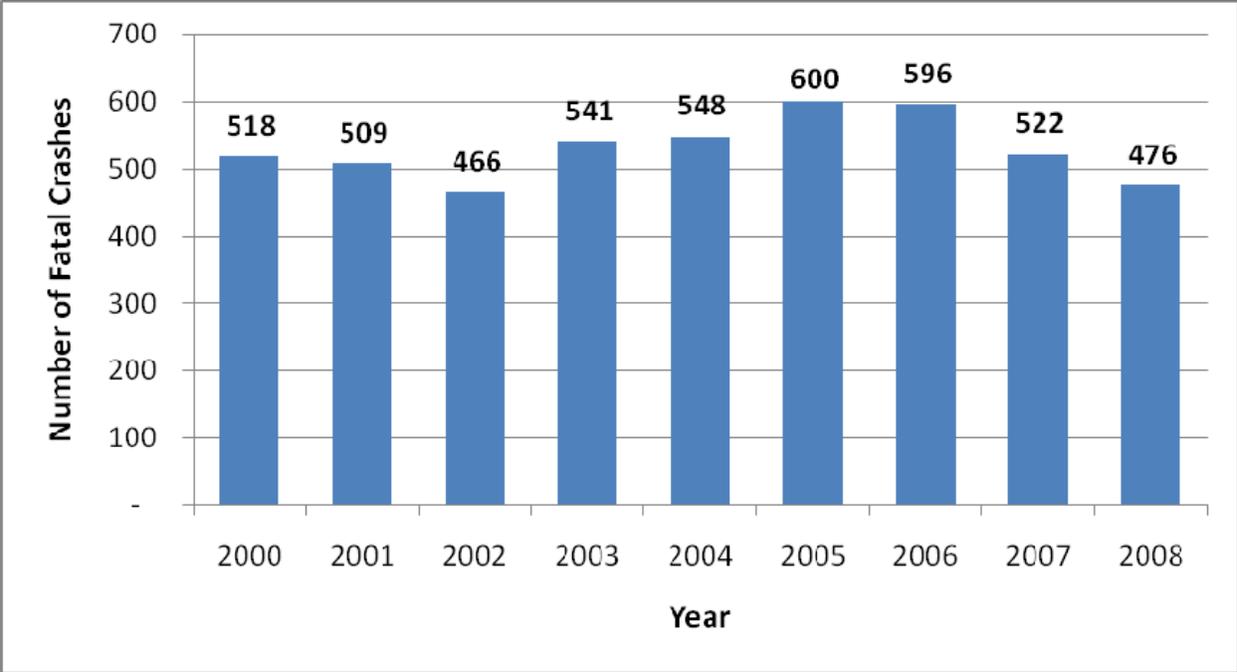
In 2008, for the 18-county Atlanta MPO area, there were 132,540 property damage only (PDO) crashes, 40,404 non-fatal injury crashes and 476 fatal crashes. Figure 26 compares crash severity data for the region to the State of Georgia.

Figure 26: Atlanta 18-County MPO Area and Georgia Crash Severity, 2008



Fatal crashes in the MPO planning area peaked in 2005. The 2008 figure (476) is the second lowest figure over a nine year period. Figure 27 a year-by-year accounting of fatal crashes in the Atlanta region.

Figure 27: 18-County MPO Area Fatal Crashes, 2000-2008



Pedestrian crashes accounted for 0.7 percent and bicycle crashes accounted for 0.2 percent of the Atlanta 18-county MPO area's total number of crashes in 2008. Clayton, Cobb, DeKalb, Fulton and Gwinnett reported the highest number of pedestrian and bicycle crashes in the MPO area with over 100 pedestrian crashes and over 20 bicycle crashes located in each of these counties. Figure 28 provides rates for the Atlanta region and the State of Georgia.

Figure 28: Atlanta 18-County MPO Area and Georgia Pedestrian and Bicycle Incident Totals and Rates

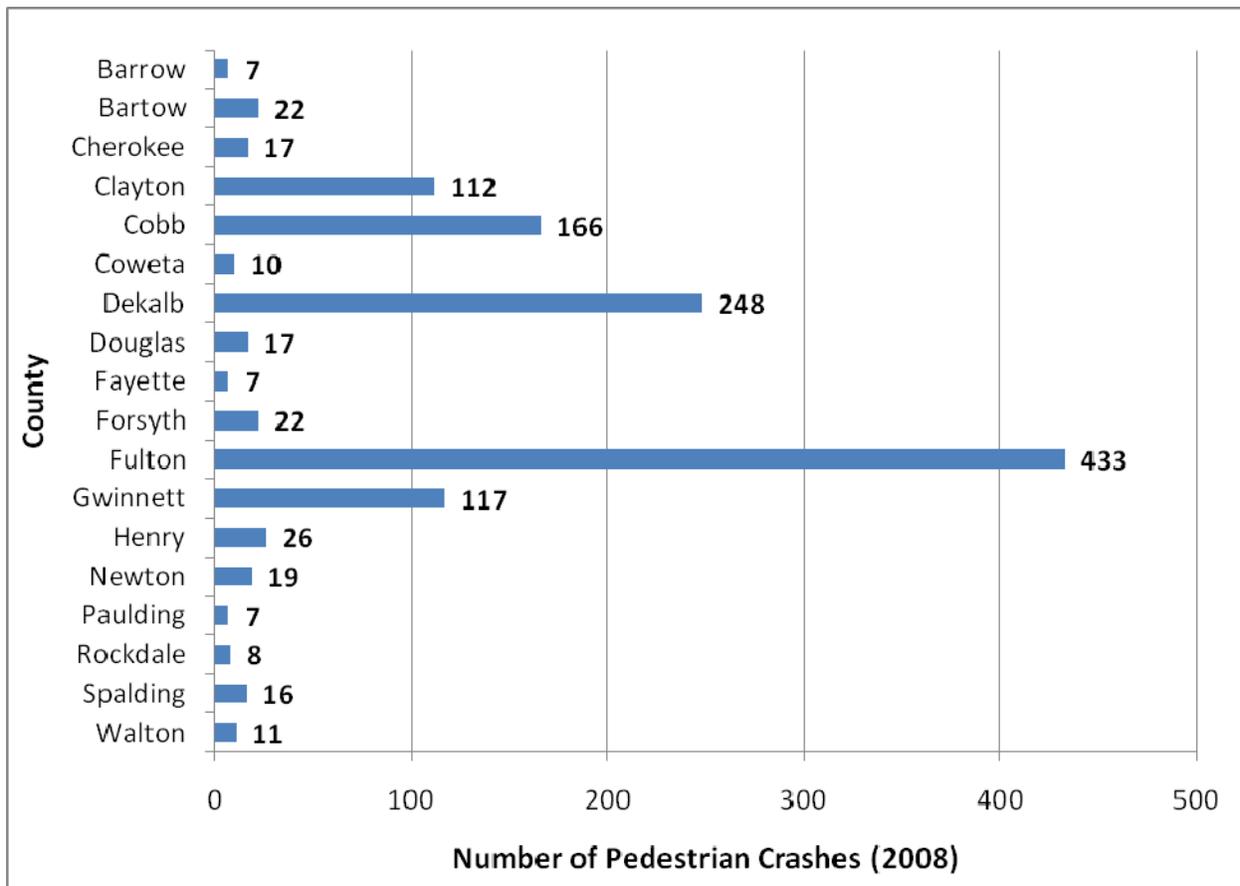
		<u>Pedestrian</u>		<u>Bicyclist</u>	
		State	Region	State	Region
Crash Rate (2008)		23	26	8	6
Injury Rate (2008)		18	21	6	4
Fatality Rate (2008)		1.2	1.1	0.2	0.08
# Crashes	2000	2,490	1,442	986	381
	2005	2,564	1,523	941	356
	2008	2,208	1,265	815	308
	% change (05-08)	-14%	-17%	-13%	-13%
# Injuries	2000	2,072	1,219	735	295
	2005	2,073	1,241	697	267
	2008	1,764	1,018	595	219
	% change (05-08)	-15%	-18%	-15%	-18%
# Fatalities	2000	141	68	14	6
	2005	150	80	21	3
	2008	115	54	22	4
	% change (05-08)	-23%	-33%	5%	33%

* Rates per 100,000 persons

Source: ARC, 2009

Each of the region's 5 core counties each had over 100 pedestrian crashes in 2008. Fulton County had over 400 pedestrian crashes. Figure 29 below provides pedestrian crash data for each of the counties in the 18-county MPO.

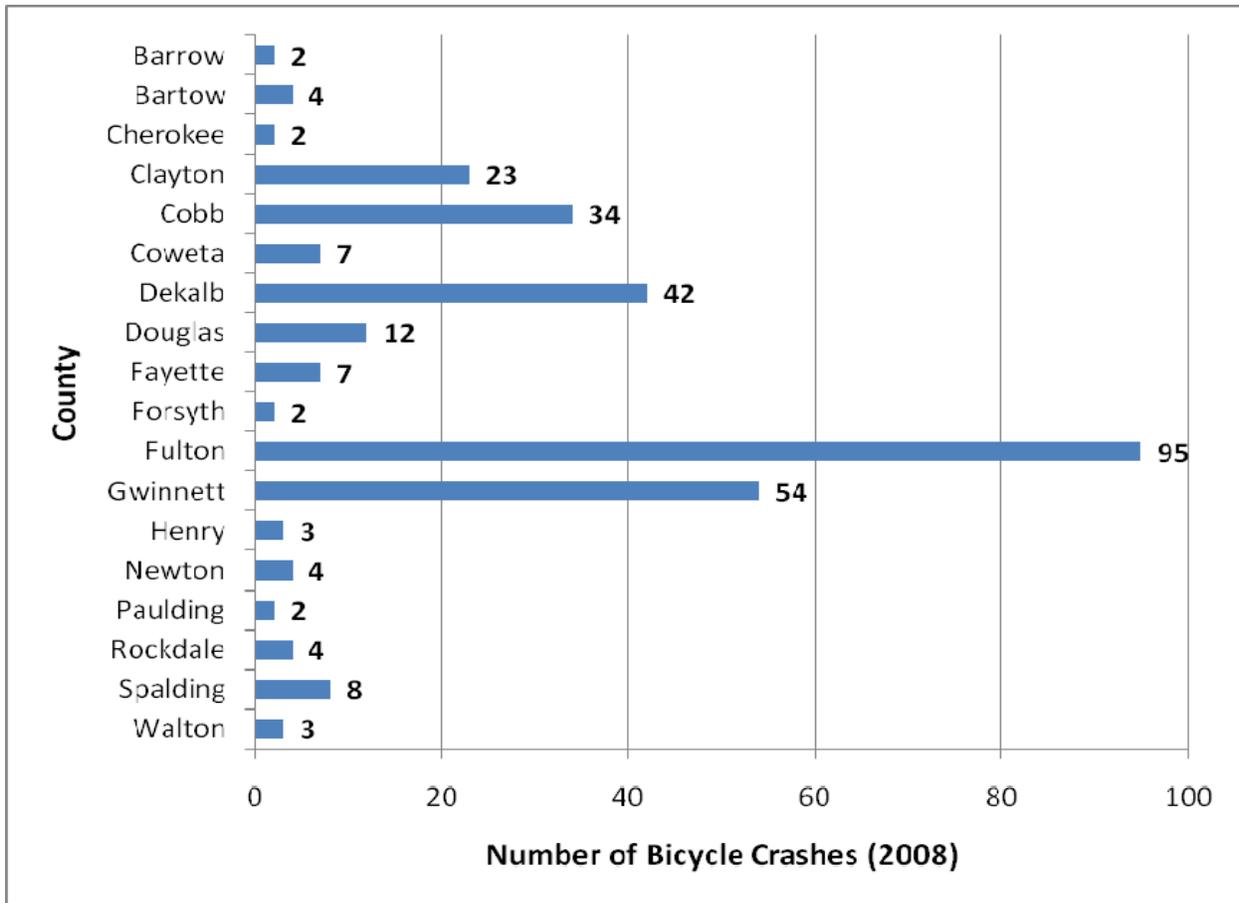
Figure 29: Atlanta 18-County MPO Area Pedestrian Crashes, 2008



Source: ARC, 2009

The core five counties again had the most bicycle crashes. Douglas County was the only other county in the MPO area to have more than 10 reported crashes. Figure 30 below provides bicycle crash data for each of the counties in the 18-county MPO.

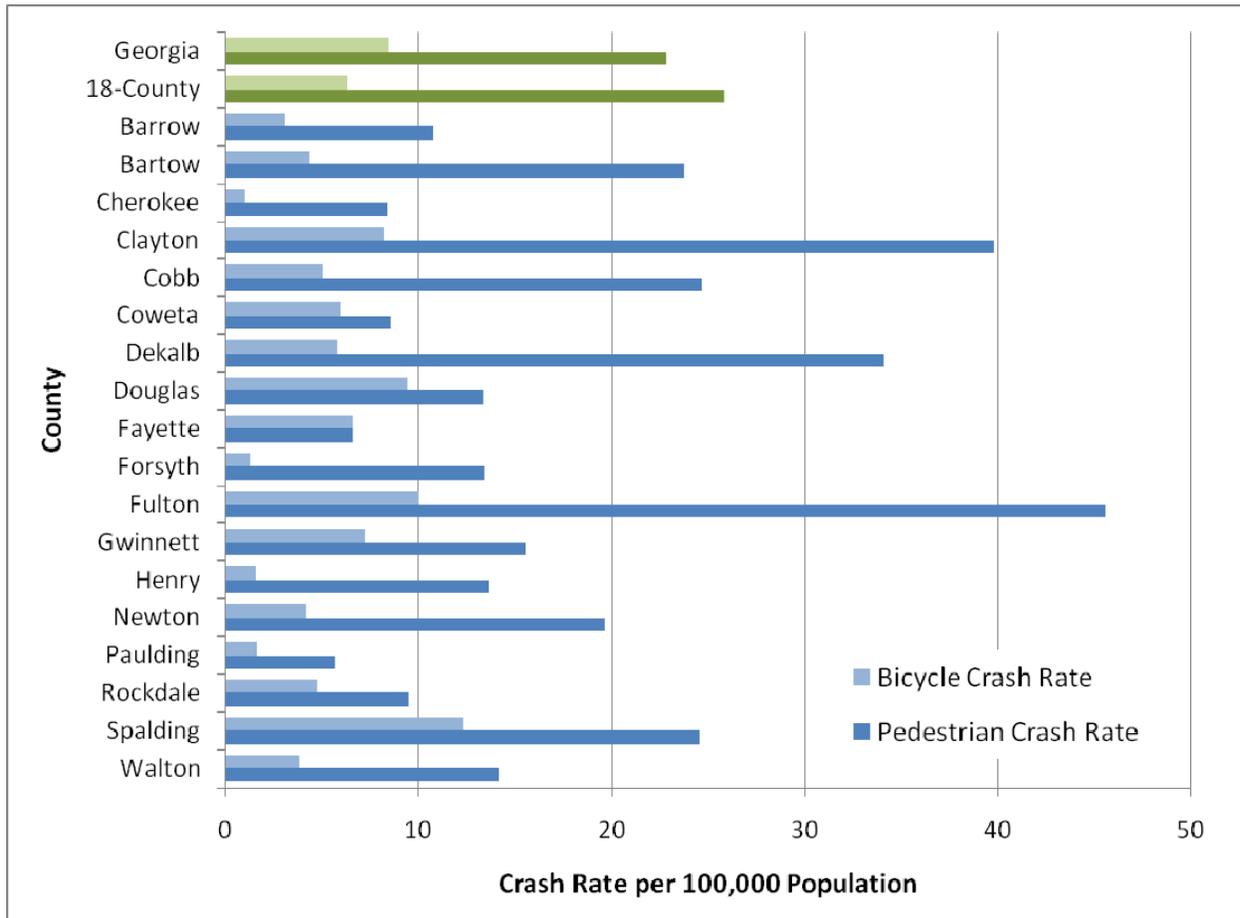
Figure 30: Atlanta 18-County MPO Area Bicycle Crashes, 2008



Source: ARC, 2009

Fulton, Clayton, and DeKalb counties have the highest pedestrian crash rates in the region. These three counties are among the five core counties of the region and are very urban. Spalding, Douglas, and Fulton Counties have the highest bicycle crash rate for 2008 within the 18-County Atlanta region. Figure 31 below provides bicycle and pedestrian crash rates for each county in the 18-county MPO.

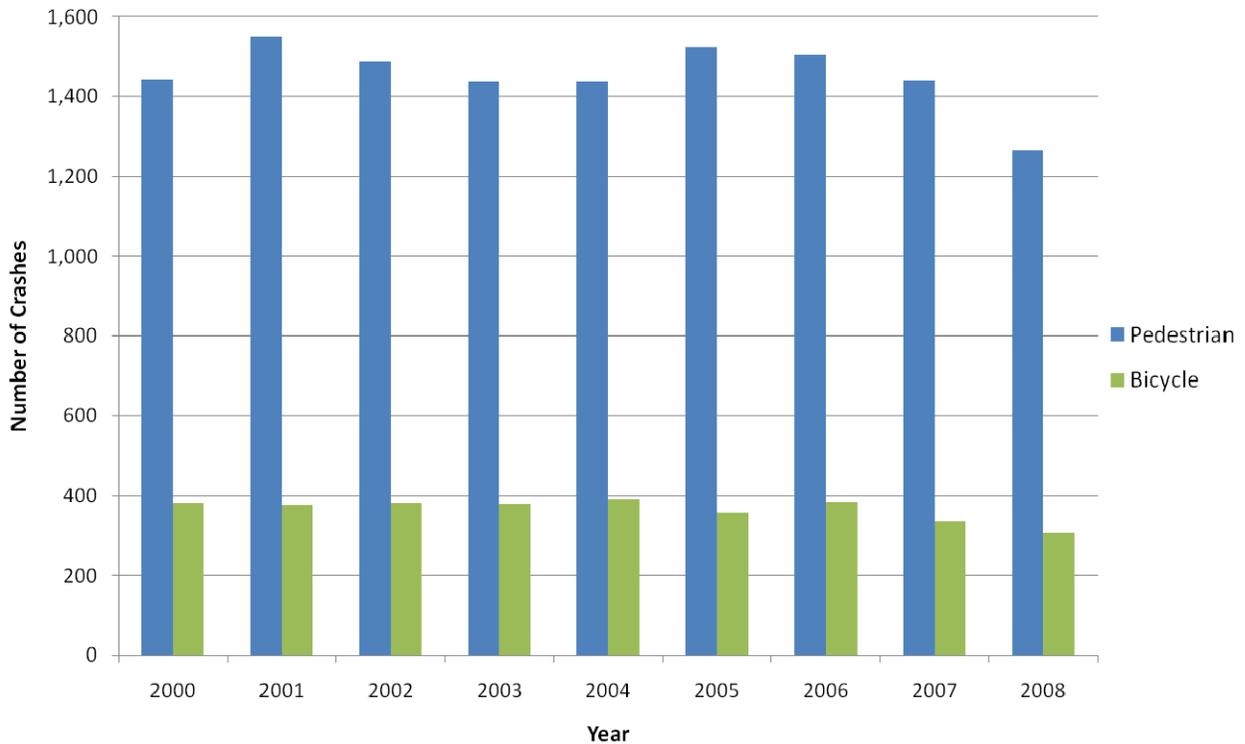
Figure 31: Atlanta 18-County MPO Area Pedestrian & Bicycle Crash Rate per 100,000 Population, 2008



Source: ARC, 2009

The total number of pedestrian and bicycle crashes have been declining since 2005. In 2008, there were 1,265 pedestrian crashes and 308 bicycle crashes. Figure 32 below provides information on the total number of crashes for the 18-county region.

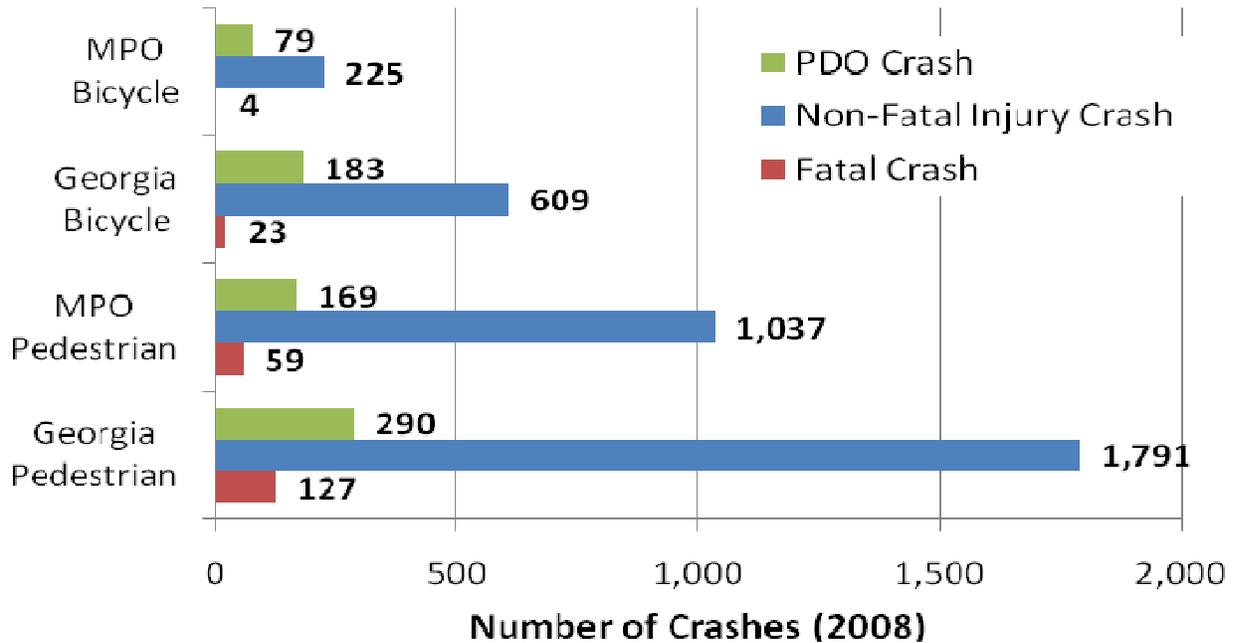
Figure 32: 18-County MPO Area – Bike and Pedestrian Crashes (2000-2008)



Source: ARC, 2009

For bicycles, there were 79 PDO crashes, 225 non-fatal injury crashes and 4 fatal crashes. For pedestrians, there were 169 PDO crashes, 1,037 non-fatal injury crashes and 59 fatal crashes for the 18-county region. Figure 33 provides information on both bicycle and pedestrian crashes for the Atlanta region and the State.

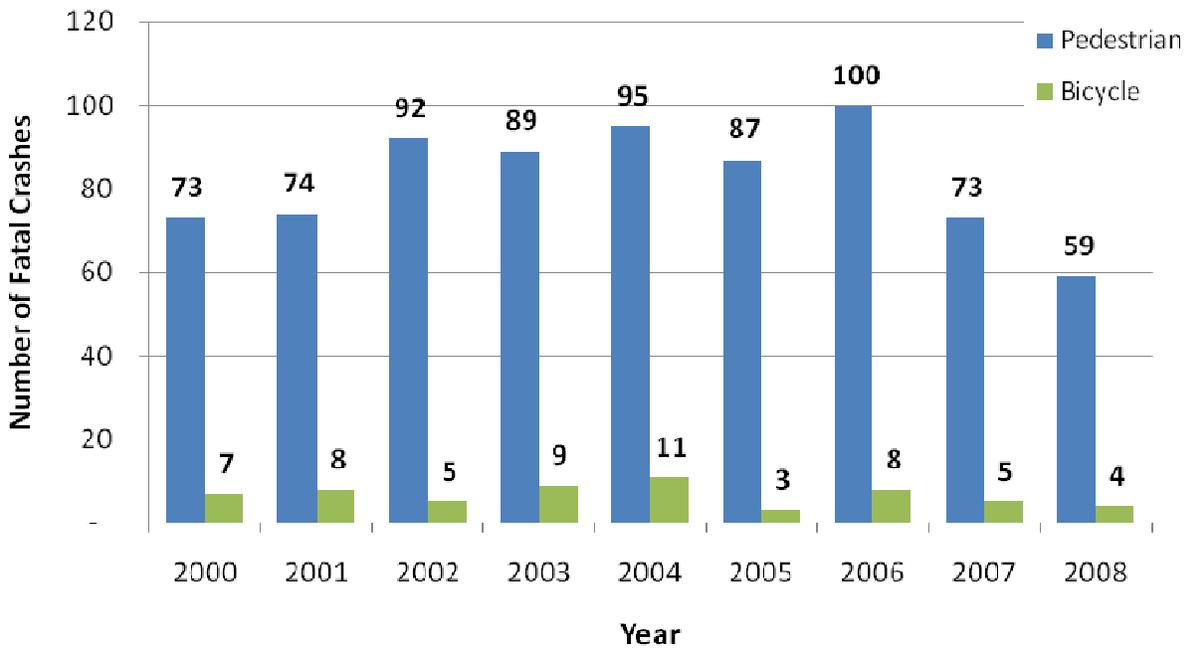
Figure 33: Georgia and 18-County MPO Area Pedestrian and Bicycle Crash Severity, 2008



Source: ARC, 2009

The total number of pedestrian and bicycle fatal crashes have decreased since 2000, after a spike in fatal crashes in 2006 (there were 100 fatal crashes involving pedestrians in 2006). Figure 34 provides information beginning in 2000 on the number of fatal crashes involving pedestrians and bicycles.

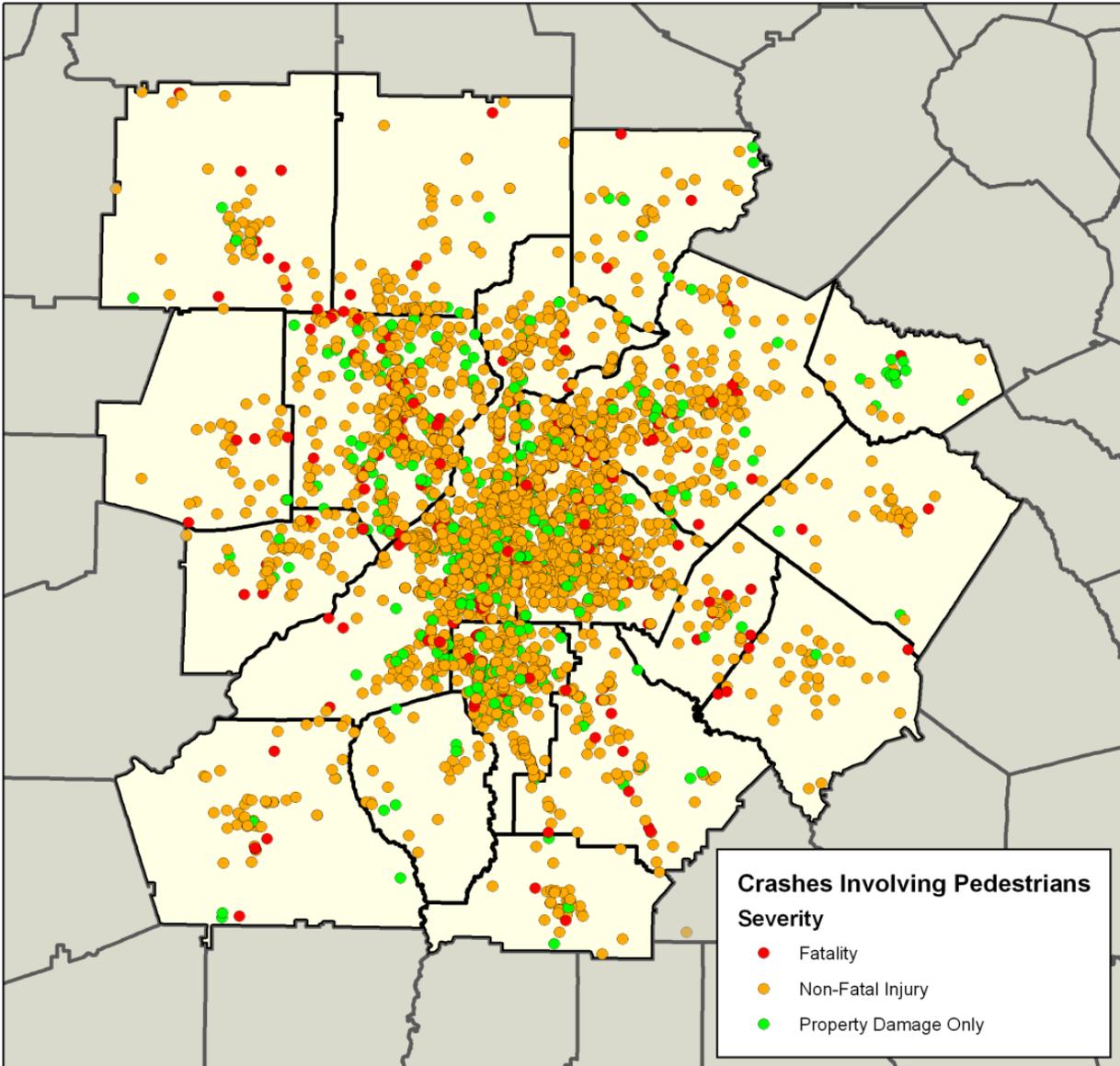
Figure 34: Number of Pedestrian and Bicycle Fatal Crashes for the MPO Area



Source: ARC, 2009

Figure 35 displays locations of crashes involving pedestrians during 2005 – 2008. The map denotes the severity of the crash (including fatalities).

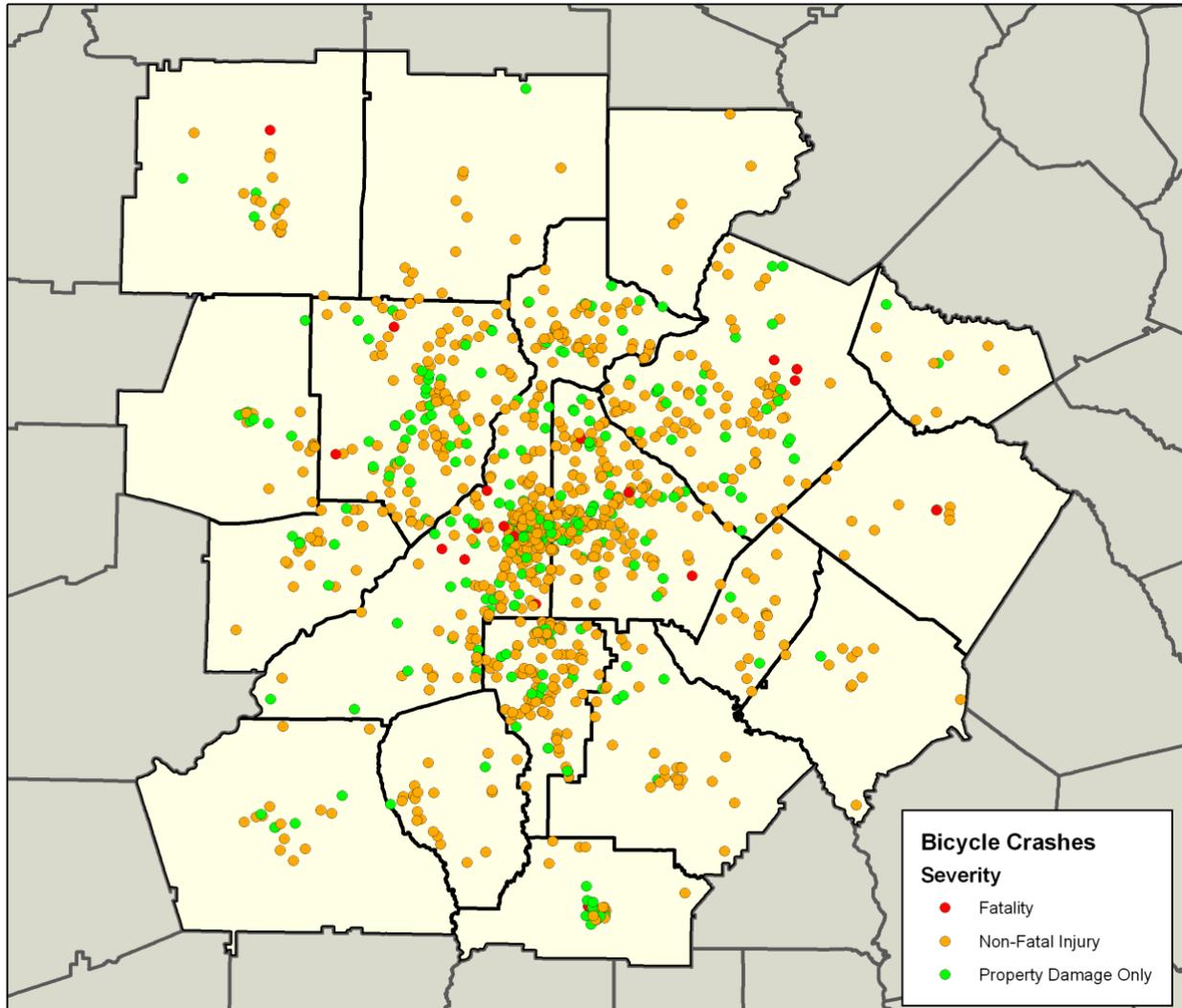
Figure 35: Atlanta 18-County MPO Area Pedestrian Crash Locations by Severity, Cumulative Total 2005-2008



Source: ARC, 2009

Figure 36 displays locations of crashes involving pedestrians during 2005 – 2008. The map denotes the severity of the crash (including fatalities).

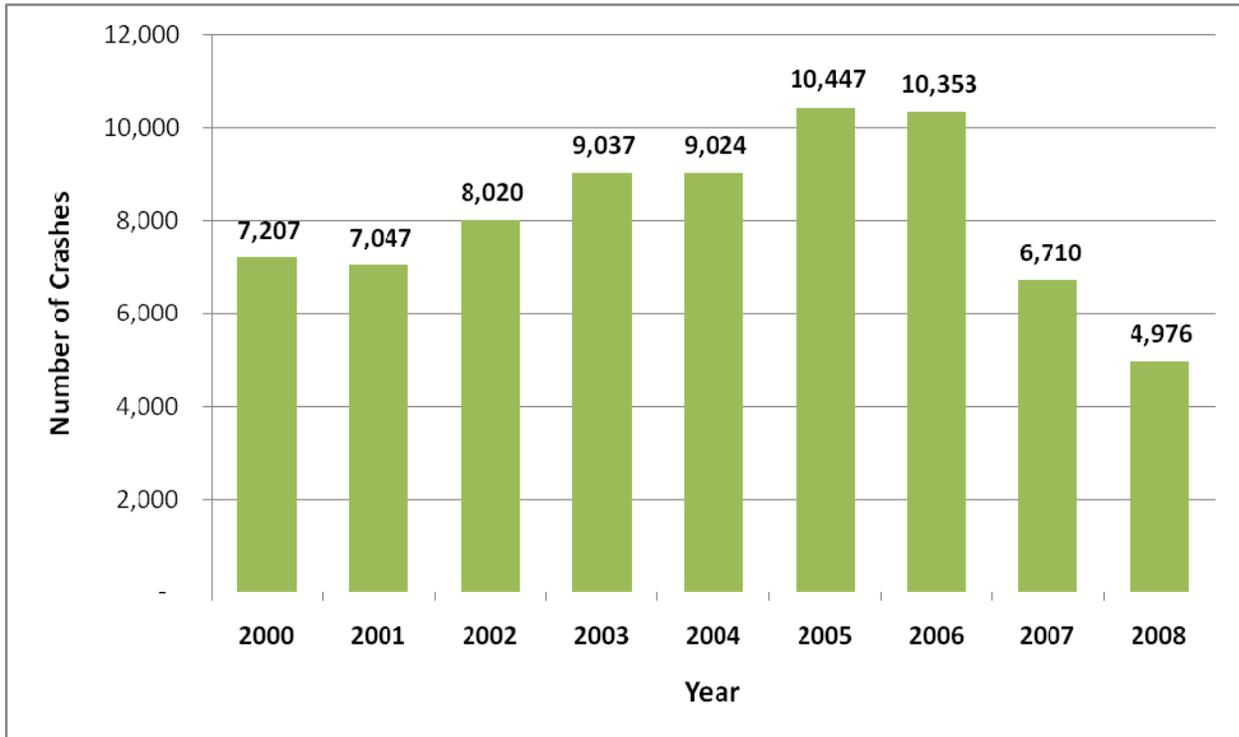
Figure 36: Atlanta 18-County MPO Area Bicycle Crash Locations by Severity, Cumulative Total 2005-2008



Source: ARC, 2009

In 2008, there were nearly 5,000 crashes in the region involving commercial vehicles, including 36 fatalities. The number of crashes involving commercial vehicles has declined since peaking in year 2005 for the 18-County Atlanta MPO area. Figure 37 reveals a significant reduction in crashes over the past few years. This is most likely linked to the sluggish economy which has caused less travel by commercial vehicles throughout the region and nation.

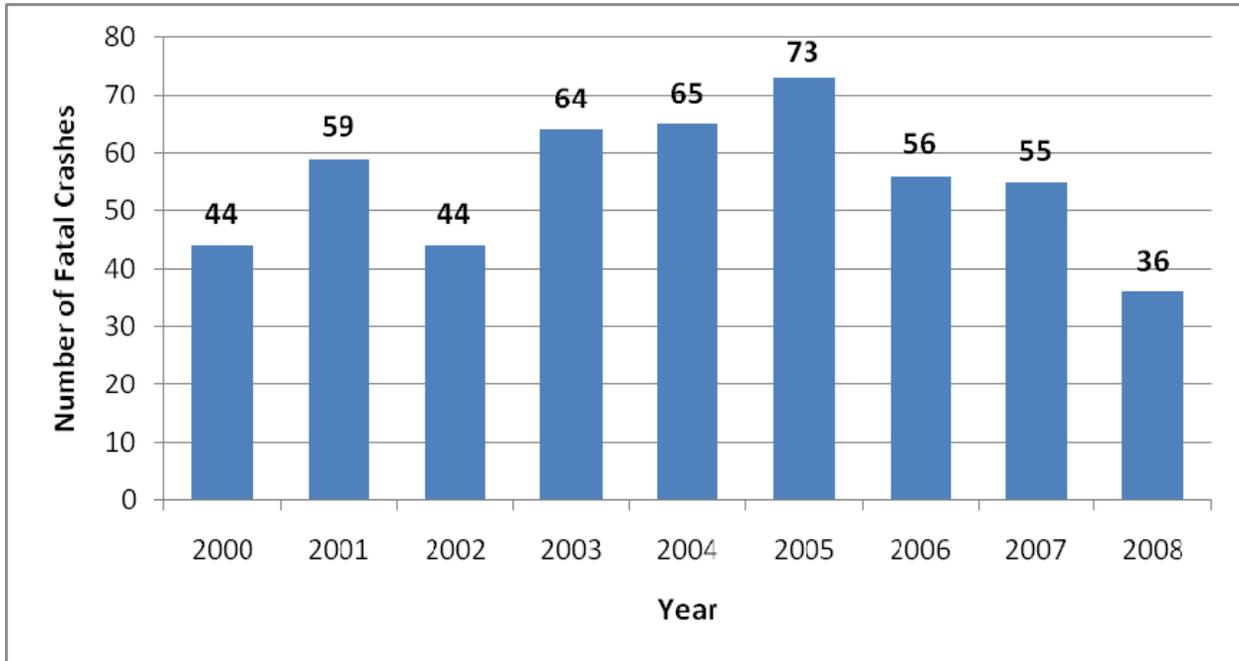
Figure 37: Atlanta 18-County MPO Area Crashes Involving Commercial Vehicles by Year



Source: ARC, 2009

As Figure 38 shows fatal crashes involving commercial vehicles have also declined since 2005. 2005 was the peak year for both total crashes and fatal crashes involving commercial vehicles.

Figure 38: Atlanta 18-County MPO Area Fatal Crashes Involving Commercial Vehicles by Year

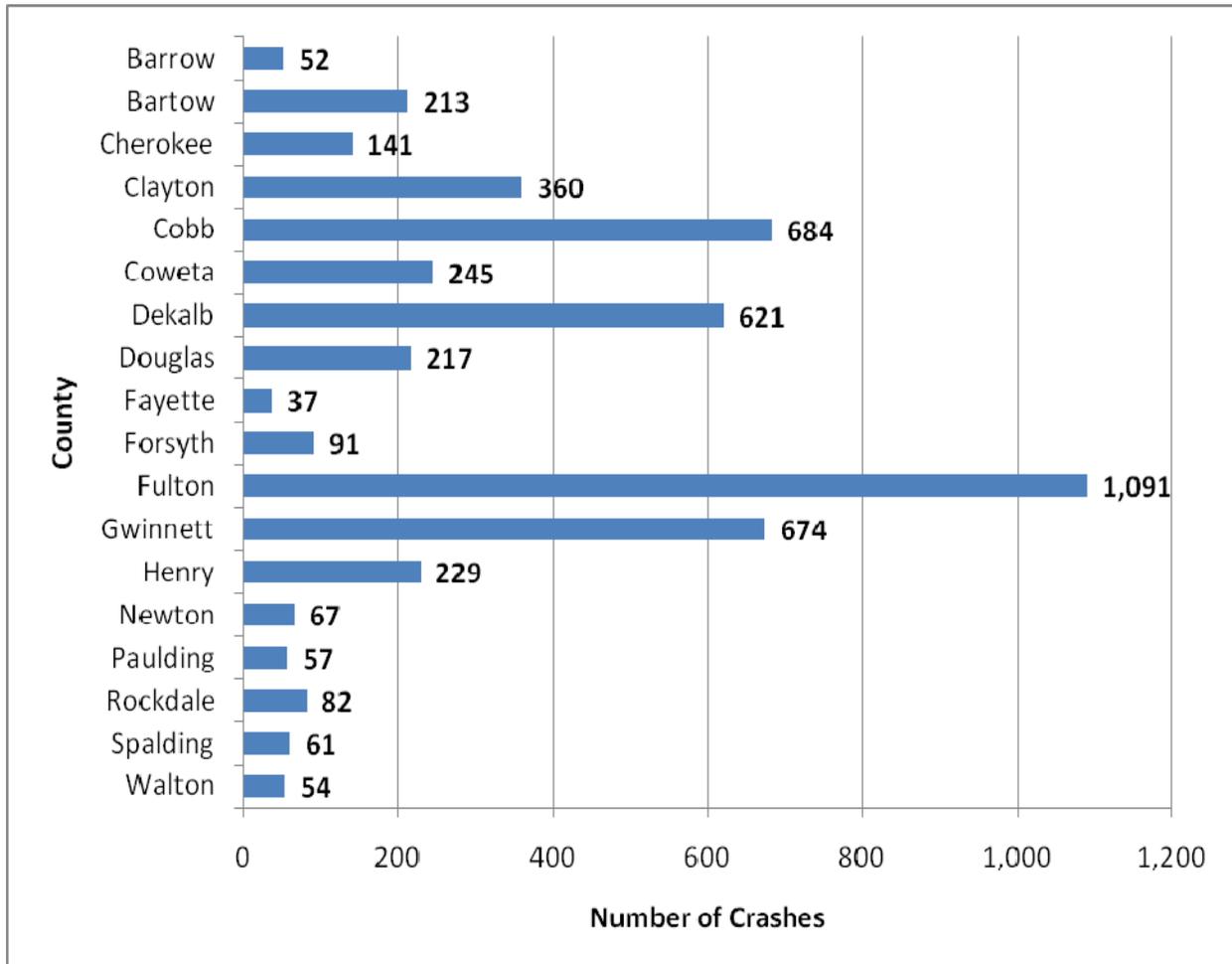


Source: ARC, 2009

The five core counties of the Atlanta region are the counties with the highest number of crashes involving commercial vehicles. Fulton County had the highest number of commercial vehicle crashes in 2008 at 1,091. Cobb, DeKalb, and Gwinnett counties all had over 600 crashes involving commercial vehicles in 2008.

Figure 39 provides county-level information for commercial vehicle crashes in 2008.

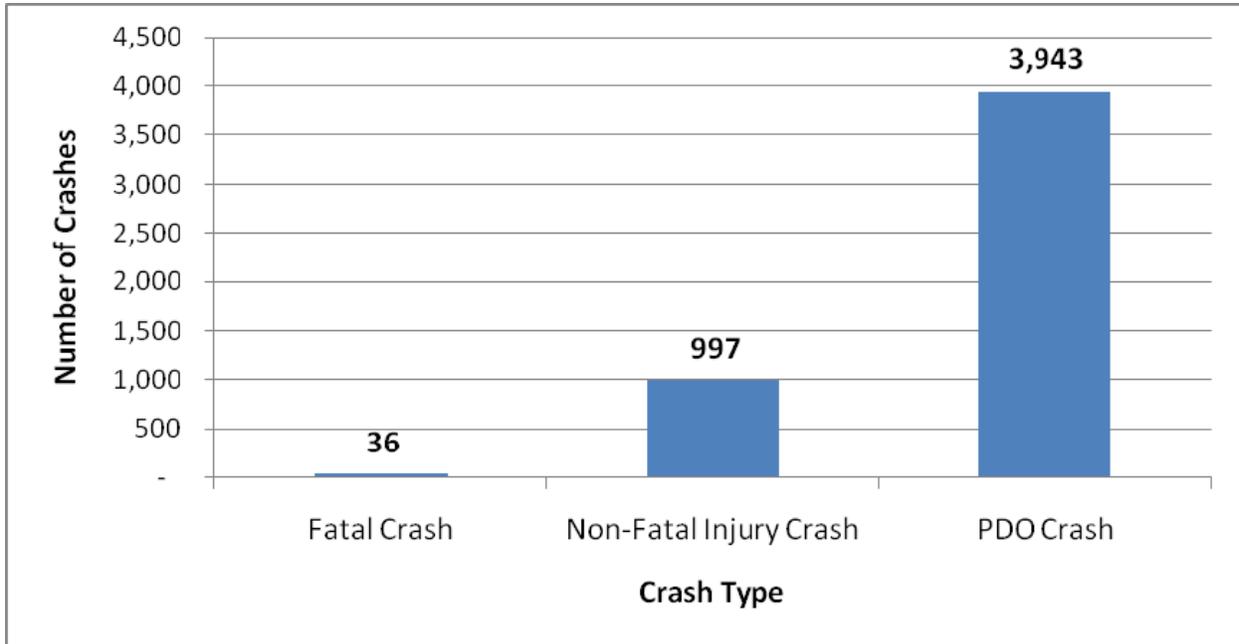
Figure 39: Atlanta 18-County MPO Area Commercial Vehicle Crashes by County, 2008



Source: ARC, 2009

Most commercial vehicle crashes in 2008 were PDO (property damage only) crashes at 79 percent of all crashes. All types of crashes have been declining since 2006. Figure 40 details commercial vehicle crashes by severity.

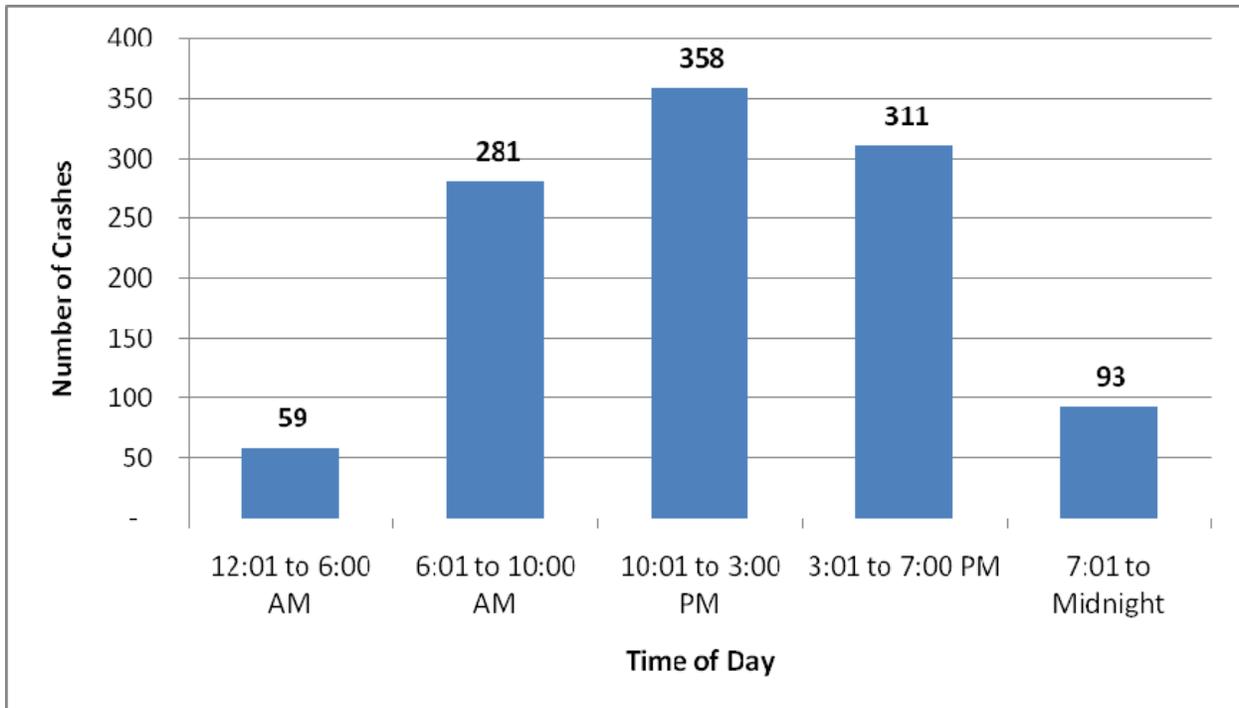
Figure 40: Atlanta 18-County MPO Area Commercial Vehicle Crash Severity, 2008



Source: ARC, 2009

Many freight distributors attempt to travel in the region in off-peak hours to avoid congestion, as a result a high number of crashes occur on the region's roadways during mid-day period (between 10AM and 3PM). Figure 41 provides information on the time of day that commercial vehicles were involved in a crash.

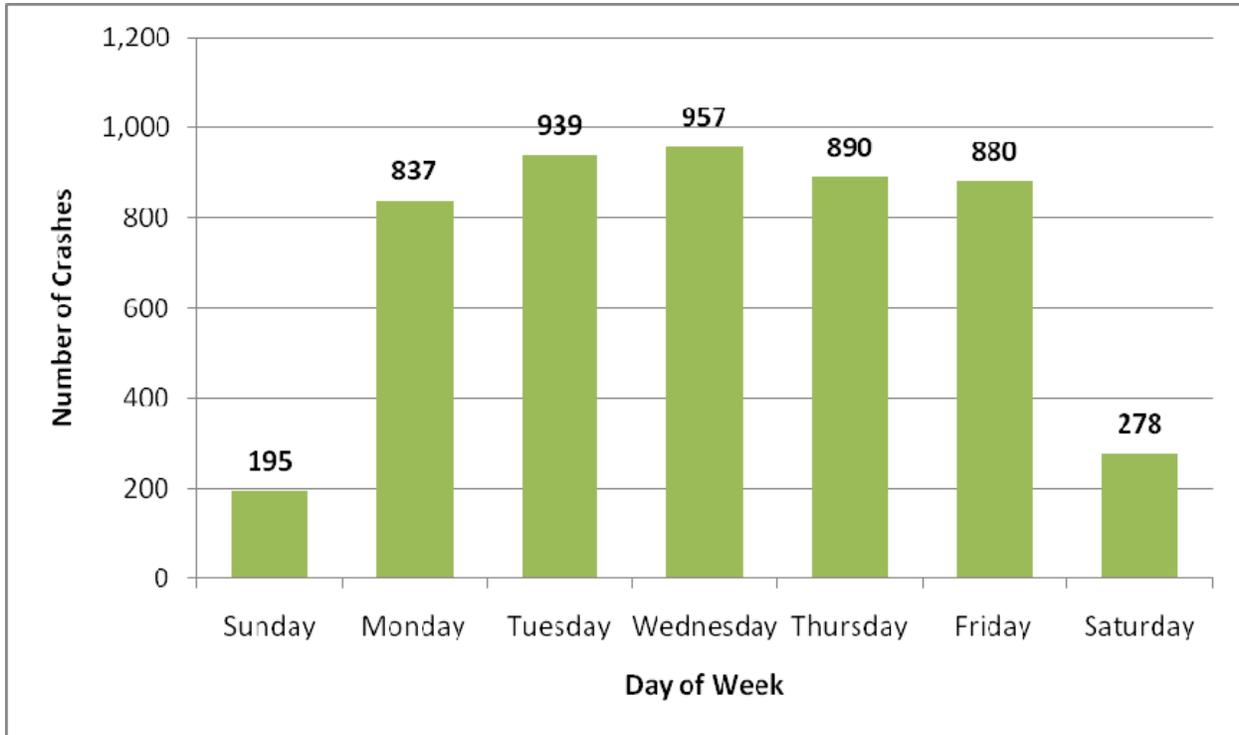
Figure 41: Atlanta 18-County MPO Area Commercial Vehicle Crashes by Time of Day



Source: ARC, 2009

Due to increased traffic during the work week, there is increased number of crashes involving commercial vehicles on during the week rather than on weekends. Figure 42 relays information concerning the time of week that commercial vehicles are involved in crashes.

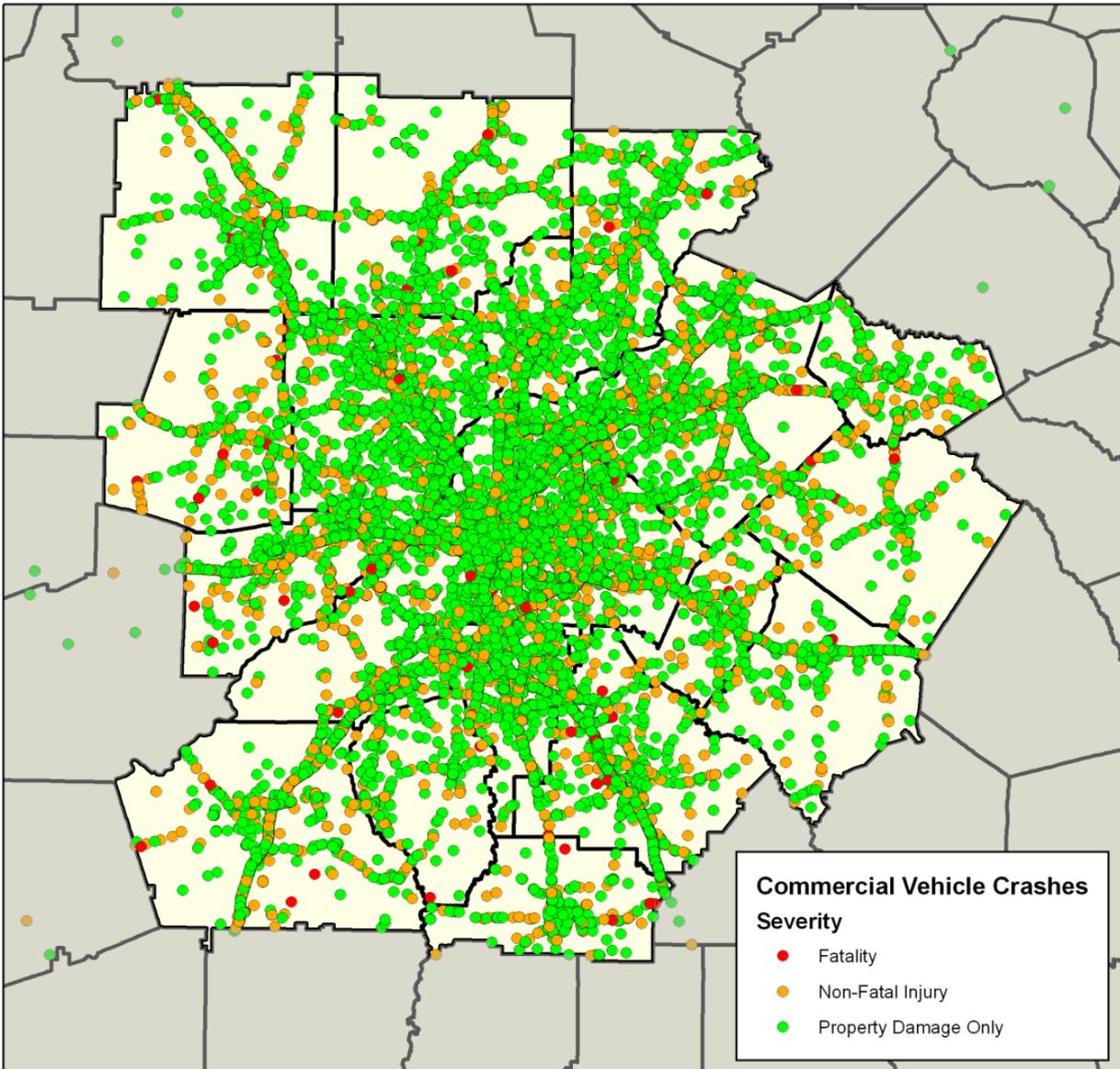
Figure 42: Atlanta 18-County MPO Area Commercial Vehicle Crashes by Day of Week



Source: ARC, 2009

Figure 43 maps all locations of reported crashes involving commercial vehicles during the 2005 to 2008 period. The map also denotes crash severity, including fatal crashes.

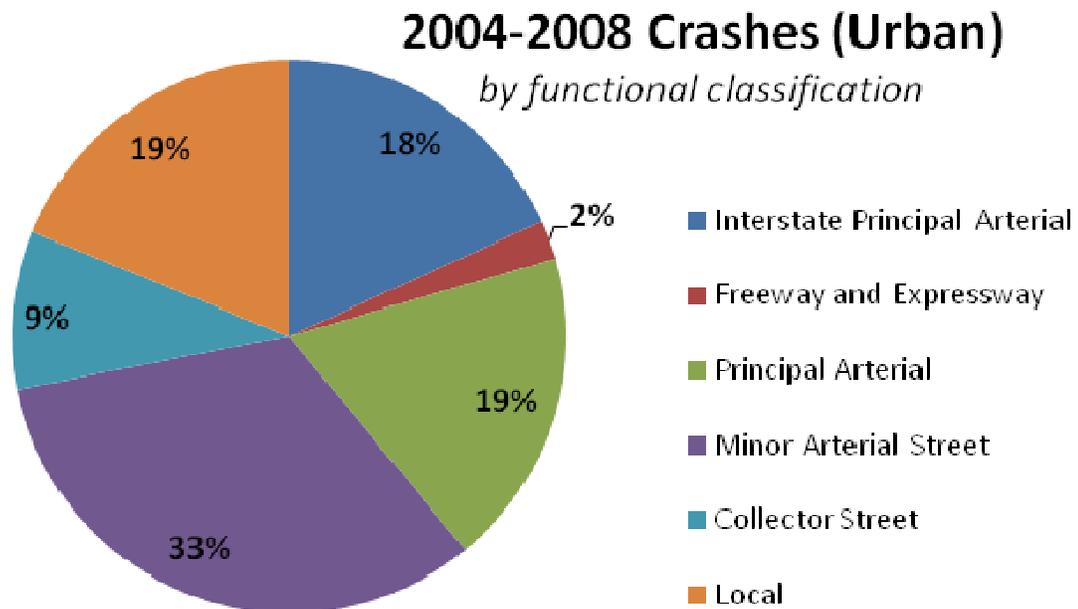
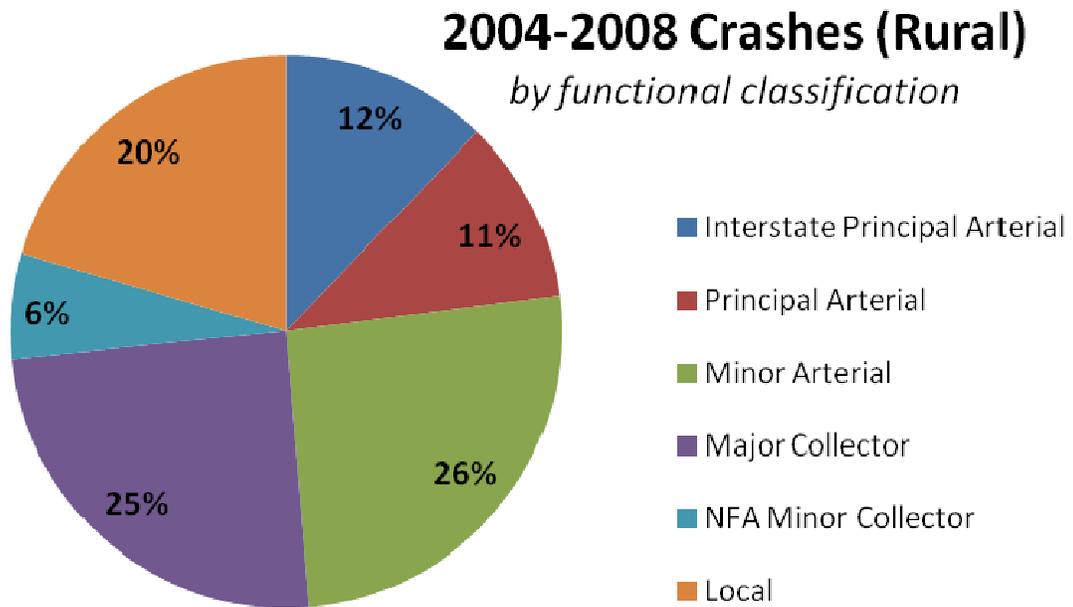
Figure 43: Atlanta 18-County MPO Area Commercial Vehicle Crash Locations by Severity, Cumulative Total 2005-2008



Source: ARC, 2009

Figure 44 shows the breakdown in total crashes from 2004 to 2008 in the 18-county planning area by roadway functional classification.

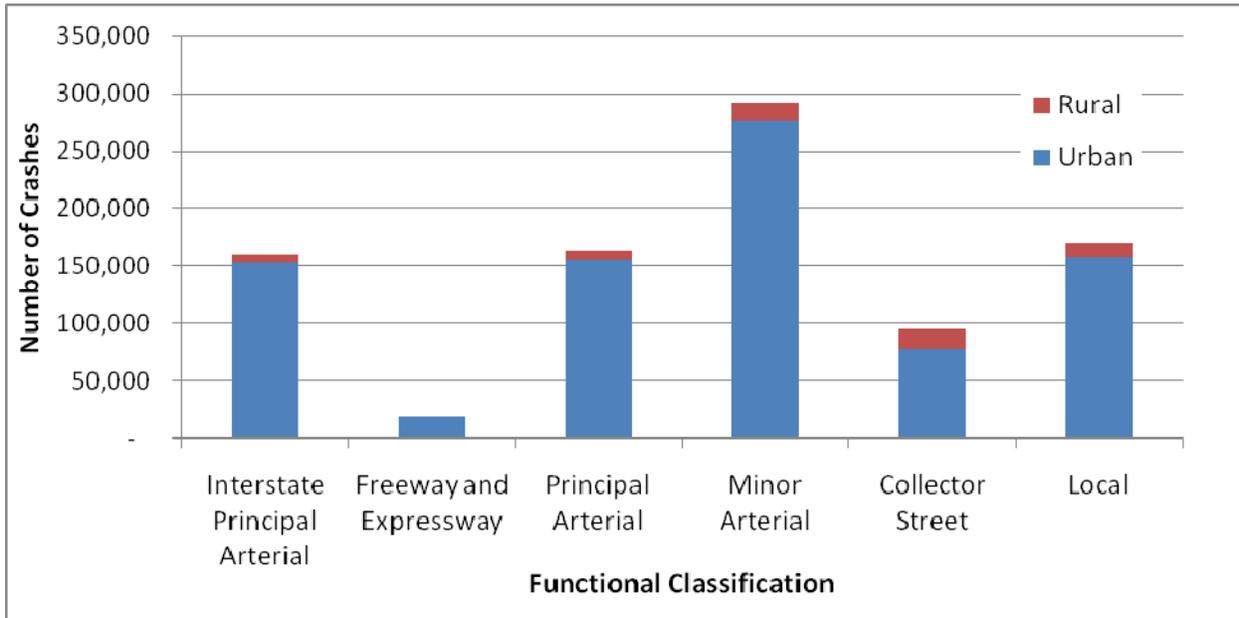
Figure 44: Regional Number of Crashes by Functional Classification (Rural & Urban)



Source: ARC, 2009

As can be seen in Figure 45 the vast majority of crashes in the region occur on facilities that are classified as urban.

Figure 45: Total Number of Regional Crashes from 2004 to 2008 by Functional Classification



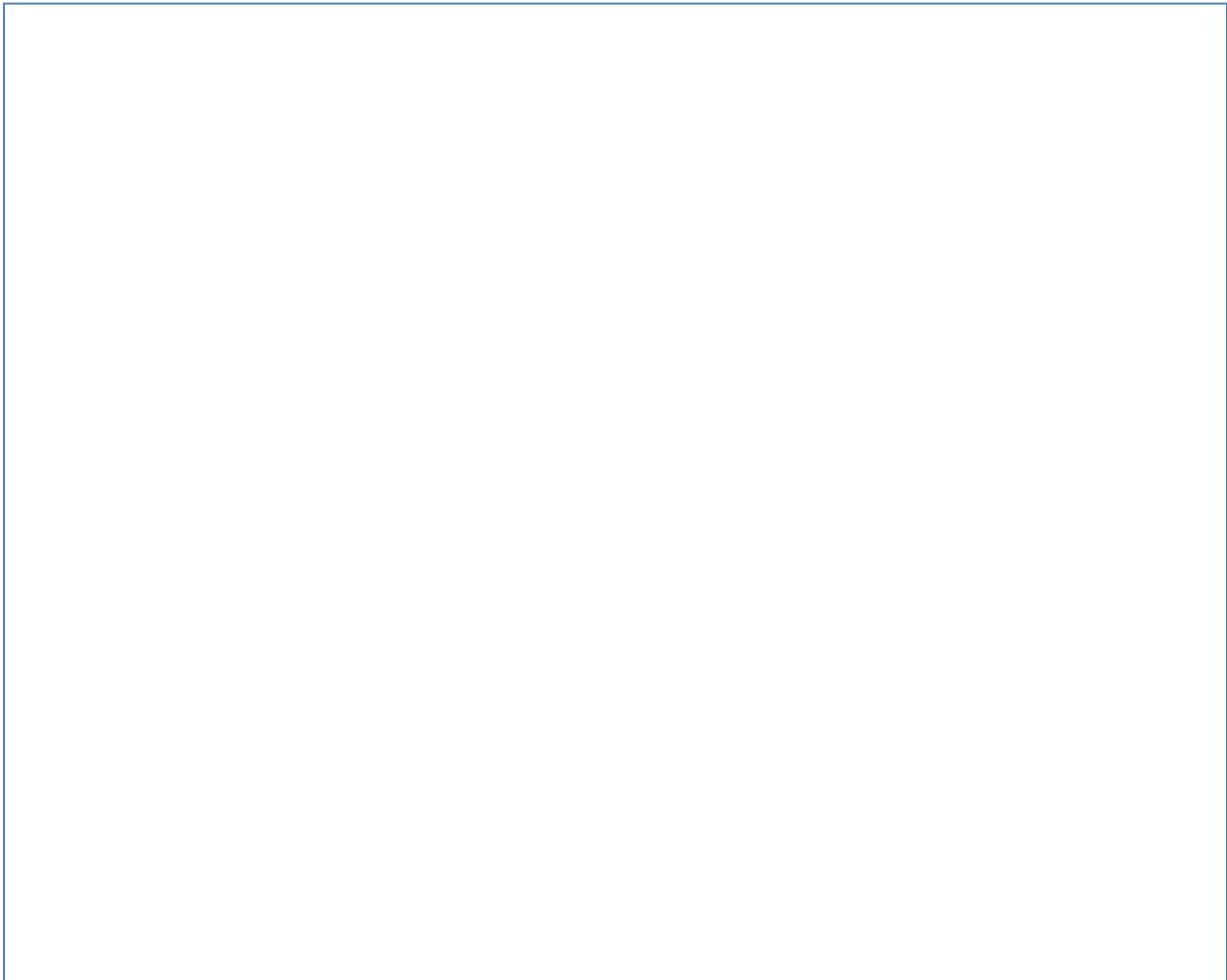
Appendix T-2: Transportation Facilities Inventory

Roads, Highways and Bridges

The Georgia Department of Transportation (GDOT) maintains centerline mile measures for all counties in Georgia based on functional classification, and updates this data annually. Functional classification is the grouping of streets and highways according to the character of traffic service they provide. There are three primary functional classifications: Arterial, Collector, and Local. A centerline mile is a measure of roadway length in miles, in a specific direction of travel, independent of the number of lanes a roadway may have.

The most current centerline mile measures for the Atlanta MPO area are from 2007 and are listed below in Figure 1. Small decreases in mileage can be attributed to human error, reclassification of roads or roads that run close to county lines and are recorded to the wrong county.

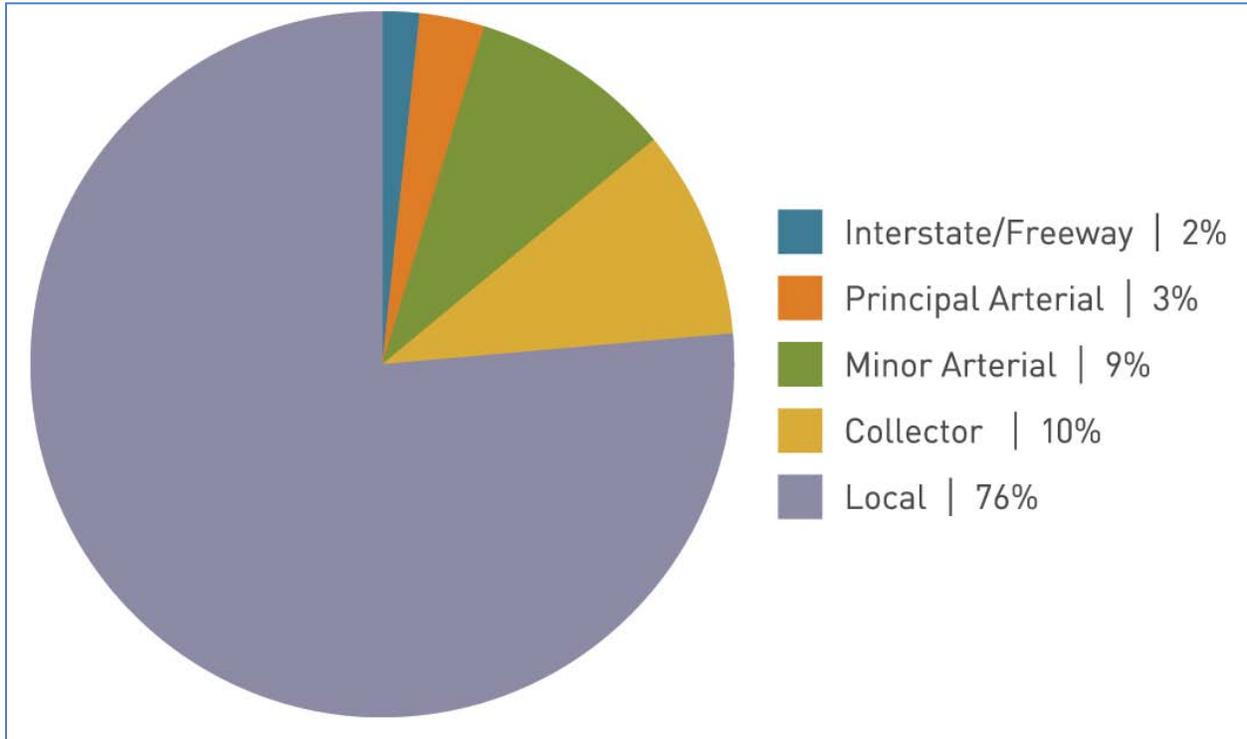
Figure 1: Roadway Characteristics



Source: ARC, 2009

The Atlanta region has over 25,000 centerline miles of roadway facilities. Several important facts relate to the region's roadway characteristics. Seventy-six percent of the region's roadways are "local" in nature. These roadways are maintained by local governments. As these facilities age and require additional maintenance, significant costs will be the responsibility of local governments. As can be seen in Figure 2 the region has significant roadway mileage that is classified as local.

Figure 2: Percentage of Road Mileage by Road Classification



Source: ARC, 2009

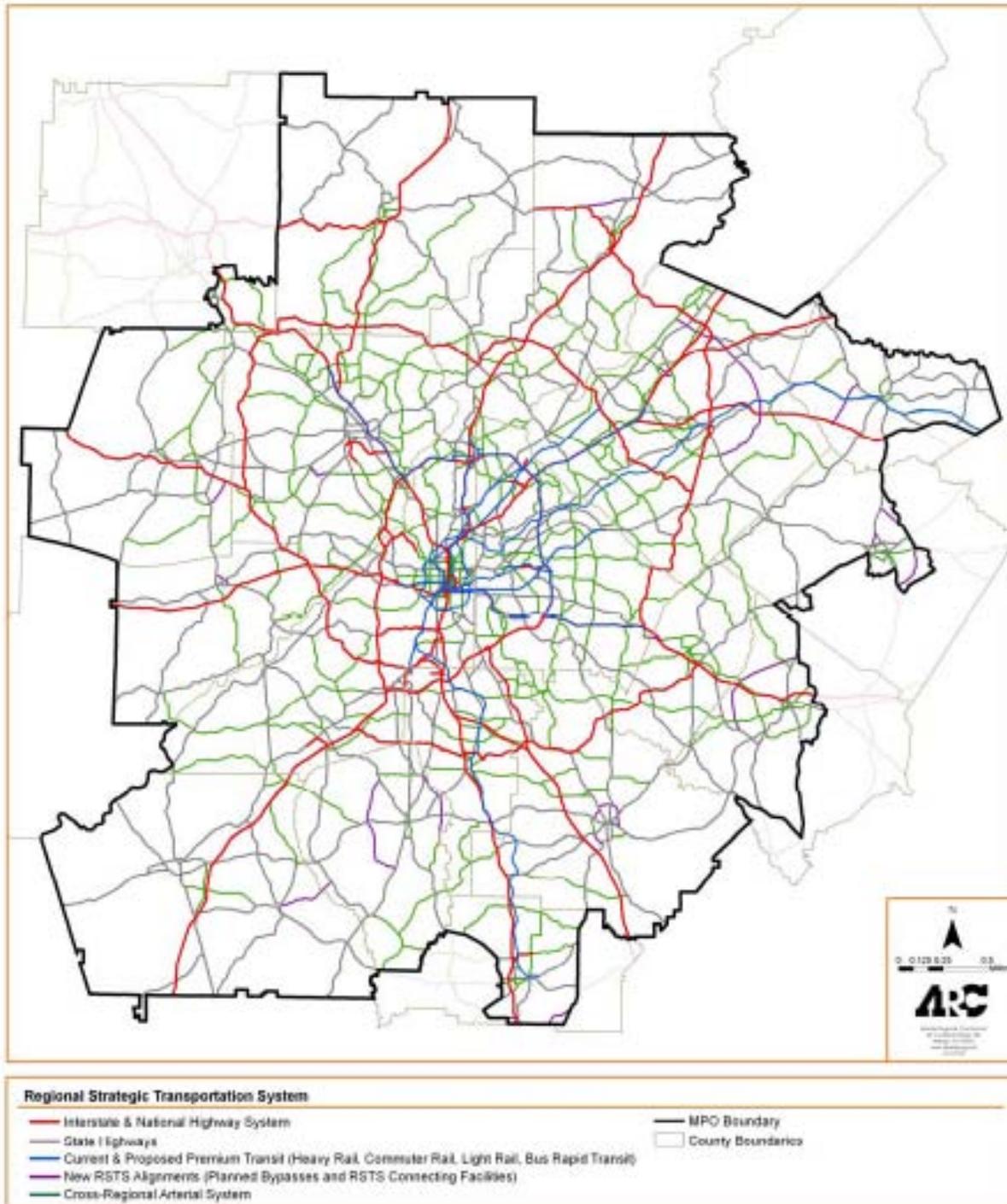
Envision6 recommended focusing limiting federal transportation funds for capacity expansion projects to facilities on the Regional Strategic Transportation System (RSTS). This recommendation was based on a policy decision to only focus funding on the most critical facilities for regional travel.

The RSTS regional systems accommodate the region's most critical trip movements (see Figure 3 below):

- Interstate highways and freeways,
- National Highway System classified facilities and State highways, including intermodal connectors for freight facilities,
- Existing and future regional transit service, and
- Principal arterials, critical minor arterials and other facilities that provide continuous, cross-regional mobility, ensure adequate spacing of major roadways and connect regional activity centers, town centers and freight corridors.

These multimodal facilities and services operate on a regional scale and are essential in meeting mobility and accessibility goals. Major roadway system expansion or transit expansion may reduce congestion and provide additional travel choices as measured at a corridor or regional scale.

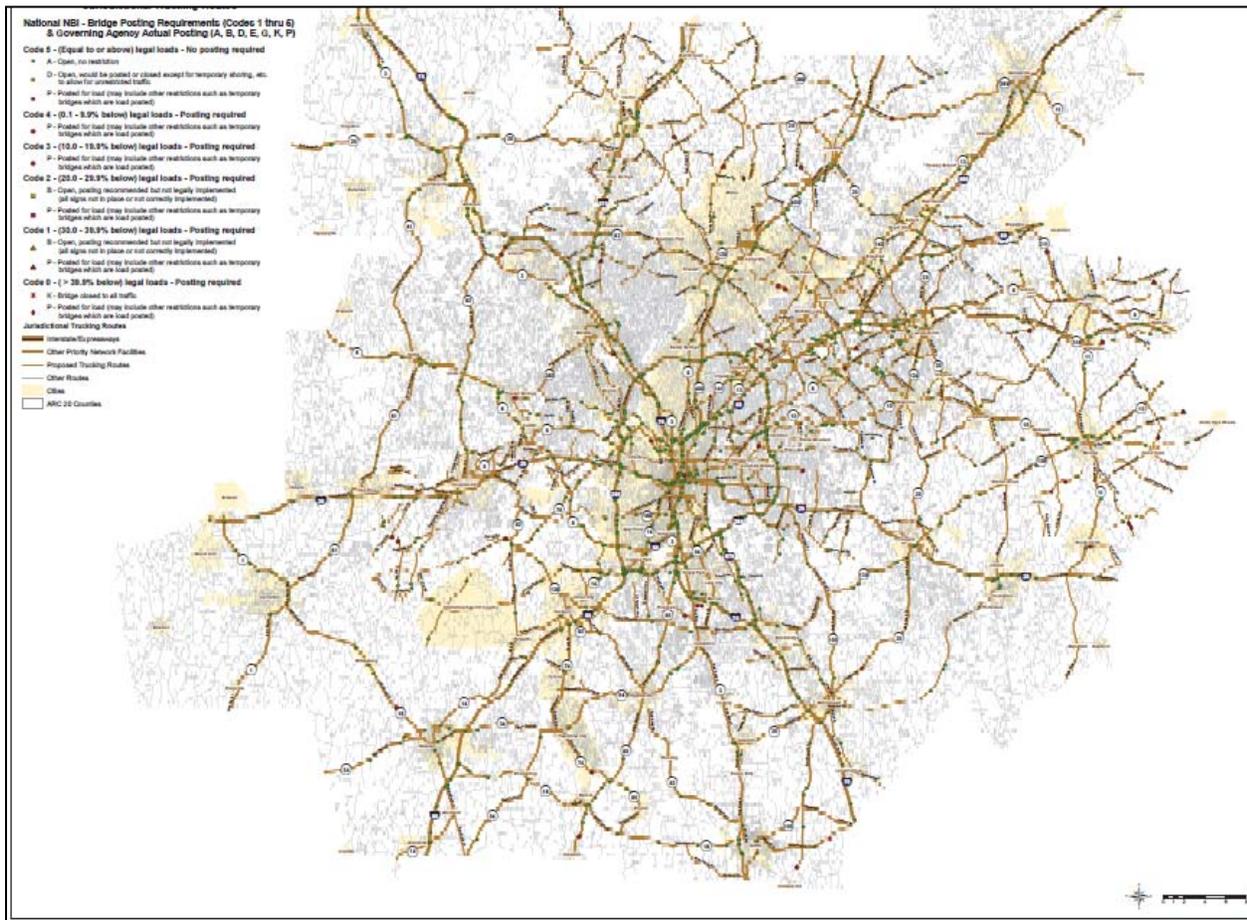
Figure 3: Regional Strategic Transportation System (RSTS)



Source: ARC, 2009

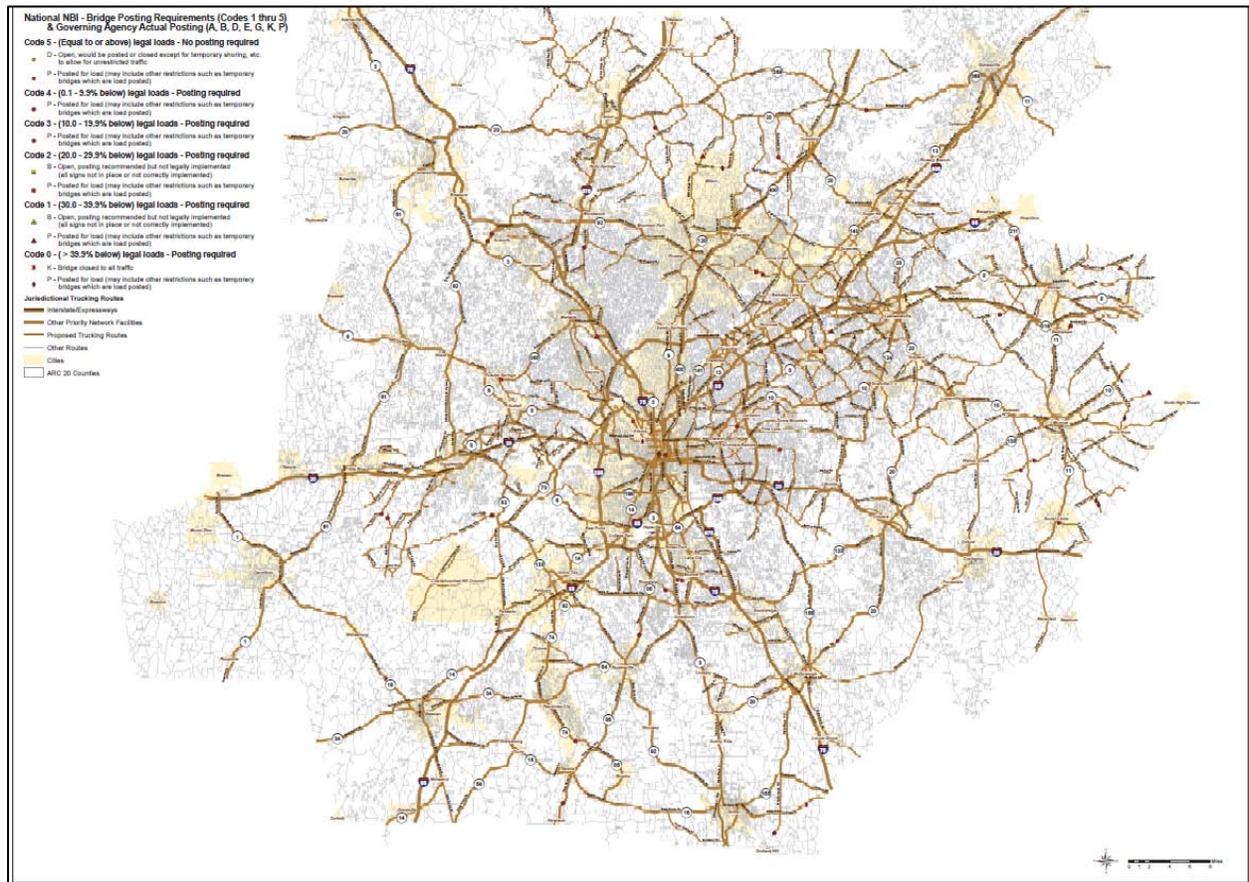
Bridge design and construction reflects the expected traffic needs of the roadway it serves. Posting of a lowered weight restriction is a reflection of safety, ability to fund a replacement, and often public or community considerations. The factors influencing a posted weight could be Annual Average Daily Traffic (AADT) counts, truck AADT percentage, condition rating, bridge design type, and enforcement and inspection frequencies. Thus, a posted weight restriction on a bridge may exclude the route. Long-term considerations could include funding requirements that may not be forthcoming. Figures 4 and 5 show bridges with posted weight restrictions and those facilities that do not have restrictions.

Figure 4: Posted Bridge Weight Restrictions



Source: ARC, 2009 – Regional Truck Route Plan Needs Assessment

Figure 5: Bridges without Weight Restrictions



Source: ARC, 2009 – Regional Truck Route Plan Needs Assessment

Regional Transit Services

The Atlanta Region is currently served by six public transportation providers, which together form the backbone of the regional transit system. The region is also served by smaller private transit providers.

The public providers are MARTA, Cherokee Area Transportation Services (CATS), Cobb Community Transit (CCT), C-Tran (Clayton Transit), Gwinnett County Transit (GCT), and GRTA Xpress (Georgia Regional Transportation Authority). Transfers between MARTA and the remaining providers are seamless thanks to a series of reciprocal fare agreements between the partner agencies. Figure 6 identifies transit providers in the Atlanta region and Figure 7 provides characteristics of each system.

Figure 6: Transit Providers in the Atlanta 18-County MPO Area, 2008

Transit Provider	Year Service Began	Service Type Provided	Web site
MARTA	1972	Local Bus, Express Bus, Rapid Rail, Demand Response	www.itsmarta.com
Cobb Community Transit	1989	Local Bus, Express Bus, Demand Response	http://dot.cobbcountyga.gov/cct.htm
C-TRAN	2001	Local Bus, Demand Response	http://web.co.clayton.ga.us/ctran/index.htm
Gwinnett County Transit	2000	Local Bus, Express Bus, Demand Response	www.gwinnettcounty.com
GRTA Xpress	2004	Express Bus	www.grta.org
Atlantic Station Shuttle	2004	Circulator Shuttle	www.asap-plus.com
The Buc Shuttle	2003	Circulator Shuttle	www.bucride.com
Cherokee Area Transportation System (CATS)	1975	Demand Response, Express Bus*	www.cherokeega.com/cats
Atlanta University Center Shuttle— R.W. Woodruff Library Shuttle Service	1991	Circulator Shuttle	www.auctr.edu/services/shuttle-services-schedule.asp
Emory University Cliff Shuttles	1994	Circulator Shuttle	http://transportation.emory.edu/shuttles.html
Georgia State University Shuttle: Panther Express	1998	Circulator Shuttle	www.gsu.edu/pantherexpress.html
Georgia Tech Shuttles	2003	Circulator Shuttle	www.parking.gatech.edu

Source: ARC, 2009

Figure 7: Selected Characteristics of MPO Area Transit Services, 2008

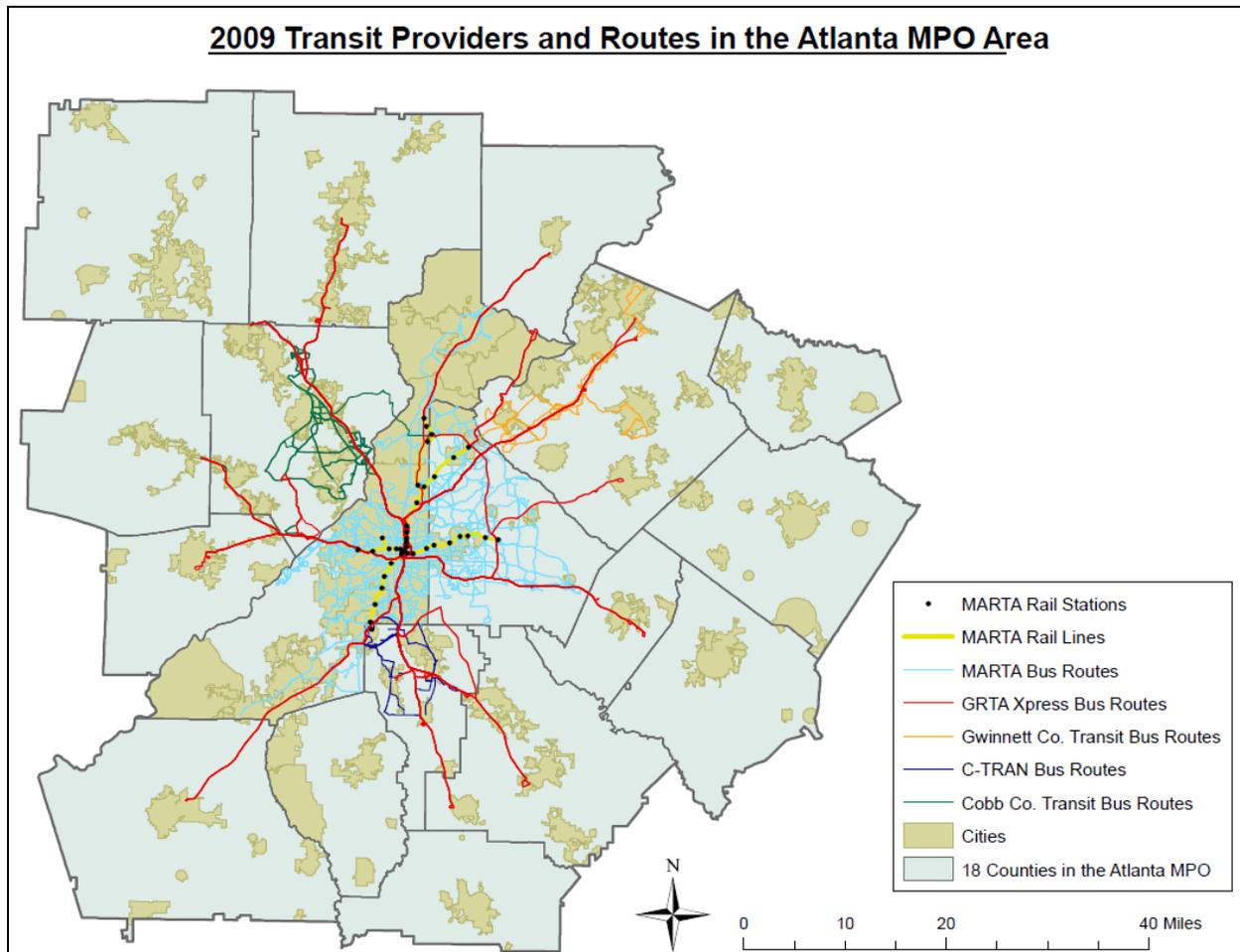
	MARTA	Cobb Community Transit	C-TRAN	Gwinnett County Transit	GRTA Xpress	The Buc Shuttle	Atlantic Station Shuttle	Emory University Cliff Shuttles	Georgia Tech Shuttle Services	AUC Woodruff Library Shuttles	Georgia State University Panther Express
Rail Stations	38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rail Miles	48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bus/Van Routes	134	15	5	14	27	5	1	18	4	5	4
Fleet Size (Rail)	272	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fleet Size (Bus/Van)	624	95	32	90	132	6	9	56	22	4	11
Local One Way Fare	\$1.75	\$1.50	\$1.50	\$2.00	N/A	Free	Free	Free	Free	Free	Free
Express One Way Fare	\$1.75	\$3.00	N/A	\$4.00	\$3.00	N/A	N/A	N/A	N/A	N/A	N/A
Weekly Pass	\$13.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Monthly Local Pass	\$52.50	\$55.00	\$52.50	\$65.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Monthly Express Pass	Monthly local pass includes express routes	\$90.00	No express routes provided	\$150	\$80.00	N/A	N/A	N/A	N/A	N/A	N/A

Source: ARC, 2009

Circulator shuttles are an important component of the regional transit network. They provide access to communities and activity centers that otherwise would be too distant from major transit services. Most of these circulator shuttles are privately owned or affiliated with a higher education organization and are offered at no cost to the rider. Currently the Atlanta region has six of these circulator shuttles including the Atlantic Station shuttle, The Buc, Georgia Tech Shuttles, Emory University's Cliff, the Atlanta University Center/ Woodruff Library shuttle and the Georgia State University shuttle.

Ten years ago, transit in the metro Atlanta region was limited to just three counties: MARTA in Fulton and DeKalb and CCT in Cobb. Today, transit service is more reflective of the region as a whole, with transit service being offered in 12 metro counties (see Figure 8 below). Much of this expansion is through regional express bus programs.

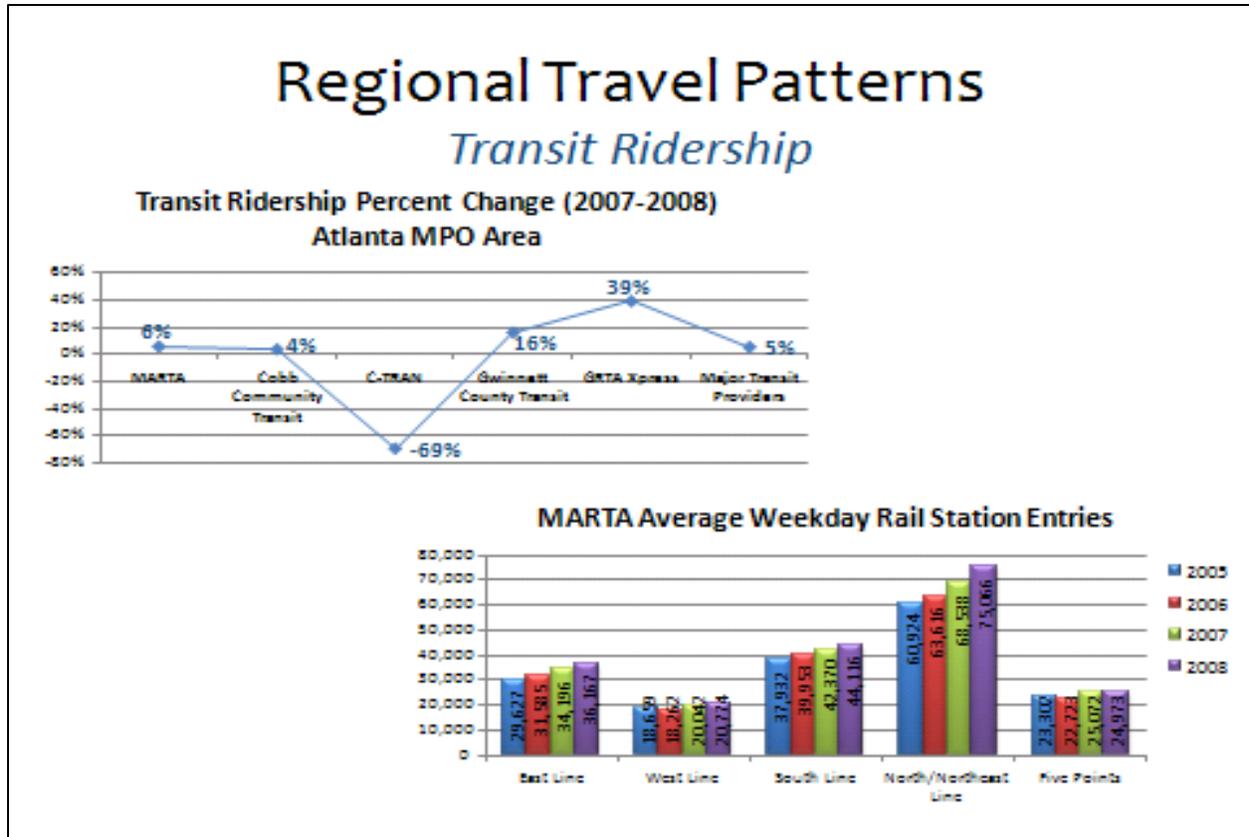
Figure 8: Transit Providers and Routes



Source: ARC, 2009

Figure 9 illustrates the changes in transit ridership between 2007 and 2008. Many transit providers have seen a significant increase in ridership. This figure also includes information regarding MARTA station entries between 2005 and 2008.

Figure 9: Transit Ridership



Source: ARC, 2009

High-Occupancy Vehicle Lanes/Managed Lanes

HOV lanes were introduced to metro Atlanta in 1994, along an 18-mile section of I-20, east of I-75/85. An additional 60 lane miles opened on interstates 75 and 85 in 1996. They are an integral part of the Georgia NavigAtor system, designed to help reduce air pollution, improve traffic congestion and ensure a substantial time savings for commuters who rideshare (two or more occupants per vehicle).

HOV lanes are identified by diamond-shaped pavement markings and overhead signs located on Interstates 20, 75, and 85. They are designated only for vehicles carrying two or more occupants, certified alternative fuel vehicles, motorcycles and emergency vehicles. Figure 10 below displays selected HOV and mainline lane volumes for year 2008.

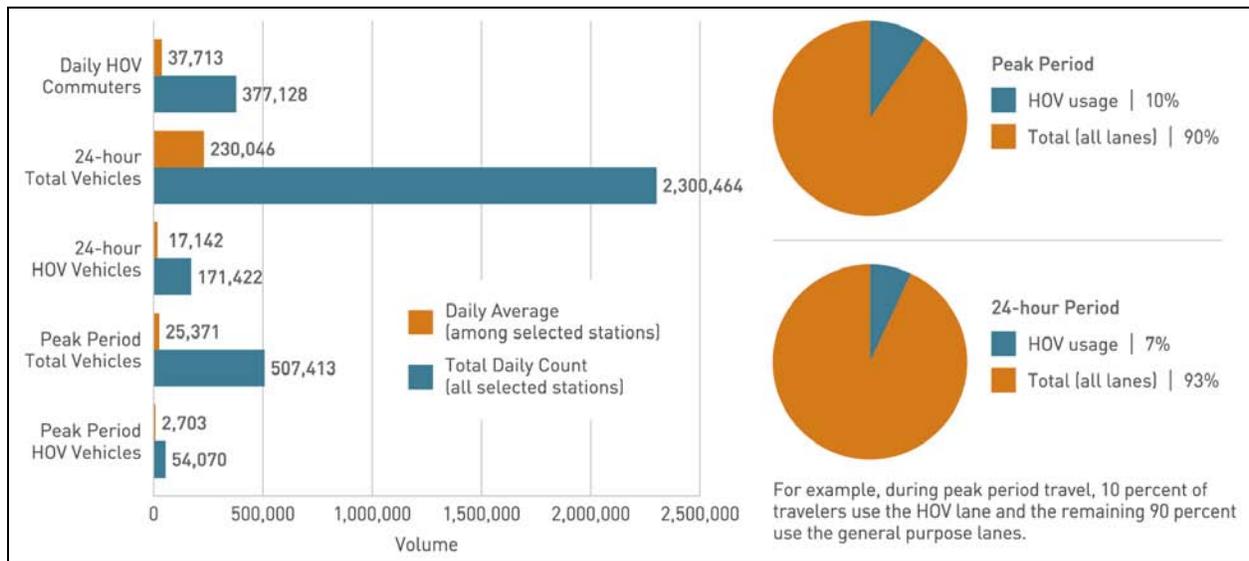
Figure 10: Selected Daily High Occupancy Vehicle (HOV) Lane Volumes, 2008



Source: ARC, 2009

In 2008, the traffic counting station at I-85 and Steve Reynolds Boulevard recorded the largest percentage (15.56) of total peak-period traffic using the HOV lane. In 2008, the traffic counting station at I-85 and Jimmy Carter Boulevard recorded the largest number of average daily HOV commuters (80,565). Ten percent of travelers used HOV lanes during peak traffic period. Seven percent of travelers used HOV lanes during throughout the entire day. Figure 11 below illustrates some of the findings related to HOV use.

Figure 11: HOV & Mainline Lane Volumes, 2008



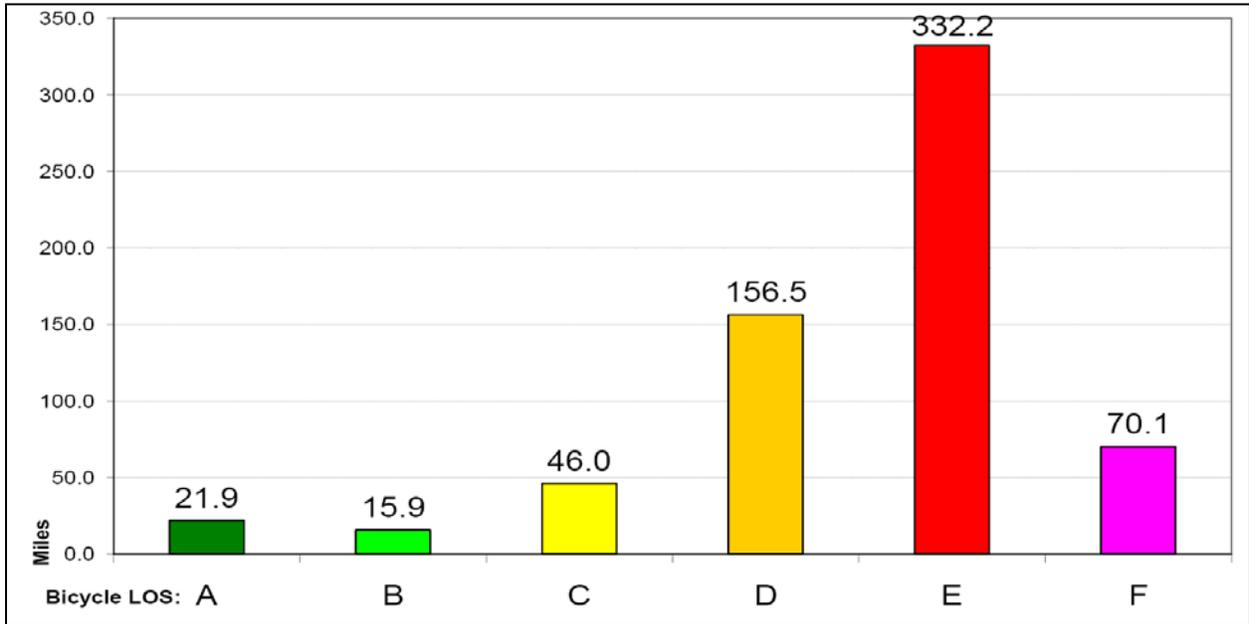
Source: ARC, 2009

Bicycle Facilities

Bicycling as a transportation mode can support transit by expanding its accessibility radius for non-drivers, provide mobility for the very low-income populations, and address air quality and a variety of other regional transportation goals identified within *Envision6 RTP*.

Bicycling accommodation in the Atlanta Region remains at a low level. As illustrated in Figure 12 below, the 2007 Atlanta Region Bicycle Transportation and Pedestrian Walkways Plan indicated that 62.6% of roadways in the bicycle study network have a Bicycle LOS “E” or “F”, yielding an overall Bicycle LOS score of “E.”

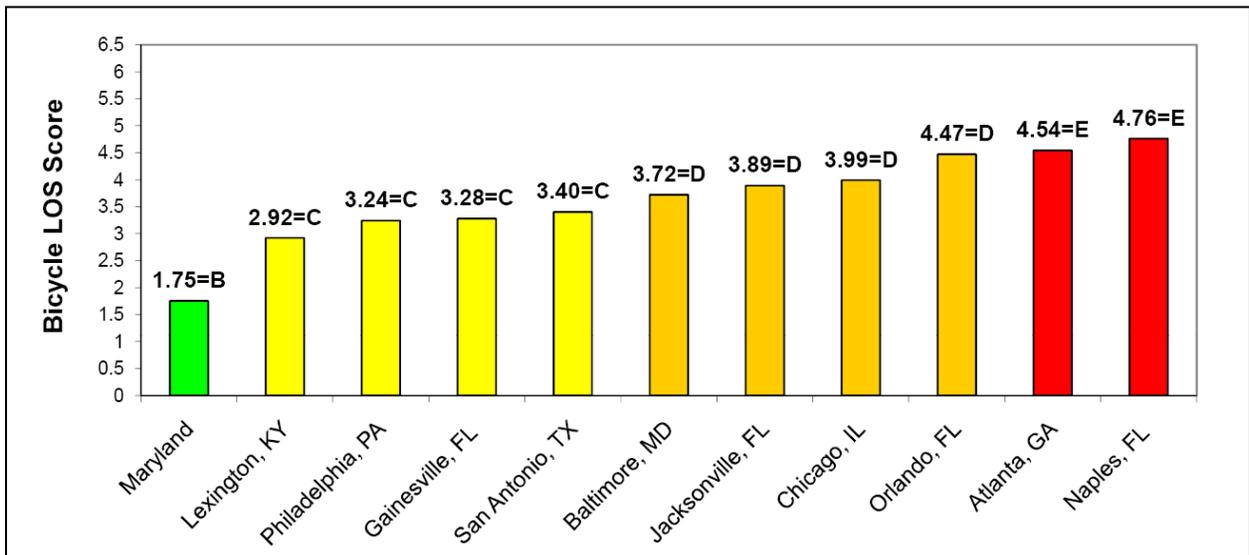
Figure 12: Bicycle LOS for Regionally Strategic Bicycle Network in Metro Atlanta



Source: ARC, 2009

The Bicycle Study network was chosen to represent the regionally strategic bicycle corridors, identified as links along the regionally significant roadways that connect the regional activity nodes, including ARC-defined Livable Centers Initiative study sites, Town Centers, Activity Centers, incorporated cities with populations over 5,000, county seats, and self-designated “Major Activity Centers.” Figure 13 illustrates that the region performs below several other regions when assessing bicycle level of service.

Figure 13: Bicycle LOS for Regionally Strategic Bicycle Network in Metro Atlanta, as Compared with Other Regions

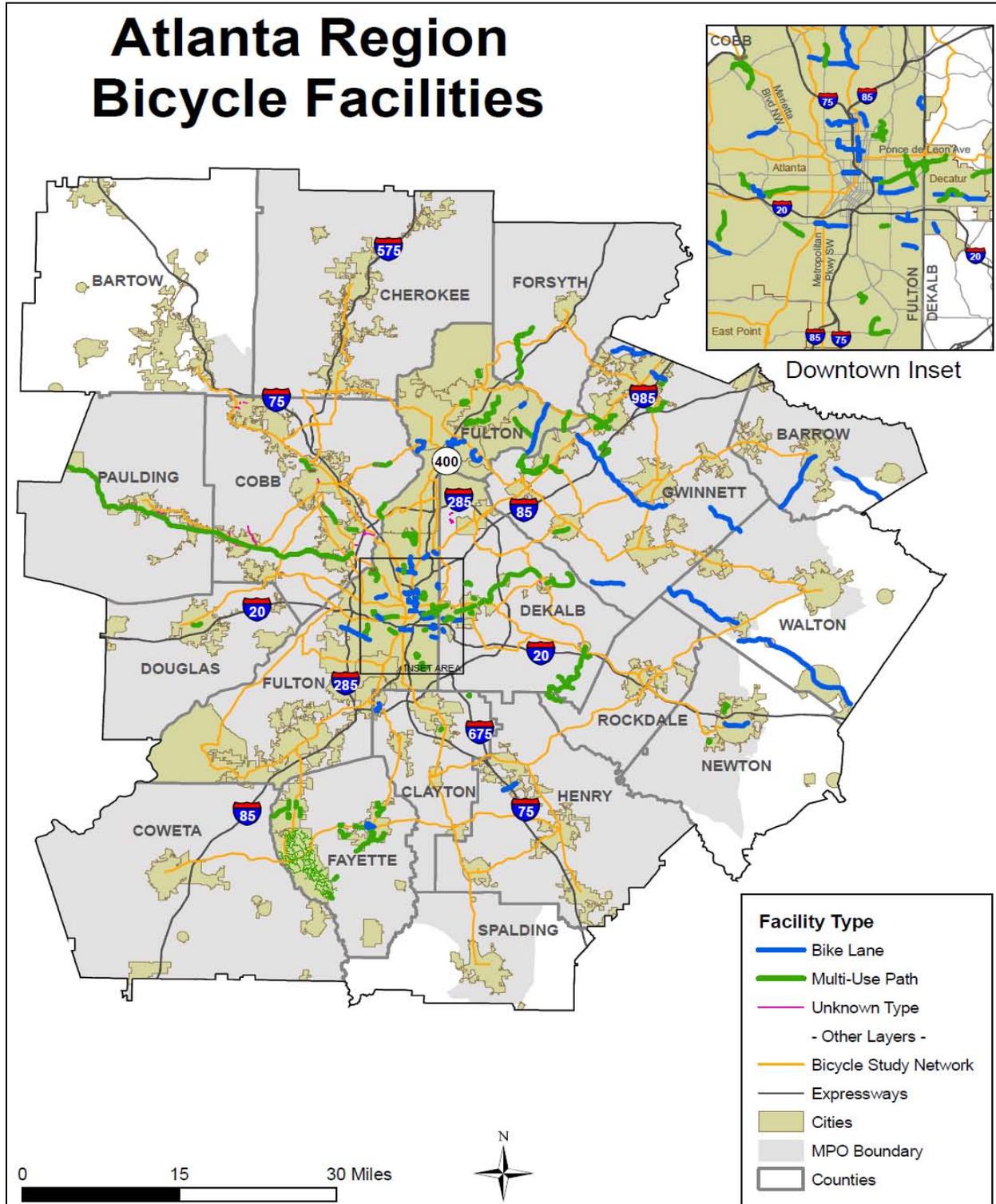


Source: ARC, 2009

The documented existing bicycle facilities in the 18-county Atlanta region include 101 miles of bicycle lanes and 257 miles of multi-use paths. 93 miles, or over a third of the multi-use paths, are composed of golf cart paths in Peachtree City. Those figures are based on Bicycle Facilities Inventory conducted by the Atlanta Regional Commission during the summer of 2008.

The Bicycle Facilities Inventory is shown in Figure 14 on the following page. There are clearly large gaps present in the network of bicycle facilities. The multi-use paths create a nice opportunity for recreation, but typically do not parallel regionally strategic bicycle corridors identified in 2007 Atlanta Region Bicycle Transportation and Pedestrian Walkways Plan.

Figure 14: Bicycle Facilities



Source: ARC, 2009

Park and Ride Lots

The regional express bus programs, vanpools and carpools all benefit from the Park & Ride lots located in the 18-county Atlanta MPO region.

The Georgia Department of Transportation (GDOT) maintains Park & Ride lots that are utilized for vanpools and carpools. GRTA vanpools operate at many Park & Ride lots throughout the region. Park & Ride lots are convenient gathering points for rideshare groups to meet at a common point near their homes. With multiple persons per vehicle, these groups experience a shorter commute time in many cases by being eligible to use HOV lanes. Other ridesharing benefits include gas cost savings, vehicle maintenance and repair savings, as well as reduced emissions and reduced congestion. Figure 15 lists only Park & Ride lots that do not have local transit connections.

Figure 15: Atlanta 18-County MPO Area Park & Ride Usage (Carpool/Vanpool Only), 2008

Georgia Department of Transportation (GDOT)			
Location	County	Spaces	2008 Annual Usage
SR 124 & 211	Barrow	28	149%
State Route 3 between Milepost 25 & Milepost 26	Bartow	20	26%
I-75 at Aviation Blvd	Clayton	579	<1%
I-20 East & Gresham Road Exit 63	DeKalb	403	0%
Hewatt Road, Snellville (Xpress Lot)	Gwinnett	170	68%
I-75 at Jodeco Road near Flippen	Henry	15	222%
I-20 & US 278 — Covington	Newton	107	78%
Faith Baptist Church On SR 101 — Dallas	Paulding	34	22%
SR 61 south of Dallas	Paulding	167	24%
I-20 West & West Avenue Exit 80 — Conyers	Rockdale	58	96%
US 19/41 at Atlanta Road — Griffin	Spalding	141	0%

Source: ARC, 2009

Many Park & Ride lots are used for transit services as well as carpool and vanpool rideshares. Such transit services include GRTA Xpress bus service, Cobb Community Transit (CCT) express bus service and Gwinnett County Transit (GCT) express bus service. MARTA also runs a few express-type bus services that require the use of various Park & Ride lots. These lots also serve as transfer stations between intersecting local routes.

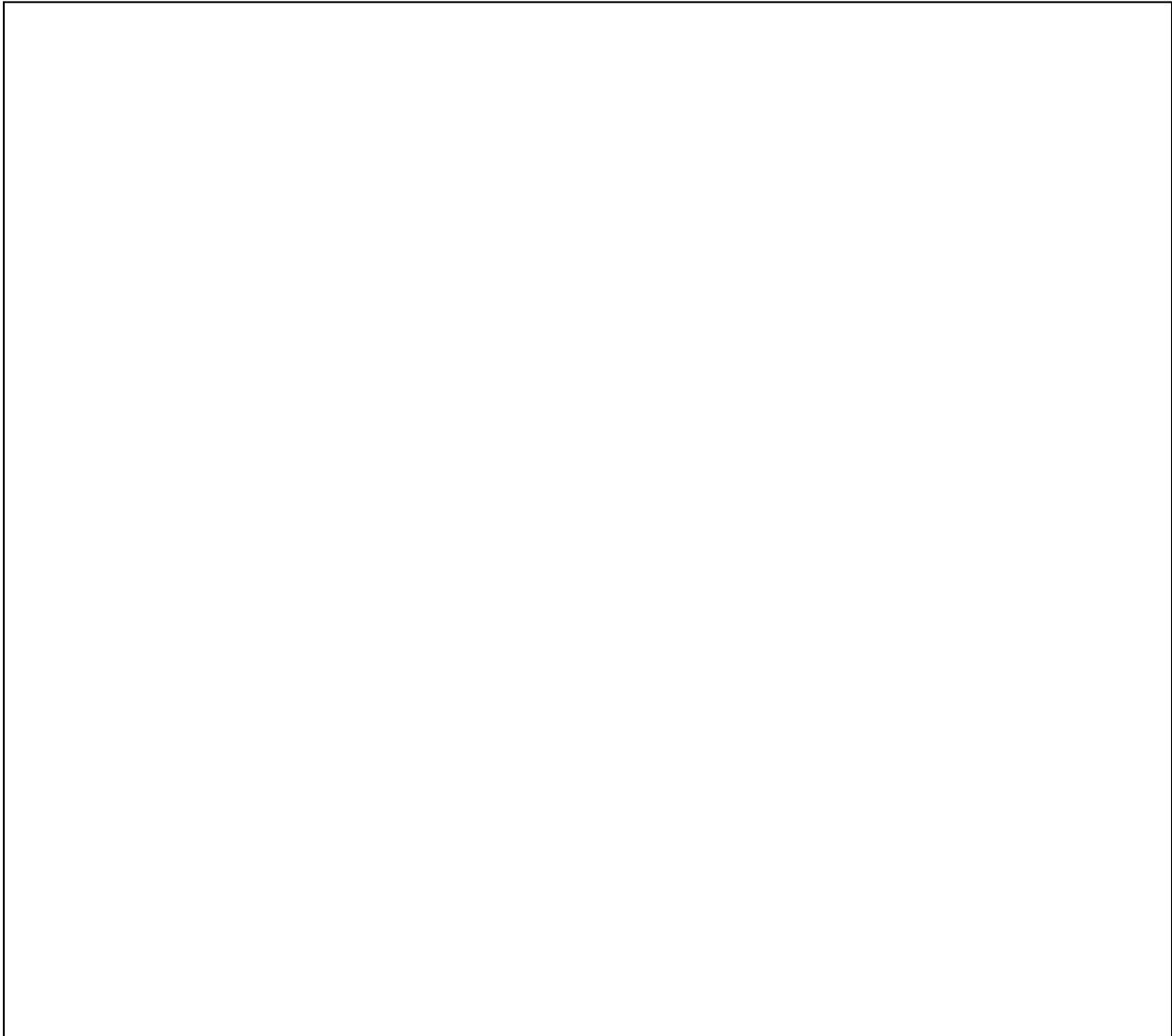
Douglas County Rideshare was established in 1986 and has greatly increased the number of vans used for ridesharing over the years. Due to the demand, the Douglas County Multi-Modal Transportation Center is now also served by GRTA Xpress. Park & Ride lots used for transit are maintained by GDOT or the transit operator. Figures 16 and 17 provide information on Park &

Ride lots with transit connections. In the 18-County MPO area, there are 12,512 parking spaces in all Park & Ride lots. The average occupancy rate for 2008 was 55 percent.

Figure 16: Atlanta 18-County MPO Area Park & Ride Usage (GRTA & MARTA), 2008



Figure 17 - Appendix: Atlanta 18-County MPO Area Park & Ride Usage (Douglas Van Pool, CCT and GCT), 2008



Source: ARC, 2009

MARTA offers Park & Ride lots at selected rail stations (see Figure 18 below). The monthly Park & Ride lot usage is displayed in the table below. MARTA has a usage rate of 67 percent for their offered Park & Ride lots. East Point Station has the highest usage rate at 93 percent. North Springs Station has the highest number of vehicles in its Park & Ride lot each month, with a monthly average of 2,032.

Figure 18: MARTA Rail Station Park & Ride Lot Usage (Number of Parked Cars by Station), 2008



Source: ARC, 2009

Transportation Demand Management (TDM)

ARC's Transportation Demand Management Division (TDM) strives to relieve traffic congestion and improve air quality in the region by helping commuters find simple, reliable alternatives to driving alone. Record-high gas prices, fuel shortages and an increase in local efforts made 2008 one of the banner years for TDM efforts in the Atlanta region. Assistance is provided to those who live or work in the Atlanta MPO area, which includes some commuting from adjacent states.

TDM strategies are organized through the RideSmart program. RideSmart encourages and helps regional commuters find potential carpool, vanpool and bike partners, or transit schedules through the use of customized software.

RideSmart also manages the funding for eleven employer services organizations (ESOs) in the region. These organizations provide comprehensive service for a defined geographic area and additional programs, such as vanpool subsidies, circulator shuttles, information sessions for both employers and employees and promotional events. These organizations work closely with employers to encourage formation of and participation in employer-supported commute options programs that can help with employee retention, and tardiness and absenteeism, as well as parking demand. Figure 19 provides information on ESOs in the Atlanta region.

Figure 19: TDM Employer Service Organizations (ESO), 2008



Source: ARC, 2009

Airports

The Atlanta region has experienced prosperity due to the world's busiest passenger airport, Hartsfield-Jackson Atlanta International Airport (H-JAIA). Direct transit passengers are passengers who continue their journey on a flight having the same flight number as the flight on which they arrived. Passengers in direct transit are counted only once. Other transit passengers and stop-over passengers are counted twice: once as arrivals and once as departures. In 2008, 90,039,280 passengers traveled through H-JAIA, a 0.74 percent increase from the previous year. See Figure 20 below for more details on operations at H-JAIA.

Figure 20: Hartsfield-Jackson Atlanta International Airport Passenger and Operations Activity

	2005	2006	2007	2008	2005-2006 % Change	2006-2007 % Change	2007-2008 % Change
Aircraft Operations							
Domestic	932,968	915,691	925,970	912,251	-1.85%	1.12%	-1.48%
International	47,418	60,756	68,376	66,573	28.13%	12.54%	-2.64%
Total	980,386	976,447	994,346	978,824	-0.40%	1.83%	-1.56%
Passengers							
Domestic	78,774,044	76,264,446	79,796,551	80,416,839	-3.19%	4.63%	0.78%
International	6,734,452	8,073,855	8,897,291	9,180,491	19.89%	10.20%	3.18%
Direct Transit	398,927	508,338	685,445	441,950	27.43%	34.84%	-35.52%
Total	85,907,423	84,846,639	89,379,287	90,039,280	-1.23%	5.34%	0.74%

Source: ARC, 2009

The Atlanta MPO region also contains 20 other public-use regional airports, all importing and exporting goods and passengers. In November 2008, a new 600-acre airport, the Paulding County Regional Airport (PUJ), was opened in the Atlanta Region. The airport, located six miles west of the city of Dallas, is the centerpiece of a 10,000-acre pod system designed to enhance commerce and industry. PUJ is Georgia’s first new jet-capable airport built in more than 30 years.

Also in 2008, Cobb County Airport — McCollum Field underwent a series of upgrades. Improvements to the runway included concrete repaving and widening from 75 feet to the Federal Aviation Administration’s (FAA) standard of 100 feet, as well as installment of high-intensity runway lights.

Figure 21 below provides information on daily takeoffs and landings at airports around the region. Figure 22 that follows indicates locations of airports in the region.

Figure 21: Atlanta 18-County MPO Area Airport Operation Activity (Public Use Airports)

County	Airport	2006	2007	2008	Last Updated (FAA)
Henry	Berry Hill Airport	14	19	N/A	8/2/07
Cherokee	Cherokee County Airport	57	52	52	8/3/07
Henry	Clayton County Airport	96	114	N/A	8/2/07
Cobb	Cobb County Airport	475	N/A	314	6/5/08
Rockdale	Covington Municipal Airport	114	79	N/A	4/6/07
Fulton	Fulton County Airport	346	358	342	5/8/08
Henry	Gordon E. Bellah Airport	N/A	N/A	N/A	-
Spalding	Griffin-Spalding County Airport	55	N/A	34	3/27/08
Gwinnett	Gwinnett County Airport	297	249	N/A	9/4/07
Fulton	Hartsfield-Jackson Atlanta International Airport	2,684	2,669	2,959	2/28/08
Walton	Monroe-Walton County Airport	33	N/A	N/A	1/20/06
Coweta	Newnan-Coweta County Airport	83	82	N/A	7/31/07
Paulding	Paulding County Regional Airport	N/A	N/A	N/A	opened 11/08
Fayette	Peachtree City Airport	144	288	N/A	9/11/07
DeKalb	Peachtree DeKalb Airport	639	554	554	5/19/08
Fayette	Rust Airstrip	2	1	N/A	1/12/00
Barrow	Winder-Barrow Airport Northeast Georgia Regional Airport	183	78	N/A	4/25/07

Source: ARC, 2009

Figure 1: Atlanta MPO Area Airports, 2008



Source: ARC, 2009

Appendix T-3: Congestion Measurement in the Atlanta Region

Understanding the Nature of Congestion

There is no doubt that congestion has been a culprit to hindered productivity, efficiency of accomplishing daily tasks, and loss of time and money. However, congestion can also be seen as an indicator of economic vitality. Every major city in the United States is faced with enduring rising levels of congestion, but they continue to also sustain healthy economies and social attractiveness. There is widespread recognition that congestion levels can and should be reduced in Metro Atlanta. There is also the emerging acknowledgement that not all congestion can be mitigated. Improving mobility while growing the region's economy should be a targeted effort that is balanced, versatile, and comprehensive.

Identifying and reducing congestion is only one of many regional transportation planning objectives. Similar to balancing the competing interests of relieving congestion and growing the economy, congestion relief should also be strategic and targeted. This is why the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: Legacy for Users (SAFETEA-LU) passed by Congress in 2005, requires ARC to oversee the Atlanta region's Congestion Management Process (CMP) for the 18-county MPO area. The CMP identifies congested locations and facilities within a metropolitan area, and is a key tool used in defining and implementing strategies for improving congested locations. The CMP must also monitor the effectiveness of these solutions.

Causes of congestion can be grouped into two different categories: **recurring** and **non-recurring**. Recurring congestion reflects the normal or routine commuting patterns that typically occur during the morning and afternoon rush hours. This type of congestion is often predictable because the travel routes follow a specific pattern in terms of time of day and route selection. Surprisingly, this type of congestion only accounts for roughly half of all the delay that motorists experience.

Non-recurring congestion results from dynamic factors, and is less predictable in nature. Non-recurring conditions are often caused by poorly operated roadways, crashes and other roadway incidents, bad weather, special events, roadway construction, and other events that do not recur at the same location on a regular basis. It is very difficult, if not impossible, to forecast these events, and how they will contribute towards congestion delay. However, non-recurring congestion can be mitigated through intense operational management conducted by the Georgia Department of Transportation or other jurisdictions responsible for maintaining the facility (i.e., county or municipal transportation or public works department).

Typically, regional congestion evaluation has primarily focused on the causes and solutions to recurring congestion, because it is easier to measure and predict, and the analysis often boils down to determining whether a roadway contains enough capacity or not. Rarely is there a

regional analysis assesses if traffic signals are adequately timed, if there is a high occurrence of crashes, or if incident clearance times are too long. These operational conditions are not directly related to capacity. A road can be widened ten times over, but that improvement alone could never prevent the chances of an over-turned vehicle from completely stopping traffic in one direction for two hours, or overcome the bottleneck at an intersection where there are competing traffic flows. In order to be affirmative and diligent with incorporating operational factors into the regional planning process, ARC initiated the ***Strategic Regional Thoroughfare Plan*** in early-2010 to help incorporate all of these other factors in order to begin addressing the “other half” of congestion more effectively.

Figure 1 on the following page provides details on two types of congestion.

Figure 1: Two Types of Congestion that Require Different Strategies

The Two “Flavors” of Congestion

Why the distinction? The types of projects most effective and appropriate at mitigating one type of congestion may not be appropriate for the other.

- 1 **POINT TO POINT** | Impedes the efficient movement of large numbers of people between major origins and destinations



- 2 **ACTIVITY CENTER*** | Impedes the efficient movement of individuals and small groups of people between specific origins and destinations within close proximity to each other



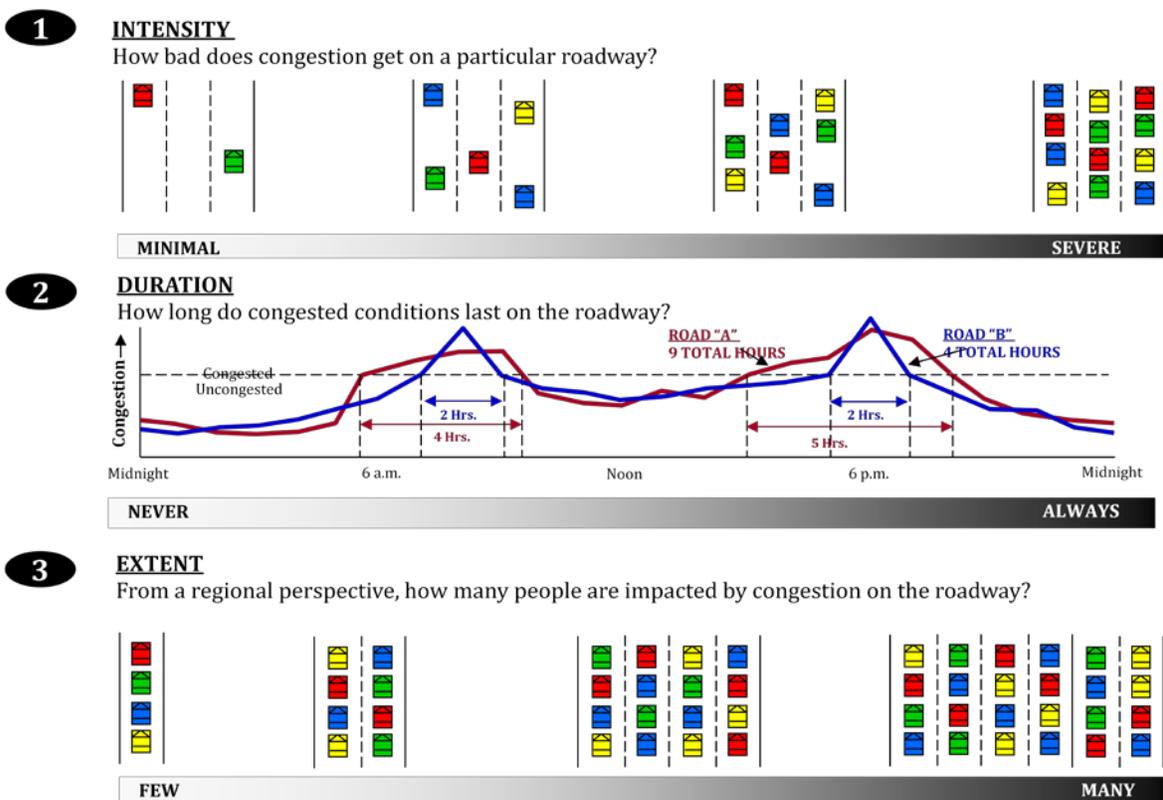
* The foundation for measuring and understanding activity center congestion was established during the 2005–2006 effort. Collecting the necessary data, quantifying congestion levels and identifying appropriate mitigation strategies will be a key element of the 2006–2007 CMP update.

For purposes of identifying the general needs of the region, a congestion location analysis will help provide some initial answers as to where capacity deficiencies are located. The following graphics illustrate two primary ways to evaluate roadway capacity at the regional scale. Both of these approaches help the region become strategic in prioritizing where congestion relief should occur and be most effective.

ARC defines congestion as occurring when the actual demand or volume reaches or exceeds what a roadway or transit facility can handle. ARC uses three variables to quantify congestion. Figure 2 below displays graphic representations of these three variables.

- Intensity — assesses how much delay is experienced by the average commuter.
- Duration — Measures how many hours during the day a facility experiences congestion.
- Extent — identifies the number of people impacted by congestion.

Figure 2: Three Congestion Variables



Most people are unfamiliar with the aforementioned approaches for identifying and ranking roadway congestion. Nonetheless, motorists experience congestion in each of these three dimensions. Below is a **hypothetical example** to help explain these concepts.

Motorist A's Experience

1. **Intensity:** Motorist A might expect her weekday morning trip from Buckhead-Atlanta to Hartsfield-Jackson Atlanta International Airport to take twice as long as it should take during off-peak hours.
2. **Duration:** She might also expect that the conditions that are causing trips along this route to take twice as long as they would if they were taken during off-peak hours would last from 6:45 a.m. to 9:00 a.m.
3. **Extent:** The number of other vehicles also experiencing the same delay as Motorist A, while traveling the same route to the airport that morning is approximately 10,000.

Motorist B's Experience

1. **Intensity:** Motorist B's journey from Newnan to Hartsfield-Jackson Atlanta International Airport is *three times* longer than it would be if it had occurred during an off-peak setting like Saturday at 7:00 p.m.
2. **Duration:** Likewise, Motorist B's route only experiences that level of congestion from 7:30 a.m. to 8:30 a.m.
3. **Extent:** The number of vehicles traveling on Motorist B's route to the airport from 7:30-8:30 is 500.

A comparison between Motorist A and B's experiences shows that the "**Intensity**" that Motorist B endures is higher than Motorist A's. However, the route taken by Motorist A sustains a longer period of congestion ("**Duration**") than Motorist B's. Furthermore, there are twenty times more vehicles delayed ("**Extent**") from Buckhead to the Airport (10,000) as there are from Newnan (500). So the question is whose route should be considered more congested considering all three dimensions equally? This is the challenge in ranking the region's most congested roadways.

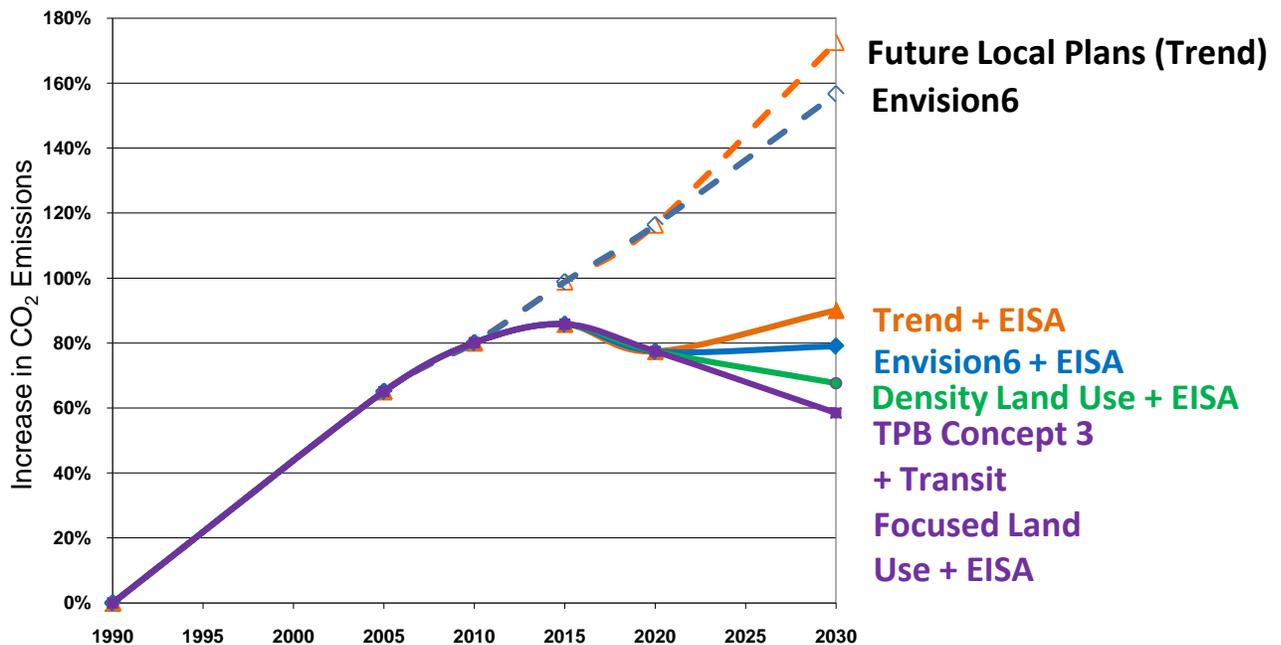
Appendix T-4: CO2 Emissions; Urban Heat Island and Relationship Between Fuel Costs and Travel

Estimating Future CO₂ Emissions

In an effort to better understand scenarios for future CO₂ emission ARC has assessed several packages of strategies including different land use patterns as well as the recent updated CAFE standard for fuel economy, called out in the Energy Independence and Security Act (EISA). These scenarios were analyzed to assess the impact of differing strategies on CO₂ emissions and compared to 1990 conditions. This information is presented in the context of the Regional Assessment to communicate the challenges ahead in addressing likely federal climate change legislation. The following scenarios were analyzed (results are shown in Figure 1 below):

1. Compilation of future local land use plans versus expected growth in the *Envision6* RTP
2. EISA mpg standard versus the current Atlanta mpg trend
3. Comparison of Future Local Plans, *Envision6*, Future Local Plans with EISA, and *Envision6* with EISA
4. *Envision6* versus Density Land Use
5. TPB Concept 3 plus transit/density focused land use. This scenario provided the biggest reduction in emissions, roughly 7% below 2005 levels.

Figure 1: CO₂ Emissions Comparison under Varying Growth and Technology Scenarios



Source: ARC, 2009

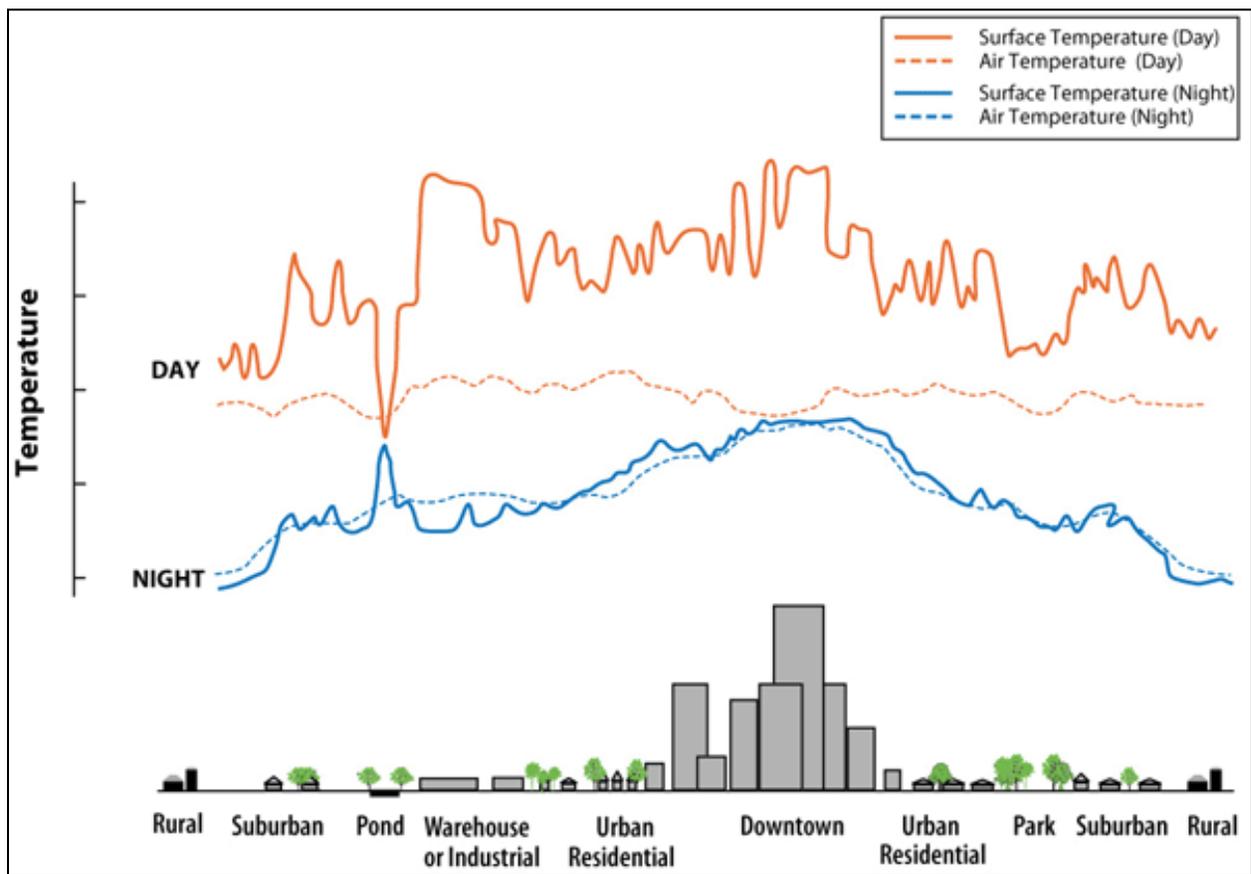
Regional land use policies focusing on significant expansion to the regional transit system results in the greatest benefit. However, these improvements result due to a significant cost and likely will take the longest to implement.

Regional Heat Islands Impacts on Air Quality

Atlanta's growth has affected the natural landscape. Roads, buildings, and other impervious surfaces have replaced open land and vegetation. These changes cause urban regions to become warmer than their rural surroundings, forming an "island" of higher temperatures in the landscape.

Heat islands are metropolitan areas that are hotter than nearby rural areas. The annual mean air temperature of a city with 1 million people or more can be 1.8–5.4°F (1–3°C) warmer than its surroundings. In the evening, the difference can be as high as 22°F (12°C). Heat islands can affect communities by increasing summertime peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness and mortality, and water quality (US Environmental Protection Agency, 2009). As shown in Figure 2 heat island effect has an influence on the development of Ozone and its precursors.

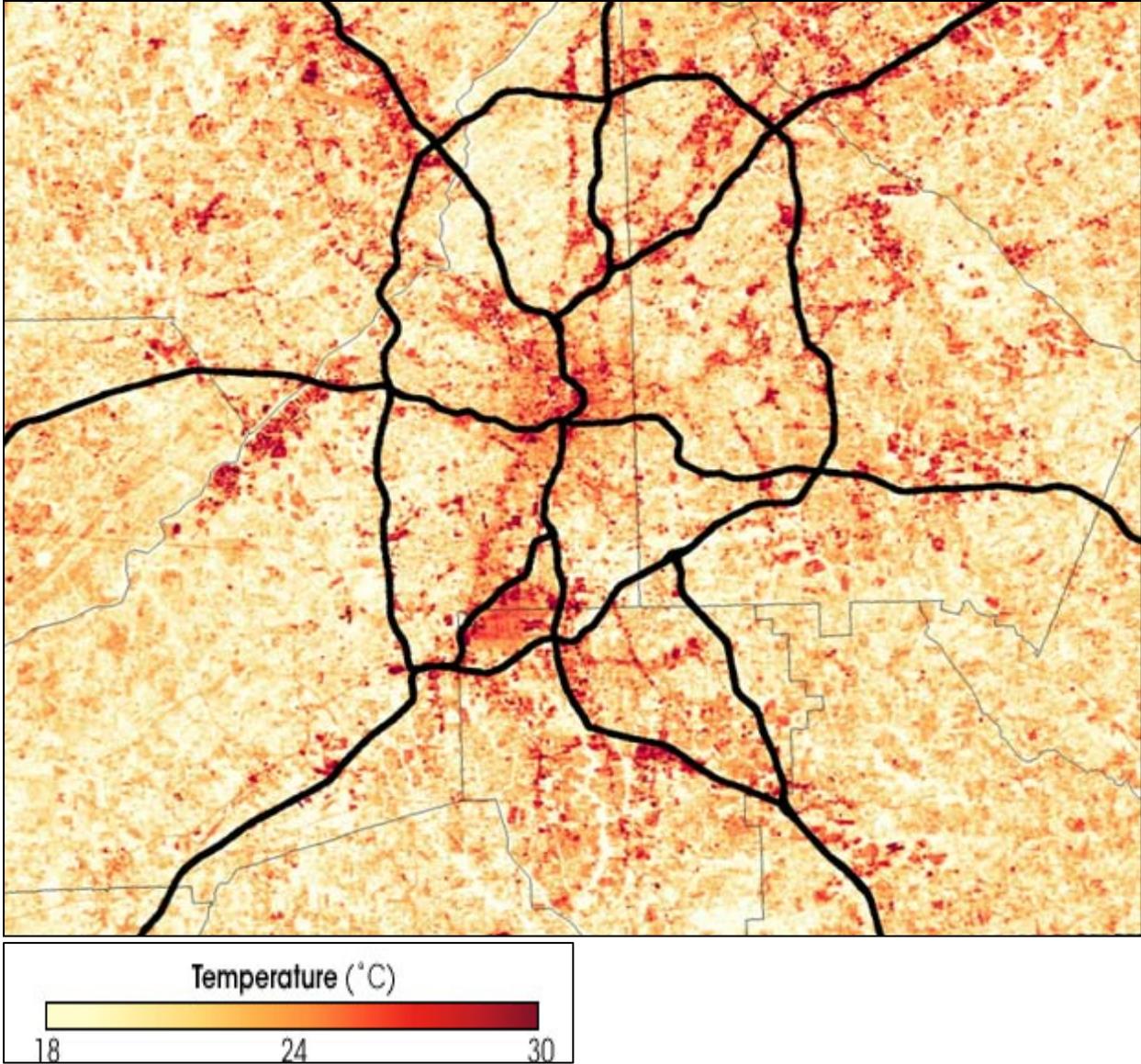
Figure 2: Variations of Surface and Atmospheric Temperatures



Source: ARC, 2009

Transportation and land use decisions have an impact on local surface temperatures. Figure 3 below demonstrates the degree to which major activity centers and transportation routes are warmer than other areas in the region.

Figure 3: Thermal Image of Surface Urban Heat Islands in the Atlanta Region



Source: ARC, 2009

Relationship between Motor Fuel Costs and Vehicular Travel

Understanding the relationship between regional vehicular travel and motor fuel costs is important in the context of the assessing the long-term issues facing travel in the Atlanta region. As future energy prices are expected to continue to be volatile, it is likely that the recent cost swings in gasoline prices may impact the types of travel options that are demanded.

The figure below illustrates the gas price fluctuations from 2006 to present, comparing the overall USA average to the Atlanta average. Typically, VMT trends dissociate with fluctuations in gas prices. As Figure 4 shows gas prices increase, VMT typically decreases.

Figure 4: 36-month Average Retail Gas/Crude Oil Price

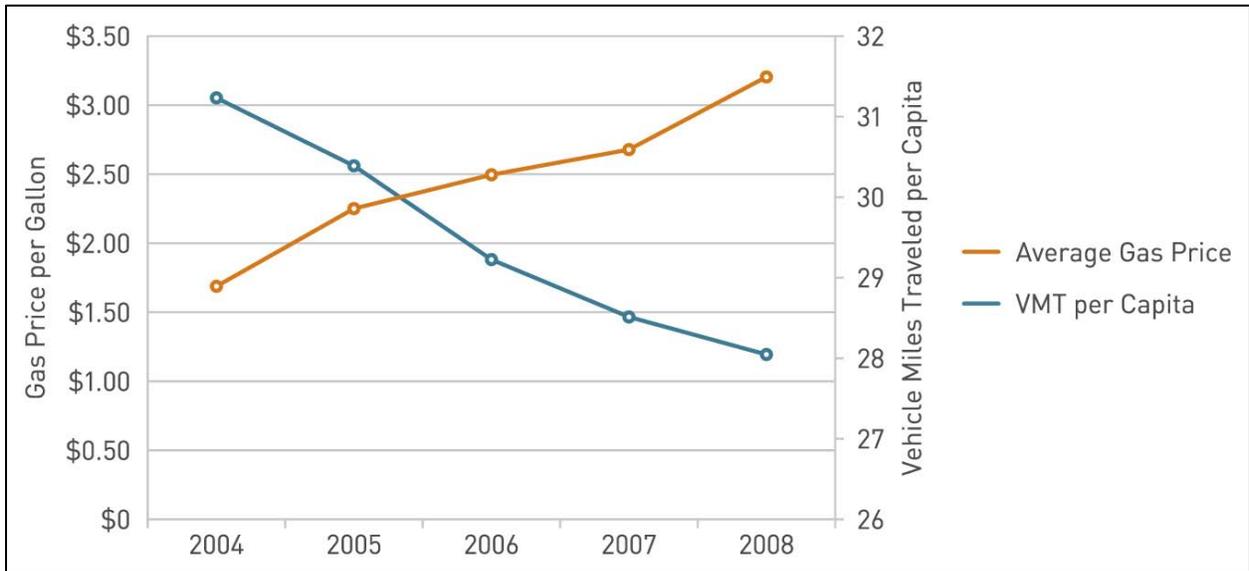


Source: GasBuddy.com

While the previous graph displays gas price per gallon fluctuations per month, VMT data is not available per month. Figures 5 and 6 below compare VMT per capita trends by year to the yearly trends of average gas price per gallon and transit ridership.

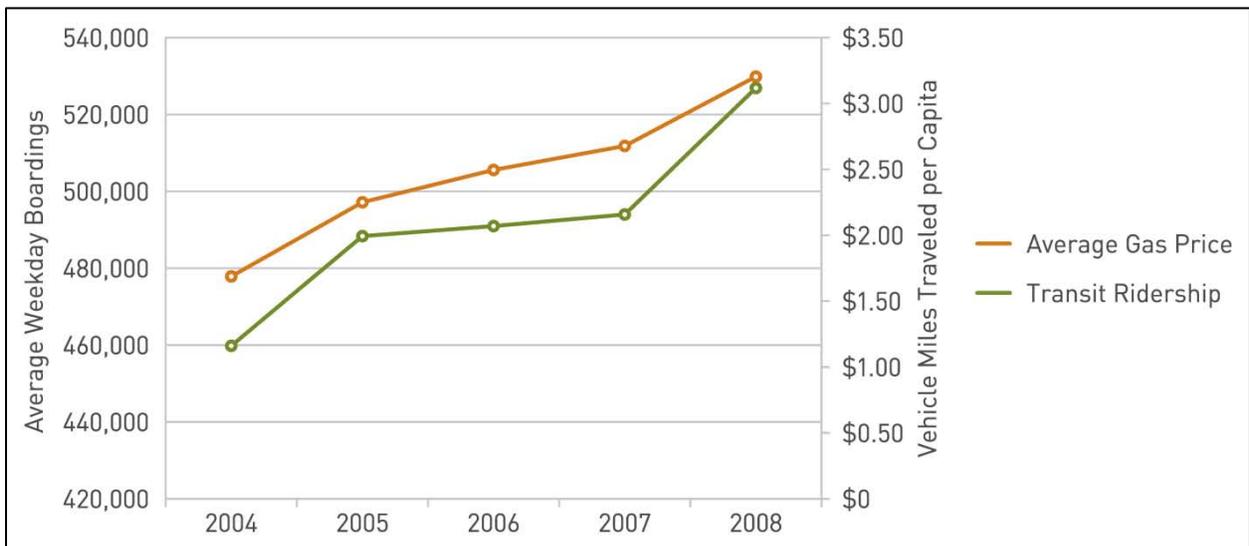
- As gas price per gallon increases, VMT per capita decreases.
- As gas price per gallon increases, transit ridership increases.
- Therefore, as gas price per gallon increases and more people find less costly commuting options, such as transit, VMT per capita decreases.

Figure 5: VMT per Capita vs. Average Gas Price



Source: GasBuddy.com; GDOT 445 Series Report; U.S. Census Bureau Population Division

Figure 6: Transit Ridership vs. Average Gas Price



Source: GasBuddy.com; Regional Major Transit Providers

Appendix: Community Facilities

Water Supply and Conservation

Water supply service and management throughout the Metro Water District is provided by over 50 individual water providers. Water management includes supply, treatment, distribution, interconnections, and the interaction of these infrastructure systems with the natural systems. The structure of these local water providers differs across the Metro Water District; however, the majority are city or county-operated water and/or wastewater providers. A few third-party providers exist that provide water for a conglomerate of entities.

The Metro Water District currently has 38 existing publicly-owned surface water treatment plants, ranging in permitted capacity of less than 1 MGD to 150 PD-MGD (peak day - million gallons per day), providing a combined permitted treatment capacity of 1,136 PD-MGD. The permitted treatment capacity of 1,136 PD-MGD or 710 AAD-MGD treats water from the 882 AAD-MGD of permitted surface water withdrawals. Approximately 600 AAD-MGD (average annual day-million gallons per day) of potable water is currently withdrawn and provided to customers within the Metro Water District by publicly owned water providers through a series of raw water supplies and treatment facilities.

For more information on Water Supply and Conservation Issues please see the Water Resource Plans developed and adopted by the Metropolitan North Georgia Water Planning District (www.northgeorgiawater.com).

Existing Municipal Permitted Surface Water Supplies (2006)

Chattahoochee River Basin (Total Permitted Monthly Average Withdrawal = 767.85 MGD)

Chattahoochee River

Lake Lanier

Bear Creek Reservoir

Dog River Reservoir

Big Creek

Sweetwater Creek (fills Ben Hill Reservoir)

Cedar Creek Reservoirs

Cedar Creek (B.T. Brown) Reservoir

J.T. Haynes Reservoir

Sandy Brown Creek

Existing Municipal Permitted Surface Water Supplies (2006)

Coosa River Basin (Total Permitted Monthly Average Withdrawal = 147.85 MGD)

Etowah River

Yellow Creek Reservoir (Hollis Q. Lathem/Etowah River)

Allatoona Lake

Lewis Spring

Bolivar Springs

Moss Springs

Hickory Log Creek Reservoir

Existing Municipal Permitted Surface Water Supplies (2006)

Flint River Basin (Total Permitted Monthly Average Withdrawal = 52.98 MGD)

Flint River
J.W. Smith and Shoal Creek Reservoirs
White Oak Creek
Line Creek
Hutchins' Lake
Whitewater Creek
Lake Kedron
Lake Peachtree (Flat Creek)
Lake Horton
Whitewater Creek
Lake McIntosh
Still Branch Creek Reservoir

Existing Municipal Permitted Surface Water Supplies (2006)

Ocmulgee River Basin (Total Permitted Monthly Average Withdrawal = 85.8 MGD)

W.J Hooper Reservoir (Little Cotton Indian Creek)
Blalock Reservoir/Pates Creek
John Fargason (Walnut Creek) Reservoir
Rowland (Long Branch) Reservoir
Towaliga River Reservoirs (Strickland and Cole)
Tusahaw Creek Reservoir
Big Haynes Creek (Randy Poynter Lake)
Brown Branch

Existing Municipal Permitted Surface Water Supplies (2006)

Oconee River Basin (Total Permitted Monthly Average Withdrawal = 2 MGD)

Cedar Creek Reservoir
North Oconee River (fills Cedar Creek Reservoir)

Existing Municipal Permitted Surface Water Supplies (2006)

Tallapoosa River Basin (Total Permitted Monthly Average Withdrawal = 1.5 MGD)

Lake Fashion
Cowan Lake

Figure 1 shows that in 2035, the Metro Water District’s water demands will approach 1,011 AAD-MGD (1,159 without conservation measures) with aggressive water conservation. Water demand forecasts for the Metro Water District were based on three main data inputs: 1) billing and production data, 2) population and employment forecasts, and 3) estimates of the current stock of plumbing fixtures and appliances for each county. The current permitted surface water supply is 882 AAD-MGD, therefore to meet the projected future water supply needs in the Metro Water District through 2035, additional water supply sources will be needed. The District anticipates 1,140 AAD-MGD of permitted water supply in 2035. Specific water supply sources are detailed in Figure 2 that begins on the following page.

Figure 1: Metro Water District 2035 Water Use Forecasts by County

County	Without Conservation (AAD-MGD)	Baseline (AAD-MGD)	Recommended Conservation Program (AAD-MGD)
Bartow	55.4	52.8	46.4
Cherokee	50.5	47.8	44.6
Clayton	45.0	42.7	40.0
Cobb	121.0	115.3	108.7
Coweta	33.5	31.9	29.3
DeKalb	123.4	116.0	106.4
Douglas	29.7	27.5	24.5
Fayette	26.0	24.3	23.0
Forsyth	69.5	66.9	59.7
Fulton	263.2	250.0	228.2
Gwinnett	161.5	153.6	140.4
Hall	57.3	54.3	52.0
Henry	49.2	46.9	43.4
Paulding	52.0	49.2	47.2
Rockdale	22.0	20.2	16.9
District Total	1159.2	1099.4	1010.8

Source: MNGWPD Water Supply and Conservation Management Plan (May 2009)

Figure 2: Surface Water Supply Sources Through 2035

Water Supply Source	Owner/Operator Utilizing Source	2035 Planned Permitted Monthly Average Withdrawal (MGD) [Note 10]
<i>Chattahoochee River Basin</i>		
1 Lake Lanier	City of Cumming	27
	Forsyth County Water Resources	51
	Gwinnett County DWR	169
	City of Buford	3.22
	City of Gainesville Public Utilities	53
2 Chattahoochee River	Cobb County-Marietta Water Authority	87
	DeKalb County Watershed Management	140
	City of Atlanta Watershed Management	180
	Atlanta - Fulton County Water Resources	116
	Forsyth County / City of Cumming	(Note 1)
3 Glades Reservoir (Flat Creek)	Hall County	TBD
4 Big Creek	City of Roswell	3.75
5 Sweetwater Creek	City of East Point	11.5
6 Bear Creek (Douglas County)	Douglasville-Douglas County Water and Sewer Authority	(Note 2)
7 Dog River	Douglasville-Douglas County Water and Sewer Authority	23
8 Bear Creek (Fulton County)	TBD	11
9 Cedar Creek (Fulton County)	City of Palmetto	0.45
10 Cedar Creek (BT Brown) Reservoir (Coweta County)	Coweta County Water and Sewerage Authority	7.5
11 Sandy Brown Creek and J.T. Haynes Reservoir	Newnan Utilities	15.8
12 Chattahoochee Basin Options	Coweta County	8
Chattahoochee River Basin Total		907.22
<i>Coosa River Basin</i>		
13 Etowah River	City of Canton	13.5
	City of Cartersville	(Note 3)

Water Supply Source	Owner/Operator Utilizing Source	2035 Planned Permitted Monthly Average Withdrawal (MGD) [Note 10]
14 Etowah Watershed Reservoir (Note 4)	Fulton County	15
15 Etowah River / Yellow Creek (Lathem Reservoir)	Cherokee County Water and Sewerage Authority	39.8
16 Etowah River / Hickory Log Creek	Cobb County-Marietta Water Authority	(Note 5)
	City of Canton	
17 Allatoona Lake	Cobb County-Marietta Water Authority	106.5
	City of Cartersville	52.5
18 Etowah River / Richland Creek	Paulding County	30
19 Lewis Spring	City of Adairsville	4.5
20 Moss Springs	City of Emerson	0.5
21 Bolivar Springs	Bartow County	0.8
22 Bannister Creek	Forsyth County	TBD (Note 1)
23 Etowah Watershed Reservoir	Forsyth County	
Coosa River Basin Total		263.1
Flint River Basin		
24 Flint River	Clayton County Water Authority	(Note 6)
	Fayette County Water System	(Note 7)
25 J.W. Smith and Shoal Creek Reservoirs	Clayton County Water Authority	19.8 (Note 8)
26 Whitewater Creek	City of Fayetteville	3
	Fayette County Water System (Note 6)	31
27 Lake Kedron / Lake Peachtree (Flat Creek)	Fayette County Water System	
28 Lake Horton (Horton Creek)	Fayette County Water System	
29 Lake McIntosh (Line Creek)	Fayette County Water System	
30 Line Creek	Newnan Utilities	(Note 9)
31 White Oak Creek	Newnan Utilities	
32 Hutchins' Lake (Keg Creek)	City of Senoia	0.45
33 Still Branch Creek	City of Griffin (to Coweta County)	7.5
Flint River Basin Total		61.75

Water Supply Source	Owner/Operator Utilizing Source	2035 Planned Permitted Monthly Average Withdrawal (MGD) [Note 10]
Ocmulgee River Basin		
34 W.J. Hooper Reservoir (Little Cotton Indian Creek)	Clayton County Water Authority	39.5 (Note 8)
35 Blalock Reservoir (Pates Creek)	Clayton County Water Authority	
36 Fargason (Walnut Creek) Reservoir	City of McDonough	2.4
37 Towaliga River Reservoirs (Strickland and Cole)	Henry County Water and Sewerage Authority	21.75
38 Gardner (Indian Creek) Reservoir	Henry County Water and Sewerage Authority	
39 Rowland (Long Branch) Reservoir	Henry County Water and Sewerage Authority	
40 Ocmulgee Reservoir	Henry County Water and Sewerage Authority	39
41 Tussahaw Creek Reservoir	Henry County Water and Sewerage Authority	
42 Brown Branch	City of Locust Grove	0.34
43 Big Haynes Creek	Rockdale County	22.1
Ocmulgee River Basin Total		125.09
Oconee River Basin		
44 North Oconee River / Cedar Creek	City of Gainesville Public Utilities	9
Tallapoosa River Basin		
45 Little Tallapoosa River (Lake Fashion / Cowan Lake)	City of Villa Rica	2.25
Totals		
Metro Water District Total	Monthly Average	1,368.41
	Annual Average	1,140.34

Notes:

1. Alternate intake if additional supplies are unavailable from Lake Lanier
2. The Bear Creek Reservoir serves as a supplemental supply to the Dog River Reservoir.
3. Cartersville's permit for Etowah River is included within it's Allatoona Lake permit.
4. The specific location of the reservoir has not been identified, but is likely to be near the Fulton County service area.
5. Water released to Etowah River—included in Canton / Cobb County Marietta Water Authority withdrawals
6. Water pumped to fill Shoal Creek reservoir
7. Water pumped to fill Lake Horton reservoir
8. Clayton County Water Authority will increase capacity at one of its three facilities to 79 PD-MGD (59.3 MGD on a monthly average basis) by 2035. This table shows capacities evenly split.
9. White Oak Creek and Line Creek withdrawals fill JT Haynes Reservoir.
10. Annual average day equals monthly average divided by 1.2.

Source: MNGWPD Water Supply and Water Conservation Management Plan (May 2009)

In addition to the existing reservoirs, there are three reservoirs planned for the Metro Water District in the near future that require 404 permits. These planned reservoirs are far enough along in the permitting process that State and Federal permits are being sought for these projects. Three additional reservoirs are in early planning stages but anticipated to be constructed in the next 25 years. Figure 3 includes all six planned reservoirs.

Figure 3: Planned Reservoirs

Reservoir (Note 1)	Owner/Operator Utilizing Resource	Basin	Estimated Size and Yield
Glades Reservoir	Hall County	Chattahoochee	The 733-acre reservoir with an estimated yield of 6.4 MGD will release water to Lake Lanier. Currently in the permitting process.
Bear Creek Reservoir	Proposed South Fulton Water Authority (Note 2)	Chattahoochee	Impoundment on Bear Creek, a tributary of the Chattahoochee River. The permitting process has been initiated with an estimated yield of 15 MGD.
Richland Creek Reservoir	Paulding County	Coosa	A 305-acre reservoir with an estimated yield of 35 MGD is in the permitting process on Richland Creek.
Etowah Reservoir	Fulton County	Coosa	A reservoir is being considered by Fulton County with a proposed 30 MGD yield.
Ocmulgee Reservoir	Henry County Water and Sewer Authority	Ocmulgee	A new reservoir is being considered in the Ocmulgee basin with a proposed 13 MGD yield.
Cedar Creek Reservoir	Gainesville-Hall County	Oconee	The Cedar Creek reservoir is expected to have a yield of 9 MGD and be supplemented with water from the North Oconee River.

Notes:

1. Reservoirs that do not require 404 permits, off-line reservoirs, and reservoirs whose primary purpose is to facilitate water treatment plant operations are not included herein.
2. The service provider for the Bear Creek Reservoir should be resolved through negotiation process or other means before a permit is issued to resolve conflicts with existing service areas.

Source: MINGWPD Water Supply and Water Conservation Management Plan (May 2009)

Wastewater Management

Existing wastewater conditions in the Metro Water District are characterized by the use of large publicly owned treatment facilities covered by Georgia EPD's permitting process, smaller systems including land application systems and decentralized systems, and the use of septic systems in less densely populated areas. As the region has grown, increased demand for wastewater treatment has been met by first seeking permit increases, building or expanding treatment facilities, and relying on septic systems in areas not yet served by sewer.

The Metro Water District has 303 wastewater treatment facilities based on facilities in operation at the end of 2006. Of these, there are 92 publicly owned facilities with a total capacity of 660 million gallons per day (MGD) and 211 private facilities (land application systems or decentralized systems). The majority (91%) of publicly owned treatment facilities have advanced levels of treatment. Of the 211 privately owned wastewater facilities located in the Metro Water District, 30 are owned by public school systems, 98 are owned by industries, and the remaining 83 are owned by campgrounds, mobile home parks, and residential developments. Approximately one-fifth of residential wastewater and one-tenth of all wastewater generated in the Metro Water District is currently treated by septic systems. Figure 4 provides details on existing water treatment plants in the Metro District planning area.

Figure 4: Existing Surface Water Treatment Plants

County	WTP	Entity	Source Stream/ Reservoir	2006 WTP Permitted Capacity (PD-MGD) (Note 1)
Bartow	Lewis Spring WTP	City of Adairsville	Lewis Spring (Note 2)	4
	Clarence B. Walker WTP	City of Cartersville	Allatoona Lake	27
	Emerson WTP	City of Emerson	Moss Spring (Note 2)	0.5
	Bartow County WTP	Bartow County	Bolivar Springs	0.8
Cherokee	Canton WTP	City of Canton	Etowah River	5.45
	Etowah River WTP	Cherokee County Water and Sewerage Authority	Yellow Creek Reservoir and Etowah River	38
Clayton	Terry R. Hicks WTP	Clayton County Water Authority	Blalock Reservoir	10
	W.J. Hooper WTP		W.J. Hooper Reservoir	20
	J.W. Smith WTP		J.W. Smith Reservoir	12
Cobb	James E. Quarles WTP	Cobb County-Marietta Water Authority	Chattahoochee River	86
	Hugh A. Wyckoff WTP		Allatoona Lake	72
Coweta	B.T. Brown WTP	Coweta County	Cedar Creek (B.T. Brown) Reservoir	7.7
	Hershall Norred WTP	City of Newnan	J.T. Haynes Reservoir	14
	Senoia WTP	City of Senoia	Hutchins' Lake	0.45

County	WTP	Entity	Source Stream/ Reservoir	2006 WTP Permitted Capacity (PD-MGD) (Note 1)
DeKalb	Scott Candler WTP	DeKalb County	Chattahoochee River	128
Douglas	Bear Creek WTP	Douglasville-Douglas County Water and Sewer Authority	Bear Creek Reservoir	16.36
			Dog River Reservoir	
	Franklin Smith WTP	City of Villa Rica	Lake Fashion, Cowan Lake	1.5
Fayette	Crosstown WTP	Fayette County	Lake Horton, Lake Kedron, Lake Peachtree, groundwater	13.5
	South Fayette WTP			6.2
	Fayetteville WTP	City of Fayetteville	Whitewater Creek	3
Forsyth	Cumming WTP	City of Cumming	Lake Lanier	24
	Forsyth County WTP	Forsyth County	Lake Lanier	13.9
Fulton	Atlanta-Fulton County WTP	Atlanta-Fulton County Water Resources Comm.	Chattahoochee River	90
	Hemphill WTP	City of Atlanta	Chattahoochee River	136.5
	Chattahoochee WTP			64.9
	Roswell Cecil Wood WTP	City of Roswell	Big Creek	1.2
	East Point WTP	City of East Point	Sweetwater Creek	13.9
	Palmetto WTP	City of Palmetto	Cedar Creek	0.6
Gwinnett	Lake Lanier WTP	Gwinnett County Public Utilities	Lake Lanier	150
	Shoal Creek WTP			75
	Buford WTP	City of Buford	Lake Lanier	2
Hall	Lakeside WTP	City of Gainesville	Lake Lanier	10
	Riverside WTP			25
Henry	Towaliga River WTP	Henry County Water and Sewerage Authority	S. Howell Gardner (Indian Creek) and Rowland Reservoirs	24
	Tussahaw WTP		Tussahaw Creek Reservoir	13
	McDonough WTP	City of McDonough	John Fargason (Walnut Creek) Reservoir	2.28
	Locust Grove WTP	City of Locust Grove	Brown Branch	0.45
Rockdale	Big Haynes Creek WTP	Rockdale County	Big Haynes Creek (Randy Poynter Lake)	22.1
Total Metro Water District Treatment Capacity (PD-MGD)				1135.29
Total Metro Water District Treatment Capacity (AAD-MGD)				709.56

Notes:

1. WTP capacity is on a permitted peak day basis.
2. Lewis and Moss Springs are groundwater under the influence of surface water and therefore classified as a surface water WTP.
3. Annual average day equals monthly average day divided by 1.6.

Source: MNGWPD Water Supply and Water Conservation Management Plan, May 2009

The increase in population and economic activity over the next 20 – 30 years is forecasted to produce 993 million gallons per day of wastewater that will need to be managed during a maximum month in 2035. This forecast does not include flows from septic systems or decentralized systems. To provide the treatment capacity required to meet this forecasted flow, localities within the District will primarily rely on the expansion of existing facilities. Expansion is considered a cost-effective approach but may prove problematic in watersheds with assimilative capacity limitations.

A total of 48 existing facilities are scheduled for expansion, 19 new facilities will be constructed, 20 existing facilities will continue to operate at their current capacity, and 24 facilities will be retired. This schedule will result in a total of 87 wastewater treatment plants either in operation, or under construction, in the Metro Water District by 2035. These plants are detailed in Figure 5. Figure 6, which follows Figure 5, highlights new treatment plants.

Figure 5: Wastewater Treatment Plants Planned to be Operation in 2035

Location by County	Wastewater Treatment Plant	Planned Permitting Capacity (MMF-MGD)	Receiving Water Body	Basin
Bartow	Adairsville North WPCP	4	Oothkalooga Creek	Coosa
	Adairsville South WPCP	1	Oothkalooga Creek	Coosa
	Cartersville WPCP	24	Etowah River	Coosa
	Bartow Southeast WPCP	8.1	Etowah River	Coosa
	Emerson Pond WPCP	1.5	Pumpkinvine Creek Tributary	Coosa
	West Bartow WPCP (Note 1)	4	Etowah River	Coosa
County Total		42.6		
Cherokee	Canton WPCP (Note 2)	8	Etowah River	Coosa
	CCWSA Fitzgerald Creek WPCP (Note 2)	11.75	Little River	Coosa
	CCWSA Rose Creek WPCP (Note 2)	15	Lake Allatoona	Coosa
	Woodstock WPCP (Note 2)	2.5	Rubes Creek	Coosa
	CCWSA Northeast WPCP (Notes 1,2)	8	Etowah River	Coosa
	Cherokee Northwest WPCP (CCWSA/Canton) (Notes 1,2)	8	Etowah River	Coosa
County Total		53.25		
Clayton	Clayton WB Casey WRF	30	Huie LAS/Wetlands to Blalock Reservoir	Ocmulgee
	Clayton Northeast WRF	10	Panther Creek	Ocmulgee
	Clayton Shoal Creek LAS/WRF	4.4	LAS/Wetlands to Shoal Creek Reservoir	Flint
County Total		44.4		
Cobb	Cobb Noonday Creek WRF (Note 2)	20	Noonday Creek	Coosa
	Cobb Northwest Cobb WRF (Note 2)	12	Lake Allatoona	Coosa
	Cobb RL Sutton WRF	60	Chattahoochee River	Chattahoochee
	Cobb South Cobb WRF	50	Chattahoochee River	Chattahoochee
County Total		142		
Coweta	Newnan Wahoo Creek WPCP	6	Wahoo Creek/LAS	Chattahoochee
	Newnan Mineral Springs WPCP	4	Mineral Springs Branch/LAS	Chattahoochee
	Coweta Sargent WPCP	1	Wahoo Creek	Chattahoochee
	Coweta Arnco WPCP	1	Wahoo Creek	Chattahoochee

Location by County	Wastewater Treatment Plant	Planned Permitting Capacity (MMF-MGD)	Receiving Water Body	Basin
	Coweta Shenandoah WPCP	2	White Oak Creek	Flint
	Grantville Colley Street LAS (Note 1)		LAS	Flint
	Grantville Ponds		Yellow Jacket & New Mountain Creeks	Chattahoochee
	Grantville New River WPCP (Note 1)		New River	Chattahoochee
	Grantville Yellow Jacket Creek WPCP (Note 1)	0.78	Yellow Jacket Creek	Chattahoochee
	Senoia LAS	1	LAS	Flint
	Sharpsburg WPCP (Note 1)	7.5	Line Creek	Flint
	Senoia Southeast WPCP (Note 1)			Flint
	Newnan Utilities Decentralized Systems (Note 1)	7.75		
	Coweta private systems (Note 1)	2.5		
	Coweta Bridgeport WPCP	1.2	White Oak Creek Tributary	Flint
County Total		34.73		
DeKalb	DeKalb Polebridge WPCP	39	South River	Ocmulgee
	DeKalb Snapfinger WPCP	54	South River	Ocmulgee
County Total		93		
Douglas	DDCWSA South Central WPCP (Note 1)	12	Chattahoochee River	Chattahoochee
	DDCWSA South Central UWRF	0.5	Chattahoochee River/LAS	Chattahoochee
	DDCWSA Northside WPCP	2	Gothards Creek	Chattahoochee
	DDCWSA Sweetwater Creek WPCP	6	Chattahoochee River	Chattahoochee
	Villa Rica North WPCP	0.84	Towne Branch	Chattahoochee
	Villa Rica West WPCP	6.5	Little Tallapoosa Creek	Tallapoosa
County Total		27.84		
Fayette	Fayetteville Whitewater Creek WPCP		Whitewater Creek	Flint
	Peachtree City Rockaway WPCP		Line Creek Tributary	Flint
	Peachtree City Line Creek WPCP	22	Line Creek	Flint
County Total		22		
Forsyth	Cumming Bethelview Road WPCP	8	Big Creek	Chattahoochee
	Forsyth Windemere Urban Reuse LAS (Note 2)	0.55	LAS	Chattahoochee
	Forsyth Shakerag/Fowler WRF	24	Chattahoochee River	Chattahoochee
	Forsyth Manor Water Reuse Facility (Note 2)	0.5	LAS	Coosa
	Forsyth Dick Creek WRF	0.76	Dick Creek	Chattahoochee
	Cumming Lake Lanier WRF (Notes 1,2)	15	Lake Lanier	Chattahoochee
	Forsyth Lake Lanier WRF (Notes 1,2)	10	Lake Lanier	Chattahoochee
County Total		58.81		
Fulton	Fulton Johns Creek WRF	20	Chattahoochee River	Chattahoochee
	Fulton Big Creek WRF	38	Chattahoochee River	Chattahoochee
	Fairburn LAS	1	LAS	Flint
	Fulton Cauley Creek Reuse (Note 2)	5	Cauley Creek	Chattahoochee
	Fulton Tech. Park/Johns Creek WRF	0.2	Chattahoochee River	Chattahoochee
	Fulton Little River WRF	2.6	Little River	Coosa
	Fulton Settingdown Cr Golf Course Reuse (Note 2)	0.2	Reuse	Coosa

Location by County	Wastewater Treatment Plant	Planned Permitting Capacity (MMF-MGD)	Receiving Water Body	Basin
	Fulton Camp Creek WRF	24	Chattahoochee River	Chattahoochee
	Atlanta RM Clayton WRC	122	Chattahoochee River	Chattahoochee
	Atlanta Utoy Creek WRC	44	Chattahoochee River	Chattahoochee
	Atlanta South River WRC	54	Chattahoochee River	Chattahoochee
	Union City WWTP (Note 1)	2.5	Deep Creek	Chattahoochee
County Total		313.5		
Gwinnett	Gwinnett F. Wayne Hill WRC (Note 2)	85	Lake Lanier	Chattahoochee
			Chattahoochee River	Chattahoochee
	Gwinnett Crooked Creek WRC	25	Chattahoochee River	Chattahoochee
	Gwinnett Yellow River WRF	22	Yellow River	Ocmulgee
	Buford Southside WPCP	4.5	Little Suwannee Creek	Chattahoochee
County Total		136.5		
Hall	Gainesville Flat Creek WRF (Note 2)	18	Flat Creek	Chattahoochee
	Gainesville Linwood WRF (Note 2)	14	Lake Lanier	Chattahoochee
	Flowery Branch WPCP (Note 2)	9	Lake Lanier	Chattahoochee
	Spout Springs facility (Note 2)	7	Lake Lanier	Chattahoochee
		4	LAS	Chattahoochee
	Hall County (Notes 1, 2)	6	TBD	Chattahoochee
	Lula WPCP (Note 1)	1.8	Lula Branch tributary	Chattahoochee
County Total		59.8		
Henry	Henry Bear Creek WRF/LAS	1.25	Bear Creek/LAS	Flint
	Henry Indian Creek LAS	7	LAS	Ocmulgee
	Henry Walnut Creek WRF (Note 1)	27	Walnut Creek	Ocmulgee
	Hampton WPCP	1.75	Bear Creek	Flint
	Locust Grove Indian Creek WPCP	3	Indian Creek	Ocmulgee
	McDonough Walnut Creek WPCP	4	Walnut Creek Tributary	Ocmulgee
	Stockbridge WPCP	2.25	Brush Creek	Ocmulgee
	Henry Leguin Mill WPCP (Note 1)	9.6		Ocmulgee
County Total		55.85		
Paulding	Paulding Pumpkinvine Creek WRF	30	Pumpkinvine Creek	Coosa
	Paulding Coppermine WRF	6.5	LAS	Chattahoochee
	Paulding Upper Sweetwater WRF	2.5	Sweetwater Creek	Chattahoochee
	Paulding West/Airport WRF (Note 1)	1.5	Pumpkinvine Creek	Coosa
County Total		40.5		
Rockdale	Rockdale Quigg Branch WRF	9	Yellow River	Ocmulgee
	Rockdale South River WRF (Note 1)	5	South River	Ocmulgee
County Total		14		
District Total		1,139		

Notes:

1. New or planned facilities

2. Facility is considered a reuse facility, which includes non-potable reuse, planned indirect potable reuse, or incidental indirect potable reuse.

Source: Metropolitan North Georgia Water Planning District Wastewater Management Plan, May 2009

Figure 6: New Wastewater Treatment Plants Constructed by 2035

Utility	Facility Name (Note 1)	2035 Capacity
Bartow County	West Bartow WPCP	4
Cherokee Co WSA	CCWSA Northeast WPCP *	8
CCWSA/Canton	Cherokee Northwest WPCP *	8
Newnan	Newnan Utilities Decentralized Systems *	7.75
Sharpsburg	Sharpsburg WPCP	7.5
Senoia	Senoia Southeast WPCP	
Grantville	Grantville Yellow Jacket Creek WPCP *	0.78
Grantville	Grantville New River WPCP *	
Coweta County	Coweta private systems (deeded to WSA) *	2.50
Coweta County	Coweta Bridgeport WPCP *	1.2
Cumming	Cumming Lake Lanier WRF	15
Forsyth	Forsyth Lake Lanier WRF	10
Union City	Union City WWTP *	2.5
Fairburn	Fairburn LAS	1
Hall County	Hall County WWTF	6
Lula	Lula WPCP *	1.8
Henry Co.	Henry Leguin Mill WPCP	9.6
Paulding Co.	Paulding West/Airport WRF	1.5
Rockdale	Rockdale New South River WRF	5

Notes:

* facilities planned for service prior to the next MNGWPD plan update

1. New facilities slated to be constructed and decommissioned by 2035 are not included.

Source: Metropolitan North Georgia Water Planning District Wastewater Management Plan, May 2009

Watershed Management

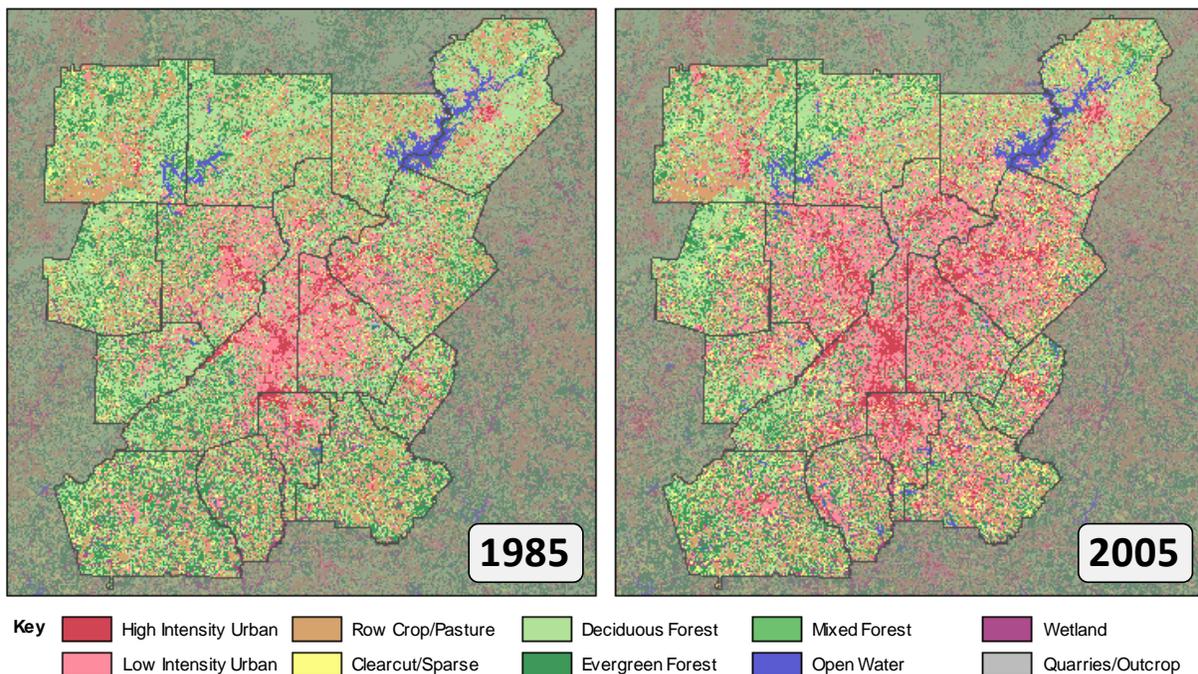
The protection of source water (drinking water supply) watersheds is vitally important to the region, as almost all of the Metro Water District's public drinking water supply comes from surface water sources, which includes streams, rivers and man-made reservoirs. Water quality degradation of these surface waters can potentially pose human health threats, and often increases water treatment costs for local communities.

Changes in watershed hydrology from land use changes can have significant impacts on stream conditions including (Figure 7 illustrates the magnitude of land cover change in the region):

- Changes in Stream Flow – Increased runoff volumes, increased peak discharges, greater runoff velocities, increased flooding, and lower dry weather stream flows.
- Changes in Stream Geometry – Stream erosion (widening and down-cutting), loss of riparian tree cover, sedimentation in the channel, and increased flood elevations.
- Degradation of Aquatic Habitat – Degradation of habitat structure, reduced stream base flows, increased temperatures, and reduced abundance and diversity of aquatic biota.
- Water Quality Impacts – Reduced dissolved oxygen and increases in suspended solids, nutrients (phosphorus and nitrogen compounds), hydrocarbons (oils and grease), organic contaminants, heavy metals, toxic chemicals, trash & debris, and microbial contamination (bacteria, viruses and other pathogens).

See Figure 8 on the following page for details on land cover changes.

Figure 7: Land Cover in the Metro Water District Region (1985 & 2005)



Source: University of Georgia Natural Resources Spatial Analysis Laboratory

Figure 8: Land Cover Changes 1985 - 2005

Land Cover Type	1985 Data		2005 Data		Change 1985-2005	
	Acres	% of Total	Acres	% of Total	Acres	Change
High Intensity Urban	89,652	2.8	216,472	6.9	126,820	141.5%
Low Intensity Urban	448,265	14.2	802,182	25.4	353,917	79.0%
Row Crop/Pasture	547,450	17.3	398,140	12.6	-149,310	-27.3%
Clearcut/Sparse	157,644	5.0	218,310	6.9	60,666	38.5%
Deciduous Forest	1,064,922	33.7	784,213	24.8	-280,709	-26.4%
Evergreen Forest	599,989	19.0	495,574	15.7	-104,415	-17.4%
Mixed Forest	85,891	2.7	60,992	1.9	-24,899	-29.0%
Open Water	58,973	1.9	85,271	2.7	26,298	44.6%
Wetland	101,070	3.2	90,136	2.9	-10,934	-10.8%
Quarries/Outcrop/Other	5,966	0.2	8,532	0.3	2,566	43.0%
TOTAL	3,159,822	100.0	3,159,822	100.0		

Source: University of Georgia Natural Resources Spatial Analysis Laboratory

River Basin Profiles

The Watershed Management Plan of the Metro Water District profiled each of the six basins within the District. Each basin has conditions now and expected conditions in the future that will impact water resources and influence management decisions.

Chattahoochee River Basin

The Chattahoochee River basin supplies drinking water and serves as the primary receiving water for treated wastewater effluent for over 3 million people in the Metro Water District. The Chattahoochee River has its headwaters in the Blue Ridge Mountains northeast of the Metro Water District. The basin occupies a relatively narrow corridor through the center of the Metro Water District, averaging about 40 miles wide, starting in the northeast corner and extending to the southwest corner of the region. Issues for this have been divided into three sub-basins (Lake Lanier, Upper Metro Chattahoochee, and Lower Metro Chattahoochee:

Lake Lanier

- Many of the tributaries to Lake Lanier are impaired and have TMDLs, primarily for fecal coliform bacteria and biota.
- Recreation is a multi-billion dollar industry for the communities surrounding the Lake and is impacted by impaired water quality and operations affecting Lake levels.
- Increasing use of decentralized wastewater systems (e.g. septic tanks) presents long-term maintenance challenges.

- Increasing development in the area upstream of the Metro Water District in Dawson, Habersham, and White Counties will further affect water quality in the Lake.

Upper Metro Chattahoochee Sub-Basin

- Upper Metro Chattahoochee River is the largest source of drinking water supplies for the Metro
- Water District, accounting for 56-percent of the Metro Water District's permitted water supply.
- The Chattahoochee River in this sub-basin does not meet State water quality standards for fecal coliform bacteria and biota. There are also Fish Consumption Guidelines as a result of legacy PCBs.
- The Chattahoochee River National Recreation Area serves as an important recreation destination for the region. Recreational activities are dramatically impacted by impaired water quality.
- Much of the development in this corridor occurred prior to improved stormwater management practices. Inadequate controls have led to increased runoff.
- Several areas in this sub-basin are prone to sanitary sewer overflows.

Lower Chattahoochee Sub-Basin

- The Chattahoochee River and several of its tributaries do not meet State water quality standards for fecal coliform bacteria, biota, and temperature.
- Much of the sub-basin is anticipated to experience high growth in the next two decades.
- Algae blooms have been identified in West Point Lake downstream of the Metro Water District, indicating high nutrient contributions.

Coosa River Basin

The Coosa River basin is a major water supply source for the Metro Water District, and includes Allatoona Lake which is the second largest reservoir in the Metro Water District. The basin is rapidly developing, but is also home to a number of protected species which are a major focus of habitat protection. The Coosa basin within the Metro Water District covers about 1,322 square miles, including all of Bartow County, most of Cherokee County, and portions of Forsyth, Fulton, Cobb, and Paulding Counties.

- Paulding, Forsyth, and Cherokee Counties are consistently noted as among the fastest growing counties in the United States.
- The Coosa basin is an important water source for Bartow, Cobb, Cherokee and Paulding Counties, therefore protection of source water supply watersheds is critical.
- Allatoona Lake currently exceeds State standards for chlorophyll-a. Nonpoint source runoff has been identified as the primary source of nutrient loadings associated with chlorophyll-a exceedences.
- The Coosa basin has great diversity of aquatic species, a number of which are on the Federal threatened and endangered species list.

Flint River Basin

The Metro Water District sits at the headwaters of the Flint River, which is a key water supply source for communities in the southern portions of the Metro Water District. The Flint basin is also known for abundant wetlands and is home to several endemic fish species. The Flint River originates near the Atlanta Hartsfield-Jackson International Airport and flows south through Clayton County. All of Fayette County is within the Flint basin as well as portions of Clayton, Coweta, Fulton, and Henry Counties. The Flint River eventually flows to the Gulf of Mexico after its confluence with the Chattahoochee River in south Georgia.

- The headwaters of the Flint basin are highly impervious due to the presence of the Hartsfield-
- Jackson Atlanta International Airport and associated land uses.
- Most of the Flint basin located within the Metro Water District consists of small drinking water supply watersheds.
- The Flint River and several tributaries currently exceed the State water quality standards for fecal coliform bacteria. Whitewater Creek does not meet State standard for biota and Flat Creek and White Oak Creek do not meet State standards for dissolved oxygen.
- Many of the new development areas in the Flint basin are slated for septic systems, therefore the proper maintenance and management of septic systems will be critically important for protecting watershed health.

Ocmulgee River Basin

Within the Metro Water District, several communities use the Ocmulgee basin for drinking water supplies, particularly in the south metro area, and wastewater discharge. Directly downstream of the Metro Water District is Jackson Lake, a Georgia Power lake that is used for recreation and power production. The Ocmulgee River basin covers most of the southeast Metro Water District and includes portions Clayton, DeKalb, Fulton, Gwinnett and Henry Counties and all of Rockdale County. A small portion of the City of Atlanta is also located in the basin.

- Of the 457 miles of streams monitored in the Metro Water District portion of the Ocmulgee basin, 385 miles did not meet State water quality standards based on the 2008 303(d) list.
- Several small drinking water supply watersheds are located in the Ocmulgee basin.
- Downstream of the Metro Water District, the Ocmulgee basin drains to Lake Jackson, which is showing signs of eutrophication due to nutrient loads.
- Sanitary sewer overflows in older portions of the sanitary sewer collection system in Fulton, DeKalb, and Rockdale Counties contribute to fecal coliform bacteria levels in the basin.

Oconee River Basin

The Oconee basin is comprised entirely of headwater streams within the Metro Water District. While traditionally rural, many communities within the basin are currently experiencing growth and new development. The Oconee River headwaters originate in Gwinnett and Hall Counties and encompass about 208 square miles along the eastern edge of the Metro Water District. In

the last decade, the Oconee basin has experienced a steady change in land use with undeveloped land transitioning predominantly to residential. However, the Oconee basin overall currently has the least intensive land use in the Metro Water District with 62 percent of land in forested and agricultural land uses.

- Land use is shifting from forested and agricultural land use to residential and supporting commercial land use.
- Much of the growth in the Oconee basin is anticipated for septic systems, potentially creating long-term management challenges.

Tallapoosa River Basin

A small piece of the Metro Water District includes the headwaters of the Tallapoosa River, which is part of the larger Alabama-Coosa-Tallapoosa (ACT) system. The southwestern corner of Paulding County in the Metro Water District lies within the Tallapoosa River basin, which encompasses about 40 square miles of the Metro Water District. Portions of the City of Villa Rica, which extends outside of the 15-county region, are also located in the Tallapoosa basin. The Tallapoosa basin is also home to several endemic fish species, including the Tallapoosa Shiner.

- Most of the growth in the Tallapoosa basin within the District is anticipated to be on septic systems.
- There are two small drinking water supply watersheds in the District portion of the basin and a planned reservoir downstream that require protection.
- There are threatened and endangered aquatic species of concern in the Tallapoosa basin that require protection.

Appendix: Regional Green Infrastructure

Recent Regional Efforts

Since 2003, ARC has been working on issues related to natural resource, greenspace, and parks planning in the Atlanta region. Stakeholders from around the region have consistently agreed on the need to establish strategies and basic support structures that could provide assistance to the many groups in the region that work on greenspace issues. In September 2005, the ARC Board echoed the direction given to ARC staff by local and regional greenspace leaders by requesting that ARC become more active in the coordination of greenspace efforts around the region. The following resources have been developed in support of these requests:

Protected Lands Inventory and Database: An inventory of all protected lands and greenspace in the 20-county region has been developed and maintained based input from public and non-profit stakeholders. The Inventory will be a valuable input in developing ARC's initial Regionally Important Resources Map.

DRAFT Green Infrastructure Priorities Map: The Draft Priorities Map attempted to identify areas around the region that should be targeted for permanent protection in the future. The Map was never adopted because it became clear that ARC would soon be responsible for developing a Regionally Important Resource Map under new DCA rules. Developing the Draft Priorities Map did serve as an experience that will assist in developing the knowledge necessary to produce the RIR map.

Green Infrastructure Toolkit: The Toolkit provides guidance and resources to local governments working to protect lands and natural resources around the region. The Toolkit will be updated in 2010 as ARC develops a Regional Resource Plan.

Existing Park and Greenspace Assets

Scenic views, rock outcroppings, wetlands, flood plains, steep slopes, river corridors, sensitive soils, water resources and plant and animal habitats all contribute to the natural beauty of the Atlanta region. The most significant concentrations of wetlands, steep slopes, flood plains, sensitive soils, plant and animal habitats and scenic views are within the river and stream corridors in our region.

The region has a varied supply of major parks and recreation areas; wildlife management areas; conservation areas; nature preserves; regional trails and water resources. Over the years, several federal agencies, State of Georgia departments and authorities, private landowners, city and county public agencies and non-profit organizations have pursued the development of park land, open space, greenspace, recreation and conservation areas.

While the region has significant park and greenspace assets, significant investments in parks and greenspace are needed over the next two decades to provide a portfolio of amenities that meets the needs of the growing region. Figures 1 and 2 show two common metrics used to

evaluate the adequacy of the current parkland to meet the needs of residents (acres of park space per 1,000 people and percent of land area by county dedicated to parks and greenspace).

Figure 3 on the following page maps existing parks and greenspace in ARC's Protected Lands Database.

Figure 1: Parks and Greenspace per 1,000 Residents (By County)

County	Parks & Greenspace		Recreation & Protected Lands(Acres) Per 1,000 Residents
	(Acres)	2009 Population	
Cherokee	17845.7	205900	86.7
Clayton	5332.5	281900	18.9
Cobb	12207.8	676800	18.0
DeKalb	11552.2	731200	15.8
Douglas	4894.9	128800	38.0
Fayette	3304.5	106700	31.0
Fulton	11767.4	957900	12.3
Gwinnett	12381.3	757300	16.3
Henry	2356.6	192800	12.2
Rockdale	7562.6	85000	89.0
Total	89205.7	4124300	21.6

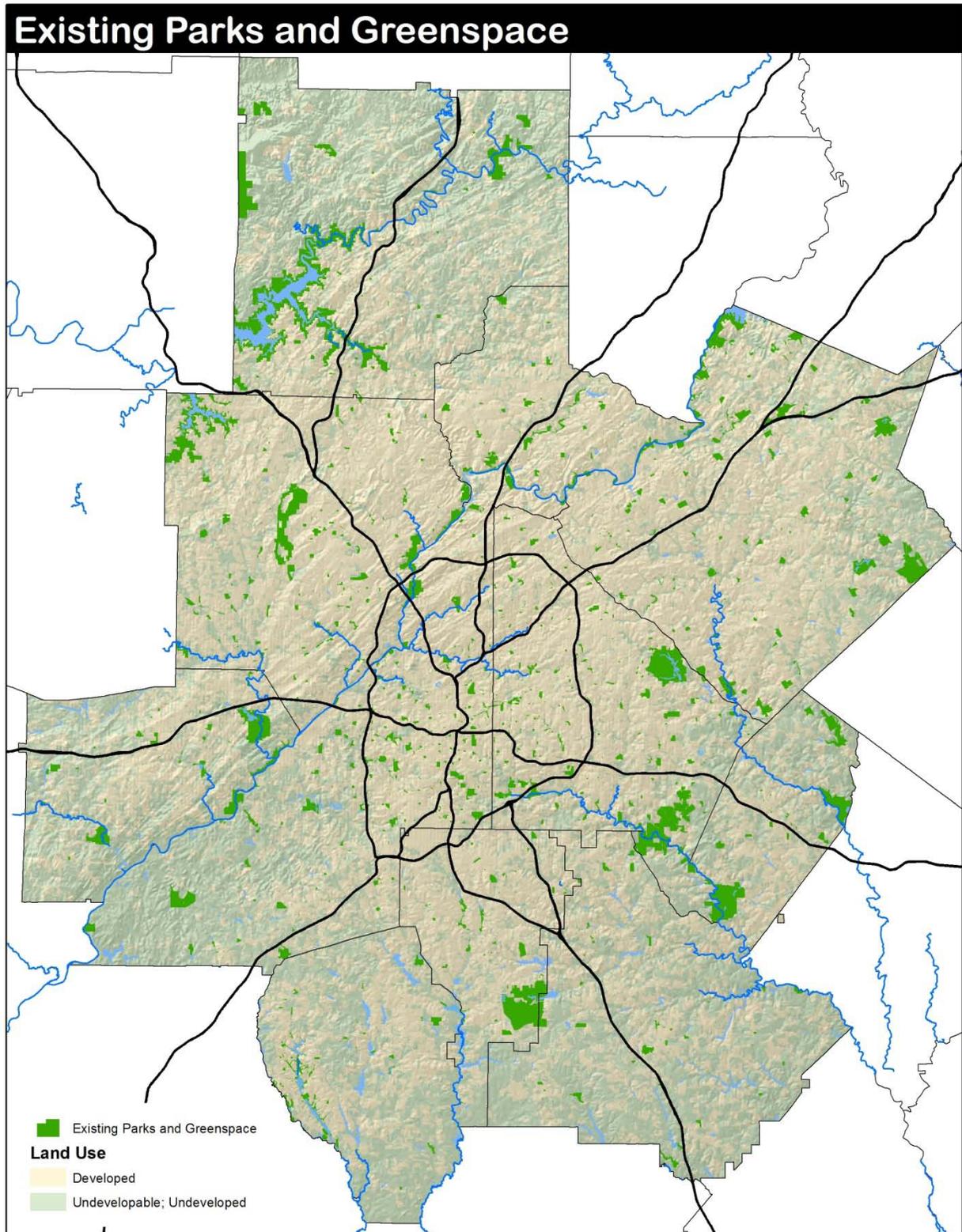
Source: ARC Protected Lands Inventory & 2009 ARC Population Estimates

Figure 2: Parks and Greenspace - % Land Area of 10-County Region

County	Parks & Greenspace (Acres)	Total Land Area (Acres)	% County Devoted to Parks and Greenspace
Cherokee	17845.7	277,703	6.43%
Clayton	5332.5	92,321	5.78%
Cobb	12207.8	220,453	5.54%
DeKalb	11552.2	173,348	6.66%
Douglas	4894.9	128,149	3.82%
Fayette	3304.5	127,498	2.59%
Fulton	11767.4	342,095	3.44%
Gwinnett	12381.3	279,448	4.43%
Henry	2356.6	207,627	1.14%
Rockdale	7562.6	84,546	8.94%
Total	89205.7	1,933,188	4.61%

Source: ARC Protected Lands Inventory

Figure 3: Existing Parks and Greenspace - 10-County Region



Regionally Important Resources

ARC will be developing a Regional Resource Plan as part of the overall Plan 2040 initiative. The Resource Plan will:

- Enhance the focus on protection and management of important natural and cultural resources in the Atlanta region.
- Provide for careful consideration of, and planning for, impacts of new development on these important resources.
- Improve local, regional, and state level coordination in the protection and management of identified resources.

The Resource Plan will be developed with input from numerous stakeholders around the region and will be reviewed by the State of Georgia and ultimately adopted and promulgated by ARC. All interested parties from around the region including local governments, state and federal agencies, local land trusts, conservation organizations, and the public will be consulted in developing the Resource Plan.

In the fall of 2009 ARC invited local governments, non-profit organizations and citizens from around the region to nominate potentially Regionally Important Resources to be considered during the Plan 2040 process

The following criteria were adopted by the ARC Board to guide the evaluation of nominated and other resources:

1. Preserves water quality and quantity by protecting drainage, flood control, recharge areas, watersheds, buffers etc.
2. Creates or preserves active or passive greenspaces including trails, gardens and informal places of natural enjoyment in areas currently underserved by greenspace.
3. Protects wildlife habitat by creating, buffering, preserving, habitat areas and corridors.
4. Preserves areas that have historical or cultural value by virtue of history, place or time period represented.
5. Preserves significant working agricultural or forest resources and/or creates opportunities for local food production activities.
6. Areas that contribute to region-wide connections between existing and proposed regional resources.

Figure 4 on the following page illustrates the many potential resources from around the region that were nominated. A list of nominated resources is also provided. Figure 5 provides a list of all resources nominated.

Figure 4: Areas Nominated for Inclusion on the Regionally Important Resources Map (As of 11/1/09)

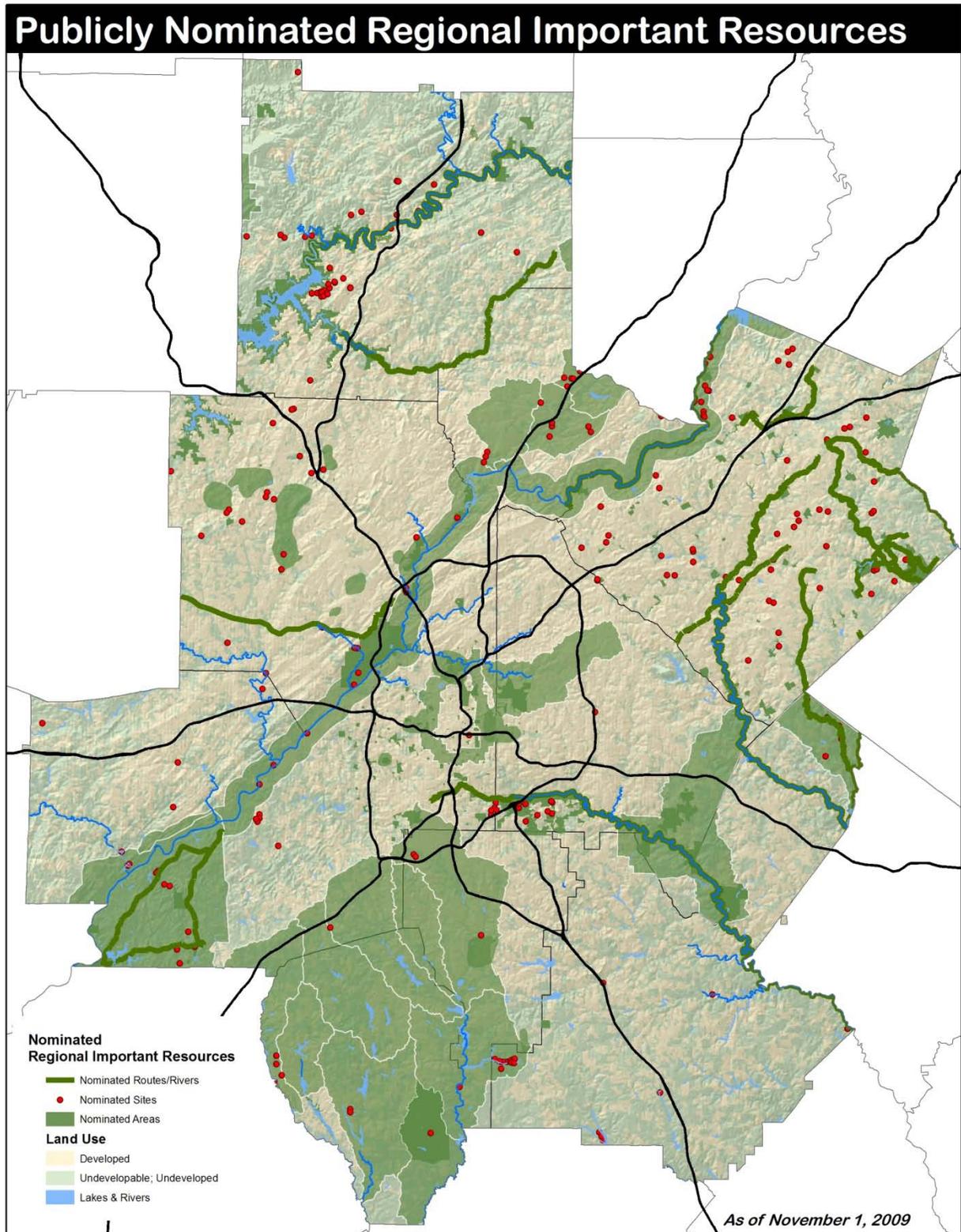


Figure 5: Nominated Regional Resources (Through 11/1/09)

Resource	Nominating Party	Location (County)
Abcrombie - Jarrard Farm	Chattahoochee Hills Civic Association	Fulton
Alcovy River (Gwinnett to Jackson lake)	Newton County	Multiple
Alcovy River Greenway (including Gwinnett, Walton, Newton counties)	Newton County	Newton
Arabia Mountain National Heritage Area (DeKalb & Rockdale)	Arabia Mountain Heritage Area Alliance	Multiple
Arabia Mountain National Heritage Area (DeKalb & Rockdale)	DeKalb County	Multiple
Atlanta BeltLine	Park Pride	Fulton
Atlanta BeltLine	City of Atlanta	Fulton
Atlanta Parks system	Park Pride	Multiple
Atlanta University Center Historic District	City of Atlanta	Fulton
Ball Ground Historic District	Cherokee County	Cherokee
Barrett Park	City of College Park	Fulton
Bear Creek Reservoir	Newton County	Newton
Bert Adams Boy Scout Camp	Newton County	Newton
Big Creek Watershed (Fulton & Forsyth)	Smart Growth Forsyth	Multiple
Big Haynes/Little Haynes Creeks (Gwinnett, Walton, Newton and Rockdale)	Newton County	Multiple
Brick Store	Newton County	Newton
Bullard-Stockton Property	Cobb County	Cobb
Burge Plantation	Newton County	Newton
Canton Historic District	Cherokee County	Cherokee
Cemeteries of Chattahoochee Hills	Chattahoochee Hills Civic Association	Fulton

Figure 6: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Centennial Olympic Park	Park Pride	Fulton
Centerville Park	Gwinnett County	Gwinnett
Charles E. Phillips, Sr. Esquire Park	City of College Park	Fulton
Chastain Memorial Park	City of Atlanta	Fulton
Chatt Hills - Cedar Rock	Chattahoochee Hills Civic Association	Fulton
Chatt Hills - Hutcheson Ferry Park Outcrop	Chattahoochee Hills Civic Association	Fulton
Chatt Hills - Indian Mill	Chattahoochee Hills Civic Association	Fulton
Chatt Hills - Split Rocks	Chattahoochee Hills Civic Association	Fulton
Chattahoochee Hill Country - Scenic Byways	Chattahoochee Hills Civic Association	Fulton
Chattahoochee Hill Country (Forests, Watersheds and Wildlife) - Carroll, Coweta,	Chattahoochee Hill Country Conservancy	Multiple
Chattahoochee River	TPL	Multiple
Chattahoochee River (Cobb County)	Cobb County	Multiple
Chattahoochee River (Gwinnett) & River Corridor Parks and Greenspace	Gwinnett County	Multiple
Chattahoochee River (Johnson Ferry North)	Private Individual	Fulton
Chattahoochee River National Recreation Area	Cobb County	Multiple
Chattahoochee River Park	Chattahoochee Hills Civic Association	Fulton
City Hall / Rico Elementary School	Chattahoochee Hills Civic Association	Fulton
City of Atlanta Greenway Corridors	City of Atlanta	Fulton
City Pond (City of Covington and Newton County)	Newton County	Newton
Civil War Sites (incl. Kolb's Farm, Kennesaw Mtn, Marietta, Peachtree Creek, Atlanta)	Georgia Battlefield Association	Multiple

Figure 7: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Clarkdale Historic District	Cobb County	Cobb
Cochran Mill Park	Chattahoochee Hills Civic Association	Fulton
College Park Auditorium	City of College Park	Fulton
College Park Cemetery	City of College Park	Fulton
College Park Golf Course	City of College Park	Fulton
College Park Historic District	City of College Park	Fulton
Concord Road and Covered Bridge Road	Cobb County	Cobb
Covington Historic District	Newton County	Newton
DeShong Park	Gwinnett County	Gwinnett
Dixie Coca-Cola Bottling Company	City of Atlanta	Fulton
Druid Hills Historic District	DeKalb County	DeKalb
Druid Hills Historic District & Olmsted Linear Parks	City of Atlanta	DeKalb
Etowah River Corridor	Cherokee County	Cherokee
Factory Shoals Park	Newton County	Newton
Fayette County Courthouse	Fayette County	Fayette
Five Forks - Trickum Road Corridor	Gwinnett County	Gwinnett
Flat Creek Nature Area	City of Peachtree City	Fayette
Flint River	Fayette County	Fayette
Fort Daniel Archeological Project	Gwinnett County	Gwinnett
Fox Theater	City of Atlanta	Fulton

Figure 8: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Freeman's Mill Park	Gwinnett County	Gwinnett
Ga. Wildlife Federation Headquarters-Alcovy Conservation Center	Newton County	Newton
Gaither Plantation	Newton County	Newton
George Pierce Park	Gwinnett County	Gwinnett
Georgia FFA-FCCLA Center	Newton County	Newton
Georgia Gwinnett College	Gwinnett County	Gwinnett
Georgia International Convention Center	City of College Park	Fulton
Georgia State Capitol	City of Atlanta	Fulton
Grant Park	Park Pride	Fulton
Grant Park	City of Atlanta	Fulton
Graves Park	Gwinnett County	Gwinnett
Gwinnett - National Register Sites (17)	Gwinnett County	Gwinnett
Gwinnett - Rivers and Protected Watersheds (Alcovy, Appalachian, Yellow, Big Haynes)	Gwinnett County	Gwinnett
Gwinnett Braves Stadium	Gwinnett County	Gwinnett
Gwinnett Civic & Cultural Center / Gwinnett Arena	Gwinnett County	Gwinnett
Gwinnett County - Major Lakes	Gwinnett County	Gwinnett
Gwinnett Environmental & Heritage Center	Gwinnett County	Gwinnett
Gwinnett Greenway System	Gwinnett County	Gwinnett
Gwinnett Parks System	Gwinnett County	Gwinnett
Gwinnett Public Library System	Gwinnett County	Gwinnett

Figure 9: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Gwinnett Water Towers	Private Individual	Gwinnett
Harbins Alcovy Park	Gwinnett County	Gwinnett
Herndon Home (Mansion)	Friends of the Herndon Home	Fulton
Herndon Mansion	City of Atlanta	Fulton
Hightower Trail	Newton County	Newton
Hutcheson Ferry Park	Chattahoochee Hills Civic Association	Fulton
Hyde Farm	Cobb County	Cobb
Judge William Wilson House	Private Individual	Fulton
Lake Allatoona (Lake and Corps properties)	Cobb County	Multiple
Lake Allatoona (Lake and Corps properties)	Cherokee County	Multiple
Lake Horton (including Woolsey Creek, Antioch Creek and Horton Creek)	Fayette County	Fayette
Lake Kedron (including Lake Peachtree and Flat Creek)	Fayette County	Fayette
Lake Lanier/Buford Dam	Gwinnett County	Gwinnett
Lake McIntosh (including Line Creek and Shoal Creek)	Fayette County	Fayette
Lake Roy Varner (Newton and Walton Counties)	Newton County	Newton
Line Creek Nature Area	City of Peachtree City	Fayette
Lionel Hampton & Beecher Hill Greenways	City of Atlanta	Fulton
Little Mulberry Park	Gwinnett County	Gwinnett
Little River Corridor	Cherokee County	Cherokee
Mansfield Historic District	Newton County	Newton

Figure 10: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
McDaniel Farm Park	Gwinnett County	Gwinnett
McGuirts Bridge Road	Newton County	Newton
Middle Chattahoochee River	GLCP	Multiple
Midtown Arts District	Midtown Alliance	Fulton
Millcreek Nature Center & Preserve	Gwinnett County	Gwinnett
MLK Historic Site and District	City of Atlanta	Fulton
Monastery of the Holy Spirit	Rockdale County	Rockdale
Nash Farm Battlefield Park	Henry County	Henry
National Register Archaeological Sites (throughout region)	Society for Georgia Archaeology	Multiple
Newborn Historic District	Newton County	Newton
Noonday Creek (Chastain Meadows)	Cobb County Water System	Cobb
Noonday Creek (Mark Avenue)	Cobb County Water System	Cobb
Old Social Circle Road	Newton County	Newton
Olmsted Linear Parks	Park Pride	DeKalb
Oxford College	Newton County	Newton
Oxford Historic District	Newton County	Newton
Panola Mountain State Conservation Park/Wolf Mountain Park	Henry County	Multiple
Panola Mountain State Park	Rockdale County	Rockdale
Peachtree Creek Watershed	DeKalb County	DeKalb
Piedmont Park	Park Pride	Fulton

Figure 11: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Piedmont Park	City of Atlanta	Fulton
Pine Log and Garland Mountains (including Part V Protected Mountain area)	Cherokee County	Multiple
Pine Log Mountain	GLCP	Multiple
Porterdale Historic District	Newton County	Newton
Redwine Plantation	Chattahoochee Hills Civic Association	Fulton
Richard D. Zupp, Jr. Park	City of College Park	Fulton
River Line Historic Area (Cobb County)	River Line Historic Area	Cobb
S.D. Truitt 4-H Camp	City of College Park	Fulton
Salem United Methodist Church and Campground	Newton County	Newton
Shoupade Park	Cobb County	Cobb
Silver Comet Trail (Cobb County extent)	Cobb County	Cobb
Simpsonwood - United Methodist Conference Center	Gwinnett County	Gwinnett
Sixes Mill	Private Individual	Cherokee
Smith-Gilbert Gardens	City of Kennesaw	Cobb
Soapstone Ridge Historic District	DeKalb County	DeKalb
South Fulton Scenic Byway	Chattahoochee Hills Civic Association	Fulton
South River (DeKalb, Rockdale, Newton counties to Jackson Lake)	Newton County	Multiple
Starr's Mill	Fayette County	Fayette
Starrsville Historic District	Newton County	Newton
Stone Mountain Stadium	Gwinnett Sports Council	DeKalb

Figure 12: Nominated Regional Resources (Through 11/1/09) – cont.

Resource	Nominating Party	Location (County)
Suwanee Creek Park & Greenway	City of Suwanee	Gwinnett
The BeltLine	Private Individual	Fulton
The Varsity	Midtown Alliance	Fulton
Three Mountains Natural Heritage Area	GLCP	Multiple
Town Center Park	City of Suwanee	Gwinnett
Tribble Mill Park	Gwinnett County	Gwinnett
Watershed Protection District	Rockdale County	Rockdale
Weaver-Hearn House and Farm	Chattahoochee Hills Civic Association	Fulton
Whitewater Creek	Fayette County	Fayette
Woodward Academy	City of College Park	Fulton
Wren's Nest	City of Atlanta	Fulton
Yellow River (Gwinnett, DeKalb, Rockdale and Newton Counties to Lake Jackson)	Newton County	Multiple
Yellow River Park	Gwinnett County	Gwinnett

Appendix: Intergovernmental Coordination

Overview

Intergovernmental coordination is a process in which two or more governmental agencies cooperate to fulfill a specified purpose. Oftentimes this cooperation is focused on one of two broad categories: (1) to ensure that actions within one community/organization does not have negative ramifications for another community/organization; (2) promote cooperation among jurisdictions/organizations on the provision of public services to prevent program overlap and optimize resources.

The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for the Atlanta metropolitan area. For 60 years, ARC has helped to focus the region's leadership, attention, and resources on key issues of regional consequence such as aging services, governmental services, leadership development, research and mapping, workforce development, environmental planning, land use planning, and mobility and air quality issues.

Cooperation among local governments in the Atlanta region is a long-standing tradition. ARC and its predecessor agencies have coordinated the planning efforts in the region since 1947, when the first publicly-supported, multi-county planning agency in the United States was created. At that time, the Metropolitan Planning Commission (MPC) served DeKalb and Fulton counties and the City of Atlanta. Since then, ARC membership has grown to its current size of 10 counties and 63 municipalities. The Atlanta Regional Commission Board is composed of officials from political subdivisions and private citizens within the region. Thirty-nine members comprise the ARC Board - 23 local elected officials, 15 private citizens and a representative of the Georgia Department of Community Affairs

ARC serves multiple roles in the regional planning arena, under state and federal laws, and these roles cover different geographies as well. ARC is fortunate to be tasked with managing multiple issues around the region in one agency. This affords ARC the opportunity to offer programs and services that reflect strong integration among many of these issues.

- Regional Commission (10-county planning area) – assisting local governments in fulfilling the state comprehensive planning requirements, including reviewing comprehensive plans, solid waste plans, and capital improvement elements; reviewing and determining compliance with state and regional goals for developments of regional impact; preparing a regional land use plan with associated maps and policies.
- Metropolitan Area Planning and Development Commission (10-county planning area) – established by state law to coordinate planning and development within each area of the state having a population of more than 1,000,000 according to the United States decennial census. This law designates the MAPDC also as the Regional Commission. For purposes of

this intergovernmental coordination discussion, the role of the MAPDC is included in references to the Regional Commission roles.

- Metropolitan Planning Organization (18-county planning area; forecasting for the 20-county Atlanta Nonattainment Area) - charged with developing regional plans and policies to enhance mobility, reduce congestion and meet air quality standards through activities such as modeling, forecasts, and preparing short and long range transportation plans.
- Metropolitan North Georgia Water Planning District (15-county planning area) – created to establish policy, create plans and promote intergovernmental coordination of all water issues in the District from a regional perspective, with a primary purpose to develop regional and watershed-specific plans for stormwater management, waste-water treatment, water supply, water conservation, and the general protection of water quality. ARC provides planning staff to the District under a Memorandum of Agreement between ARC and the District.
- Area Agency on Aging (10-county planning area)- plans and provides comprehensive services to address the needs of the region's older population through a continuum of home and community-based services, including information and referral services, case management, transportation, in-home services, home-delivered meals, health and wellness programs, employment and volunteer opportunities, senior centers, caregiver support and legal services.
- Atlanta Region Workforce Board (7-county planning area) - provides workforce solutions for dislocated workers, low-income adults and youth, and for businesses seeking qualified applicants. Services include: training for in-demand occupations, business partnerships, youth programs, career resource centers, and rapid response activities to address plant closings and layoffs. Additionally, ARC is the grant recipient for multiple strategic industry sector initiatives, including the Bio Science Innovation Crescent and the Supply Chain Management sectors. These initiatives often include counties outside the 7 county ARWB area.

Figure 1 below provides details as to which services ARC is responsible for providing for each of the governments in the 10-county planning area.

Figure 1: ARC Roles and Local Government Service Areas (X = Service in Full / P = Service in Part)

	RC	MPO	AAA	MNGWPD	ARWB
CORE COUNTIES					
Cherokee	X	X	X	X	X
Ball Ground	X	X	X	X	X
Canton	X	X	X	X	X
Holly Springs	X	X	X	X	X
Nelson	P	P	P	P	P
Waleska	X	X	X	X	X
Woodstock	X	X	X	X	X
Clayton	X	X	X	X	X
Forest Park	X	X	X	X	X
Jonesboro	X	X	X	X	X
Lake City	X	X	X	X	X
Lovejoy	X	X	X	X	X
Morrow	X	X	X	X	X
Riverdale	X	X	X	X	X
Cobb	X	X	X	X	
Acworth	X	X	X	X	
Austell	X	X	X	X	
Kennesaw	X	X	X	X	
Marietta	X	X	X	X	
Powder Springs	X	X	X	X	
Smyrna	X	X	X	X	
DeKalb	X	X	X	X	
Avondale Estates	X	X	X	X	
Chamblee	X	X	X	X	
Clarkston	X	X	X	X	
Decatur	X	X	X	X	
Doraville	X	X	X	X	
Lithonia	X	X	X	X	
Pine Lake	X	X	X	X	
Stone Mountain	X	X	X	X	

Figure 1: ARC Roles and Local Government Service Areas (cont.)

X = Service in Full / P = Service in Part

	RC	MPO	AAA	MNGWPD	ARWB
CORE COUNTIES					
Douglas	X	X	X	X	X
Douglasville	X	X	X	X	X
Villa Rica	P	P	P	P	P
Fayette	X	X	X	X	X
Brooks	X	X	X	X	X
Fayetteville	X	X	X	X	X
Peachtree City	X	X	X	X	X
Tyrone	X	X	X	X	X
Woolsey	X	X	X	X	X
Fulton - North	X	X	X	X	
Alpharetta	X	X	X	X	
Johns Creek	X	X	X	X	
Milton	X	X	X	X	
Mountain Park	X	X	X	X	
Roswell	X	X	X	X	
Sandy Springs	X	X	X	X	
Fulton - South	X	X	X	X	
Atlanta	X	X	X	X	
Chattahoochee Hills	X	X	X	X	
College Park	X	X	X	X	
East Point	X	X	X	X	
Fairburn	X	X	X	X	
Hapeville	X	X	X	X	
Palmetto	X	X	X	X	
Union City	X	X	X	X	

Figure 1: ARC Roles and Local Government Service Areas (cont.)

X = Service in Full / P = Service in Part

	RC	MPO	AAA	MNGWPD	ARWB
CORE COUNTIES					
Gwinnett	X	X	X	X	X
Berkeley Lake	X	X	X	X	X
Braselton	P	P	P	P	P
Buford	X	X	X	X	X
Dacula	X	X	X	X	X
Duluth	X	X	X	X	X
Grayson	X	X	X	X	X
Lawrenceville	X	X	X	X	X
Lilburn	X	X	X	X	X
Loganville	P	X	P	P	P
Norcross	X	X	X	X	X
Rest Haven	X	X	X	X	X
Snellville	X	X	X	X	X
Sugar Hill	X	X	X	X	X
Suwanee	X	X	X	X	X
Henry	X	X	X	X	X
Hampton	X	X	X	X	X
Locust Grove	X	X	X	X	X
McDonough	X	X	X	X	X
Stockbridge	X	X	X	X	X
Rockdale	X	X	X	X	X
Conyers	X	X	X	X	X

RC – Regional Commission, MPO – Metropolitan Planning Organization, AAA – Area Agency on Aging, MNGWPD – Metropolitan North Georgia Water Planning District, ARWB – Atlanta Region Workforce Board

Existing Coordination Mechanisms

Coordination mechanisms typically come in two forms – those mandated by law and those voluntarily entered into between two or more parties. Many of the state and federal rules under which ARC conducts its various activities specifies coordination activities and other actions that must be conducted in the course of our work. The following provides a brief overview of mandated coordination mechanisms.

Intergovernmental Coordination Act of 1968

US Office of Management and Budget issued Circular A-95 requiring area wide regional planning agency review of proposals for local participation in development programs. This requirement created a network of clearinghouses to receive and disseminate project information. This rule is seen as establishing a strong administrative base for regional planning and coordination.

Metropolitan Area Planning and Development Commissions (MAPDCs)

Title 50, chapter 8, article 4 of Georgia law defines the authority of ARC as a MAPDC. As the regional planning body in an area greater than 1,000,000 population, ARC has MAPDC authority as outlined under Georgia law. In 2008, HB 1216 restated that as the MAPDC, ARC also has the authority of a Regional Commission.

Georgia Planning Act

The Georgia Planning Act of 1989 was the Legislature's attempt to "provide a framework to facilitate and encourage coordinated, comprehensive state-wide planning and development at the local, regional, and state levels of government ..." It:

- Empowered the state's Department of Community Affairs (DCA) to assist local governments in the preparation and implementation of comprehensive plans.
- Directed DCA to assist the governor "... in the development of a comprehensive plan for the state."
- Established or re-designated local area planning commissions as regional commissions.
- Authorized the appropriate regional commission (for example, in the Atlanta area, the Atlanta Regional Commission) to review local plans, point out conflicts, and force local government reconsideration of plans.

Georgia Department of Community Affairs (DCA) Regional Rules

Georgia DCA developed new regional rules for Regional Commissions that became effective on July 1, 2009. These new rules encompassed the requirements and procedures for four areas:

Regional Planning - A regional plan must include three components: (1) a Regional Assessment, (2) a Stakeholder Involvement Program, and (3) a Regional Agenda.

Regionally Important Resources - Each Regional Commission must prepare a comprehensive Regional Resource Plan for the protection and management of the identified resources.

Developments of Regional Impact – ARC reviews development projects with impact beyond a single local government territory (thresholds determined by DCA). DRI's are reviewed for consistency with regional plans, local impacts and potential effects on neighboring jurisdictions.

Alternative Dispute Resolution - These rules establish an alternative dispute resolution process for reconciling differences on planning or growth management related issues among Georgia's local governments

Metropolitan River Protection Act

In 1973 the Georgia General Assembly enacted the Metropolitan River Protection Act (Georgia Code 12-5-440 et seq.). It established a 2000-foot Corridor along both banks of the Chattahoochee and its impoundments for the 48 miles between Buford Dam and Peachtree Creek. The Act was amended in 1998 to extend the Corridor an additional 36 miles to the downstream limits of Fulton and Douglas Counties (the limit of the Atlanta region).

The act requires the Atlanta Regional Commission to adopt a plan to protect the Chattahoochee River Corridor and to review development proposals for consistency with the plan. The Act also requires local governments along the corridor to implement the plan by issuing permits based on ARC findings, monitoring land-disturbing activity in the corridor and enforcing the act and the plan.

Metropolitan North Georgia Water Planning District Act

The Metropolitan North Georgia Water Planning District was created by the Georgia General Assembly in 2001 to establish policy, create plans and promote intergovernmental coordination of all water issues in the District from a regional perspective. O.C.G.A. § 12-5-579 of Georgia law stipulates that the Atlanta Regional Commission provides staff support and cooperates with the District and shall assist in its efforts.

Metropolitan Planning Organization Regulations

Under the requirements of the SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users), signed into law by the President on August 10, 2005, the ARC serves as the regional forum for cooperative transportation decision-making as the federally designated Metropolitan Planning Organization (MPO) for the Atlanta metropolitan transportation planning area.

ARC as the MPO for the Atlanta Region is responsible to develop the long range transportation plan (Regional Transportation Plan – RTP) and short range transportation program (Transportation Improvement Program – TIP) in cooperation with the State and with operators of publicly owned transit services. The RTP and TIP are produced through a planning process which involves the region's local governments, the Georgia Department of Transportation (GDOT), the Georgia Regional Transportation Authority (GRTA), the Georgia Environmental Protection Division (EPD), the State Road & Tollway Authority (SRTA), Metropolitan Atlanta Rapid Transit Authority (MARTA), local jurisdictions and citizens of the region. Additionally, representatives from the local offices of the U. S. Department of Transportation (US DOT) Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) and the U. S. Environmental Protection Agency (US EPA) provide guidance and participate in the planning process.

Older American's Act as amended in 2006 (Public Law 109-365)

As specified in the Older American's Act, "An area agency on aging shall be any public or nonprofit private agency in a planning and service area.... which is under the supervision or direction for this purpose of the designated State agency and which can and will engage only in the planning or provision of a broad range of supportive services, or nutrition services within such planning and service area."

Each Area Agency on Aging must "provide, through a comprehensive and coordinated system, for supportive services, nutrition services, and, where appropriate, for the establishment, maintenance, or construction of multipurpose senior centers, within the planning and service area covered by the plan, including determining the extent of need for supportive services, nutrition services, and multipurpose senior centers in such area taking into consideration, among other things, the numbers of older individuals with low incomes, with the greatest economic need and with the greatest social need and the efforts of voluntary organizations in the community, evaluating the effectiveness of the use of resources in meeting such need, and entering into agreements with providers of supportive services, nutrition services, or multipurpose senior centers in such area, for the provision of such services or centers to meet such need."

Workforce Investment Act

This act contains legal mandates for membership on local Workforce Investment Boards as well as mandated participation of community and state partners in the local one-stop delivery system. The mandates do not include financial commitments, but rather coordination and involvement. Resource sharing agreements by community partners and state agencies are required for all one stop centers. Additionally, as of July 1, 2009 state plans require regional planning within the Regional Planning Commission areas.

Voluntary Agreements

In addition to the required coordination activities specified by law, there are a number of voluntary agreements in which ARC is party to that aid in regional cooperation. Some of these are highlighted below.

Quad Party - Transportation Planning Coordination and Cooperation

Memorandum of Agreement between the Atlanta Regional Commission, the Georgia Department of Transportation, the Georgia Regional Transportation Authority and the Metropolitan Atlanta Rapid Transit Authority, 1/23/08. This was an update of a 1997 agreement to include GRTA.

Transportation Planning Coordination and Cooperation with Limited Member Counties

- Memorandum of Agreement between the Atlanta Regional Commission and Coweta County (6/14/04), Forsyth County (6/18/04), and Paulding County (5/11/04)

- Memorandum of Agreement between the Atlanta Regional Commission, Georgia Department of Transportation and Barrow County (3/31/05), Bartow County (3/31/05), Newton County (3/31/05), Spalding County (5/12/04), and Walton County (6/14/04)

Transit Planning Coordination and Cooperation

Letters of Agreement between the Atlanta Regional Commission and:

- Cherokee County Board of Commissioners (new Cherokee Area Transit System - CATS), 6/6/08.
- Clayton County Board of Commissioners (C-TRAN), 7/2/08.
- Cobb County Board of Commissioners (CCT), 6/16/08
- Douglas County Board of Commissioners (Douglas Vanpool), 10/21/08
- Gwinnett County Board of Commissioners (new Gwinnett Transit - GCT), 9/24/08.
- Memorandum of Agreement between the Atlanta Regional Commission and Coweta County (6/14/04), Forsyth County (6/18/04), and Paulding County (5/11/04)

Transportation Project Prioritization

Memorandum of Understanding between the Georgia Regional Transportation Authority, Atlanta Regional Commission and the Georgia Department of Transportation regarding methodology to prioritize transportation projects, 12/12/07.

Interagency Transportation Conformity (SIP MOA)

Memorandum of Agreement between the Atlanta Regional Commission, Georgia Department of Transportation, Environmental Protection Division, Metropolitan Atlanta Rapid Transit Authority, Federal Highway Administration, Federal Transit Administration, Environmental Protection Agency, 2/16/99

Atlanta Nonattainment Area Responsibilities

Memorandum of Understanding between the Atlanta Regional Commission and the Georgia Regional Transportation Authority with respect to each agency's transportation, land use and air quality responsibilities for the Atlanta Nonattainment Area, 9/11/02.

Portion of Atlanta Planning Boundary in Hall County

Memorandum of Agreement between the Atlanta Regional Commission, the Gainesville-Hall Metropolitan Planning Organization, the Georgia Department of Natural Resources Environmental Protection Division, and the Georgia Department of Transportation for transportation planning and air quality planning coordination and cooperation with respect to the portion of the Atlanta metropolitan transportation planning boundary in Hall County and to the 20-county nonattainment area for ozone under the 8-hour standard, 3/9/05.

FTA JARC and New Freedom Programs

Joint agreement between the Atlanta Regional Commission and the Metropolitan Atlanta Rapid Transit Authority regarding FTA Section 5316, Job Access Reverse Commute, and Section 5317, New Freedom Programs for the Atlanta Region, 4/14/08.

Transit Planning Board / Transit Implementation Board / Regional Transit Committee

The Transit Planning Board (TPB) was a partnership that operated from January 2006 to December 2008 to establish and maintain a seamless, integrated transit network for the Atlanta region. Created by a joint resolution of the Atlanta Regional Commission (ARC), Metropolitan Atlanta Rapid Transit Authority (MARTA) and the Georgia Regional Transportation Authority (GRTA).

The Transit Implementation Board (TIB) was established in January 2009 to guide the implementation of Concept 3, the long-range transit vision for the Atlanta region developed by the board's predecessor, the Transit Planning Board. The TIB was a partnership between the MARTA, ARC, GRTA, and GDOT. The TIB ceased to exist as of December 31, 2009.

In December 2009 the ARC Board voted to create the Regional Transit Committee (RTC) to provide governance over a region-wide transit system. The RTC builds on the TIB with significant changes to its structure and procedures. The RTC will continue the work of developing a region-wide fare structure and payment process that would allow riders to traverse the Atlanta region in a seamless, consistent manner.

Area Agency on Aging

County-Based Aging Programs: As the designated Area Agency on Aging, ARC supports the development of a comprehensive service delivery system for older adults and caregivers. Central to such development, ARC has contractual relationships with local governments and community agencies that implement a coordinated aging program in each of the region's ten counties. These ten agencies, referred to as County-Based Aging Programs, serve as focal points in the delivery of services to older adults and caregivers in their respective counties. In addition, ARC contracts with eleven community agencies to serve specific population groups with special needs that may put them at risk.

ESP (Enhanced Services Program): ARC supports the State of Georgia's most comprehensive database of aging and long-term care services. The database includes information on more than 20,000 listings in over 50 categories and 288 services. The database is updated weekly to reflect the most current service information. ESP is used throughout the region by information and assistance specialists at contract agencies to provide information on services to older adults and caregivers. ESP is also available by subscription to help businesses and community organizations provide the best information and referrals to their older consumers.

Local & Regional Studies

ARC provides funding to local governments to conduct studies through programs such as the Livable Centers Initiative and Countywide Transportation Plans. ARC also manages studies that affect multiple jurisdictions through programs such as Multi-Modal Corridor Studies and

Regional Freight study. Furthermore, ARC provides direct technical support to planning initiatives funded by ARC, as well as to planning partners around the region.

Authorities

Local government authorities are separate entities created for a specific public purpose. Local governments create these authorities as a means of providing additional services to their citizens. Under Georgia Statute, local government authorities can be created in three ways: by general enabling act, local laws, and Constitutional Amendments. There are 11 types of authorities that can be created through a general enabling act.

Authorities can be created to serve a single jurisdiction or provide services to multiple cities or counties. Most of the authorities registered with Georgia DCA were created to serve a single jurisdiction, but some authorities serve more than one jurisdiction, such as regional solid waste authorities, regional jail authorities, and joint development authorities.

Local government authorities may also function as either dependent or independent entities. If an authority's finances are included in a local government's audit or financial statements, or if it's operating decisions are made by a local government's executive officer or governing board, it is considered to be dependent. All other authorities are classified as independent, which represents the majority of authorities in the region.

Figure 2 below provides a list of authorities in the 10-county planning area.

Figure 2: Authorities in the 10-County Atlanta Region

Authority Name	Dependency	Single- or Multi-Jurisdictional
Acworth Area Convention and Visitors Bureau Authority	Dependent	Single-Jurisdictional
Acworth Downtown Development Authority	Dependent	Single-Jurisdictional
Acworth Lake Authority	Independent	Single-Jurisdictional
Butts, Henry, Lamar and Spalding County Joint Development Authority	Independent	Multi-Jurisdictional
Canton Building Authority	Dependent	Single-Jurisdictional
Canton Development Authority	Independent	Single-Jurisdictional
Cherokee County Airport Authority	Dependent	Single-Jurisdictional
Cherokee County Development Authority	Dependent	Single-Jurisdictional
Cherokee County Water and Sewerage Authority	Independent	Single-Jurisdictional
City of Alpharetta Development Authority	Dependent	Single-Jurisdictional
City of Atlanta Fulton County Recreation Authority	Dependent	Single-Jurisdictional
City of Atlanta Solid Waste Management Authority	Independent	Single-Jurisdictional
City of Decatur Parking Authority	Independent	Single-Jurisdictional
City of Douglasville Industrial Development Authority	Dependent	Single-Jurisdictional
City of Duluth Downtown Development Authority	Dependent	Single-Jurisdictional
City of Fayetteville Downtown Development Authority	Dependent	Single-Jurisdictional
City of Sandy Springs Development Authority	Independent	Single-Jurisdictional
City of Sandy Springs Public Facilities Authority	Independent	Single-Jurisdictional
City of Sugar Hill Downtown Development Authority	Independent	Single-Jurisdictional
Clayton County Airport Authority	Dependent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Clayton County Hospital Authority	Independent	Single-Jurisdictional
Clayton County Solid Waste Management Authority	Dependent	Single-Jurisdictional
Clayton County Tourism Authority	Dependent	Single-Jurisdictional
Clayton County Water Authority	Independent	Single-Jurisdictional
Cobb County Kennestone Hospital Authority	Independent	Single-Jurisdictional
Cobb County Recreation Authority	Dependent	Single-Jurisdictional
Cobb County Solid Waste Management Authority	Dependent	Single-Jurisdictional
Cobb County-Marietta Water Authority	Independent	Multi-Jurisdictional
Cobb-Marietta Coliseum and Exhibit Hall Authority	Independent	Multi-Jurisdictional
Conyers Downtown Development Authority	Dependent	Single-Jurisdictional
Conyers-Rockdale-Big Haynes Impoundment Authority	Dependent	Single-Jurisdictional
Coweta, Fayette, Meriwether Joint Development Authority	Independent	Multi-Jurisdictional
DeKalb County Building Authority	Dependent	Single-Jurisdictional
DeKalb County Convention Center Authority	Independent	Single-Jurisdictional
DeKalb County Hospital Authority	Independent	Single-Jurisdictional
DeKalb County Public Safety and Judicial Facilities Authority	Dependent	Single-Jurisdictional
DeKalb Private Hospital Authority	Dependent	Single-Jurisdictional
Development Authority of Cherokee County	Dependent	Single-Jurisdictional
Development Authority of Clayton County	Dependent	Single-Jurisdictional
Development Authority of Cobb County	Independent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Development Authority of Conyers, Georgia	Independent	Single-Jurisdictional
Development Authority of DeKalb County	Dependent	Single-Jurisdictional
Development Authority of Douglas County	Independent	Multi-Jurisdictional
Development Authority of Fairburn	Dependent	Single-Jurisdictional
Development Authority of Fulton County	Independent	Single-Jurisdictional
Development Authority of Gwinnett County	Independent	Single-Jurisdictional
Development Authority of Lawrenceville, GA	Independent	Single-Jurisdictional
Development Authority of Palmetto	Independent	Single-Jurisdictional
Development Authority of Peachtree City	Independent	Single-Jurisdictional
Development Authority of Powder Springs	Independent	Single-Jurisdictional
Development Authority of Rockdale County	Independent	Single-Jurisdictional
Development Authority of the City of Marietta	Independent	Single-Jurisdictional
Development Authority of the City of Roswell	Independent	Single-Jurisdictional
Douglasville Convention and Conference Center Authority	Independent	Single-Jurisdictional
Douglasville-Douglas County Water and Sewer Authority	Independent	Multi-Jurisdictional
Downtown Development Authority of Austell	Dependent	Single-Jurisdictional
Downtown Development Authority of Fairburn	Dependent	Single-Jurisdictional
Downtown Development Authority of Hampton	Dependent	Single-Jurisdictional
Downtown Development Authority of Holly Springs	Dependent	Single-Jurisdictional
Downtown Development Authority of Lawrenceville, GA	Independent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Downtown Development Authority of Smyrna	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Atlanta	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Buford	Independent	Single-Jurisdictional
Downtown Development Authority of the City of Canton, Georgia	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Decatur	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Douglasville	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Locust Grove	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of McDonough	Independent	Single-Jurisdictional
Downtown Development Authority of the City of Morrow, Georgia	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Norcross	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Roswell	Independent	Single-Jurisdictional
Downtown Development Authority of the City of Stone Mountain	Dependent	Single-Jurisdictional
Downtown Development Authority of the City of Waleska, Georgia	Dependent	Single-Jurisdictional
Downtown Development Authority of Woodstock	Dependent	Single-Jurisdictional
Downtown Marietta Development Authority	Dependent	Single-Jurisdictional
East Point Building Authority	Dependent	Single-Jurisdictional
East Point Business and Industrial Development Authority	Independent	Single-Jurisdictional
Fairburn Housing Authority	Independent	Single-Jurisdictional
Fayette County Development Authority	Dependent	Single-Jurisdictional
Fayette County Public Facilities Authority	Dependent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Fulton County/City of Atlanta Land Bank Authority, Inc.	Independent	Multi-Jurisdictional
Georgia Bioscience Joint Development Authority	Independent	Multi-Jurisdictional
Gwinnett County Airport Authority	Dependent	Single-Jurisdictional
Gwinnett County Recreation Authority	Dependent	Single-Jurisdictional
Gwinnett County Stormwater Authority	Independent	Single-Jurisdictional
Gwinnett County Water and Sewerage Authority	Independent	Single-Jurisdictional
Henry County Development Authority	Dependent	Single-Jurisdictional
Henry County Governmental Services Authority	Dependent	Single-Jurisdictional
Henry County Water and Sewerage Authority	Dependent	Single-Jurisdictional
Hospital Authority of Cobb County	Independent	Single-Jurisdictional
Hospital Authority of Douglas County	Independent	Single-Jurisdictional
Hospital Authority of Fayette County	Independent	Single-Jurisdictional
Hospital Authority of Fulton County	Independent	Single-Jurisdictional
Hospital Authority of Gwinnett County, Georgia	Independent	Single-Jurisdictional
Hospital Authority of Henry County	Dependent	Single-Jurisdictional
Hospital Authority of Rockdale County	Independent	Single-Jurisdictional
Housing Authority of Clayton County	Independent	Single-Jurisdictional
Housing Authority of Cobb County	Independent	Single-Jurisdictional
Housing Authority of Fulton County	Independent	Single-Jurisdictional
Housing Authority of Gwinnett County	Independent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Housing Authority of the City of Buford, Georgia	Independent	Multi-Jurisdictional
Housing Authority of the City of Canton	Independent	Single-Jurisdictional
Housing Authority of the City of College Park	Independent	Single-Jurisdictional
Housing Authority of the City of Conyers	Independent	Single-Jurisdictional
Housing Authority of the City of Decatur, Georgia	Independent	Single-Jurisdictional
Housing Authority of the City of East Point, Georgia	Independent	Single-Jurisdictional
Housing Authority of the City of Lawrenceville, GA	Independent	Single-Jurisdictional
Housing Authority of the City of Lithonia, Georgia	Independent	Single-Jurisdictional
Housing Authority of the City of Marietta	Independent	Multi-Jurisdictional
Housing Authority of the City of McDonough	Independent	Single-Jurisdictional
Housing Authority of the City of Roswell	Independent	Single-Jurisdictional
Housing Authority of the City of Sugar Hill, Georgia	Independent	Single-Jurisdictional
Housing Authority of the County of DeKalb, Georgia	Independent	Single-Jurisdictional
Industrial Development Authority of Austell	Dependent	Single-Jurisdictional
Industrial Development Authority of the City of Buford	Independent	Single-Jurisdictional
Joint Development Authority of Dekalb County, Newton County, and Gwinnett County	Independent	Multi-Jurisdictional
Joint Development Authority of Metropolitan Atlanta	Independent	Multi-Jurisdictional
Joint Public Safety and Judicial Facilities Authority for the Cities of Sandy Springs,	Independent	Multi-Jurisdictional
Kennesaw Development Authority	Dependent	Single-Jurisdictional
Kennesaw Downtown Development Authority	Dependent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
Lake Allatoona Preservation Authority	Independent	Multi-Jurisdictional
Lilburn Downtown Development Authority	Dependent	Single-Jurisdictional
Morrow Housing Authority	Dependent	Single-Jurisdictional
Norcross Development Authority	Dependent	Single-Jurisdictional
Palmetto Housing Authority	Independent	Single-Jurisdictional
Peachtree City Airport Authority	Independent	Single-Jurisdictional
Peachtree City Water and Sewerage Authority	Independent	Single-Jurisdictional
Pine Lake Downtown Development Authority	Dependent	Single-Jurisdictional
Redevelopment Authority of Clayton County	Dependent	Single-Jurisdictional
Residential Care Facilities for the Elderly Authority of DeKalb County	Dependent	Single-Jurisdictional
Residential Care Facilities for the Elderly Authority of Fulton County	Independent	Single-Jurisdictional
Resource Recovery Development Authority of Cherokee County	Independent	Single-Jurisdictional
Riverdale Development Authority	Dependent	Single-Jurisdictional
Rockdale County Water and Sewerage Authority	Dependent	Single-Jurisdictional
Smyrna Downtown Area Development Corporation	Dependent	Single-Jurisdictional
Smyrna Housing Authority	Independent	Single-Jurisdictional
South Fulton Municipal Regional Jail Authority	Independent	Multi-Jurisdictional
South Fulton Municipal Regional Water and Sewer Authority	Independent	Multi-Jurisdictional
Suwanee Downtown Development Authority	Dependent	Single-Jurisdictional
The Atlanta Development Authority	Dependent	Single-Jurisdictional

Figure 2: Authorities in the 10-County Atlanta Region (cont.)

Authority Name	Dependency	Single- or Multi-Jurisdictional
The Fulton-DeKalb Hospital Authority	Independent	Multi-Jurisdictional
The Housing Authority of the City of Atlanta, Georgia	Independent	Single-Jurisdictional
Union City Housing Authority	Independent	Single-Jurisdictional
Urban Redevelopment Agency of Clayton County, Georgia	Dependent	Single-Jurisdictional
Urban Redevelopment Agency of the City of Canton	Dependent	Single-Jurisdictional
Urban Redevelopment Agency of the City of Duluth	Dependent	Single-Jurisdictional
Urban Redevelopment Agency of the City of Kennesaw, Georgia	Dependent	Single-Jurisdictional
Urban Redevelopment Agency of the City of Morrow, Georgia	Dependent	Single-Jurisdictional
Urban Redevelopment Agency of the City of Stockbridge	Dependent	Single-Jurisdictional
Urban Redevelopment Authority of the City of Suwanee	Dependent	Single-Jurisdictional
Urban Residential Finance Authority of the City of Atlanta, Georgia	Dependent	Single-Jurisdictional
West Georgia Joint Development Authority	Independent	Multi-Jurisdictional
Woodstock Area Convention and Visitors Bureau Authority	Dependent	Single-Jurisdictional

Source: Source: Georgia DCA, <http://www.dca.state.ga.us/development/research/programs/lqa.asp>

Community Improvement Districts

Authorized by the Georgia Constitution, a Community Improvement District (CID) is a mechanism for funding certain governmental services including road construction and maintenance, parks and recreation, stormwater systems, water and sewer systems, and other services and facilities. The administrative body of the CID may levy taxes, fees and assessments within the CID, not to exceed 2.5 percent of the assessed value of the real property. Such taxes, fees and assessments may only be levied on real property that is used for non-residential purposes and revenues may be used only to provide services within the CID boundaries.

The General Assembly may create a CID by local legislation and conditioned on approval of the local jurisdiction(s) in which it resides. Additionally, the creation of a CID is contingent on receiving the written consent of a majority of the owners of the real property within the CID that would be subject to CID taxes, fees and assessments, as well as the owners of the real property within the CID that constitutes 75 percent or more by value of all real property within the CID which will be subject to CID taxes, fees and assessments. Figure 3 below provides information on the CIDs currently operating in the Atlanta region.

Figure 3: Community Improvement Districts

CID Name	Jurisdictions Served
Buckhead	Atlanta
Cumberland	Cobb County
Downtown	Atlanta
Evermore	Snellville, Gwinnett County
Gwinnett Place	Gwinnett County
Gwinnett Village	Norcross, Gwinnett County
Midtown	Atlanta
North Fulton	Alpharetta, Milton, Roswell
Perimeter (DeKalb)	Dunwoody, DeKalb County
Perimeter (Fulton)	Sandy Springs, Fulton County
South Fulton	Fairburn, Palmetto, Union City, Fulton County
Town Center	Cobb County

Source: Atlanta Regional Commission

Employer Service Organizations

Transportation Management Associations (TMAs) are typically organized groups of individuals or businesses created to address localized transportation issues. TMAs in the Atlanta region, in most cases, are non-profit organizations that were formed to facilitate the movement of people and goods in their geographically designated service areas. These organizations help improve accessibility and mobility in and around activity centers which have experienced rapid growth. The primary focus is to assist employers by providing technical advice and assistance on commute options, and by providing information on transportation services, including carpool, vanpool, and transit options. Employer Service Organizations (ESOs) work closely with employers to encourage formation of and participation in employer-supported commute options programs that help with employee retention, tardiness and absenteeism, as well as parking demand. They provide similar technical advice and assistance programs as provided by TMAs, but without being formed as a TMA. All TMAs in the Atlanta region are considered ESOs.

ARC sub-contracts with eleven ESOs in the region to distribute Congestion Mitigation and Air Quality (CMAQ) funds (listed in Figure 4). The Clean Air Campaign is funded separately. Eight of the recipients are TMAs/ESOs, one is an ESO only and two are ESO universities. These organizations provide specifically defined activities as part of the CMAQ program for their defined geographic area and some offer additional programs, such as vanpool subsidies and circulator shuttles. The ARC Transportation Demand Management Division coordinates and provides resources to the TMAs/ESOs in the Atlanta region.

Figure 4: Employer Service Organizations

Employer Service Organizations	Service Area
Cobb Rides (TMA)	Town Center Area
Commuter Club (TMA)	Cumberland Galleria Area
Perimeter Transportation Coalition (TMA)	Perimeter Center Area
Buckhead Area Transportation Management Association	Buckhead Area
Midtown Transportation Solutions (TMA)	Midtown Atlanta
Atlantic Station Access + Mobility Program	Atlanta Station
Downtown Transportation Management Association	Downtown Atlanta
Clifton Corridor Transportation Management Association	Clifton Corridor
Hartsfield Area Transportation Management Association	Hartsfield-Jackson Airport Area
Georgia Institute of Technology	University Campus
Clayton University	University Campus
The Clean Air Campaign	Atlanta Region

Source: Atlanta Regional Commission

School Boards

In the Atlanta region, there are 14 public schools systems – one in each of the 10 counties and 4 city-based school systems. In 2008, these systems included 809 schools serving over 690,000 students. In addition to the public schools, there were 295 private schools in the Atlanta region serving over 72,000 students. Public school districts have independent authority outside the requirements of local planning codes to site and construct school facilities. Private schools must follow local government regulations. 2008 enrollment information are show in Figures 5 and 6.

Figure 5: Public and Private School Enrollment (2008)

Public School Systems			Private Schools		
School System	# of schools	# of students	County	# of Schools	# of Students
Cherokee	33	35924	Cherokee	7	1388
Clayton	59	52029	Clayton	8	1253
Cobb	111	106673	Cobb	45	11666
Marietta (city)	14	7936			
DeKalb	147	97580	DeKalb	74	12775
Decatur (city)	6	2476			
Douglas	32	24586	Douglas	9	1477
Fayette	29	21961	Fayette	11	2205
Fulton	94	84337	Fulton	80	26597
Atlanta (city)	110	49101			
Gwinnett	107	154901	Gwinnett	39	9312
Buford (city)	4	2840			
Henry	45	38844	Henry	13	4491
Rockdale	18	15443	Rockdale	9	1618

Source: Georgia DOE / Private School Review

Figure 6: School Enrollment by County (% Public and Private)

County	Total Students	% Private	% Public
Cherokee	37,312	3.7%	96.3%
Clayton	53,282	2.4%	97.6%
Cobb	126,275	9.2%	90.8%
DeKalb	112,831	11.3%	88.7%
Douglas	26,063	5.7%	94.3%
Fayette	24,166	9.1%	90.9%
Fulton	160,035	16.6%	83.4%
Gwinnett	167,053	5.6%	94.4%
Henry	43,335	10.4%	89.6%
Rockdale	17,061	9.5%	90.5%
Total	767,413	9.5%	90.5%

Source: Source: Georgia DOE / Private School Review

Local Issues and Opportunities

From May to June 2009 ARC convened over thirty meetings with planning directors and staff from around the 20-county region. These meetings were held at a central location in each county and were attended by city and county staff, as well as members of ARC's Land Use, Transportation and Research Division planning staff.

During these meetings ARC staff presented information on the planning process for Plan 2040, with the remainder of the meetings spent discussing any planning issues the municipalities considered most pressing. Each jurisdiction's input played a critical role in the development of small area household and employment forecasts, later to be used in estimating the long-term travel needs of the region. Local input and knowledge garnered through these meetings was also used to better understand current and future local infrastructure and development challenges.

A one-page summary for each county was prepared that captures the primary discussion topics at the initial outreach meetings, as well as any key findings from regional review of local comprehensive plans. Local Issues and Opportunities were prepared for the 10-County RC planning area.

Cherokee County, Plan 2040, Local Issues and Opportunities

Land Use

- The development spectrum makes it difficult to forecast 2010, much less 2040- but all agreed this is a good time to plan. Having a county-wide conversation of what really makes sense to be more intensely developed, and where it should be rural would be very helpful.
- The County is having problems with federal money and feels the design parameters aren't feasible.
- Elected officials have trouble understanding character area narratives and think the future development map is not flexible.
- The County is likely very much over-retailed, but yet everyone still approves retail (particularly cities in the county).
- The Cherokee County map shows much more commercial farther up I-575 than the UGPM.
- Bells Ferry has a good overlay ordinance. Woodstock's Hwy 92 overlay needs to be revisited –has been a major handicap and is in many ways a detriment to development (doesn't recognize the real development potential).
- Piece of land without roads next to Etowah could be rural.
- There is a lot of Ag-Residential conflict in the County (nuisance issues, etc.).
- Waleska not interested in growing (NW part of county likely to be slow/no growth).
- E. Central Cherokee/Woodstock will be focal areas for growth.
- County wants increased density around nodes. Cities in the county have a fairly wide-range of densities they are pursuing.
- There are annexation conflicts in some cases, but in others the county has an agreement in place.

Transportation

- At a recent Civic League land use meeting the topic turned to transportation – 95% of people demanded the region address mass transit. The feeling is that if the region doesn't pay attention to transit, Atlanta will lose out to Nashville and Charlotte— seems to be real citizen support of massive transit expansion but a real disconnect with leadership.
- BRT is not the solution –real transit investment is needed.
- Lack of a good E/W route in Cherokee causes all existing state highways to have unusual traffic patterns. Hwy 92 has potential as a good east-west transit line (Acworth, Woodstock, Roswell). Hwy 20 and Hwy 140 are the worst. There is also a lot of cross county truck traffic.
- Development project has not improved SR20 & 575 interchange (no widening though they do have ROW).
- All state routes disconnect, e.g. through Canton, and no signage to enable access.

Housing

- Many people going through foreclosure have to leave the County because there are no affordable units; i.e. Woodstock has an 80% affordable senior development but rent starts at \$775/month. And most mobile home parks are being bought up.
- Cherokee County is not as bad on un-built lots as some other counties are, although the county does not have a good handle on the total number of un-built, semi-unfinished lots.
- There are fewer than (6-10) fully belly-up subdivisions in unincorporated county; cities are worse off with foreclosures.
- Senior Development: a lot along Hwy 92 in Woodstock, Canton has Laurel Canyon for seniors – Woodstock provides density bonus for senior development.

Economic Development

- Holly Springs recently saw its 8th builder bankruptcy; other cities are also facing multiple bankruptcies. Many believe that the next tidal wave will be the commercial businesses having to go back to the bank-big impact on local tax base.
- Much of the county's small businesses were construction related; they are now scrambling to keep themselves alive.

Community Facilities

- School board doesn't allow sidewalks on their property – this prohibits safe routes to schools.
- They (School Board) are building huge schools out in the county that are not close or easily accessed by anyone.
- Woodstock Greenprints –offers an opportunity for 62 miles of trail facilities.
- Reinhardt College (1,000 students) expansion is limited-they would have to provide sewer (not available in Waleska).

Clayton County - Plan 2040, Local Issues and Opportunities

Land Use

- Opportunities for in-migration will be largely found in two development sectors: in-fill and higher density residential development. A limited number of undeveloped sites as well as relatively large lots containing only one dwelling are found in residential areas of the cities.
- There is currently very little land used for agriculture in Clayton County, and the bulk of this land is located in the Panhandle area.
- The Tara Boulevard corridor contains a number of older strip malls that are now in need of redevelopment, as does Riverdale Road.
- The few remaining undeveloped or vacant areas in the county are generally larger tracts in the southern Panhandle and northeastern Rex/Ellenwood areas
- The residents of the southern area of the county have indicated that they want to preserve the rural character of the area during public input workshops.

Transportation

- Sidewalks are generally not present on the major functional classes of roadways throughout Clayton County, including the Cities of Jonesboro and Forest Park.
- Of the residents commuting outside of the county for work most are commuting to neighboring counties, such as Henry, Fulton, Fayette, and DeKalb. Over half of the out-commuters are commuting into Fulton County.

Housing

- Housing growth has been primarily detached single family homes; almost two-thirds of the county's housing units are single family detached homes. Comparatively, multi-family housing is declining in share of housing in the county.
- Anecdotal evidence suggests that many of the extended stay hotels along the Tara Boulevard corridor are serving as semi-permanent residences for lower income, cost burdened and severely cost burdened households in Clayton County.
- The projected aging of the population indicates there will be a need for smaller low maintenance residences such as condominiums, retirement communities and assisted living facilities.

Economic Development

- Clayton County has a large number of programs and tools that can be utilized to foster local economic development, including industrial recruitment opportunities, business incubators, special tax districts, and industrial parks.
- There is a need to expand opportunities for education in professional technical specialties in order to fill local technical jobs with Clayton residents as well as a need to expand the office professional sectors in the County to provide more clerical and administrative job opportunities for residents.

Community Facilities

- Clayton high school graduation test scores and high school dropout rates have fallen behind neighboring counties.
- Clayton College & State University offers a great resource as an accredited, moderately selective four-year state university in the University System of Georgia whose enrollment exceeds 5,700.
- The county has plans to pursue a program of expanding water reclamation capacity to meet projected 2025 demand in accordance with the 2000 CCWA Master Plan

Natural and Cultural Resources

- Clayton County has a low proportion of open and green space to population. However, the county's numerous floodplains provide an opportunity for the conservation of open space and protection of the water supply and the development of additional areas for passive recreation.
- Clayton County Parks and Recreation Department maintains 670 acres of park land including a number of recreational facilities for the leisure and enjoyment of its citizens.

Intergovernmental Coordination

- The majority of the county's departments and entities involved in the delivery of services are unaware of the SDS and coordination between the county and cities is minimal.
- The county has taken steps to coordinate land use plans for the areas in proximity to Hartsfield-Jackson International Airport with the airport's long range plans.

Cobb County - Plan 2040, Issues and Opportunities

Land Use

- Concerned that elected officials may start to panic over the lack of development, and would begin approving bad projects. The question was posed of how ARC or others could be involved presenting the best information obtained through this process to these officials.
- Because Kennesaw is almost built out the city is exploring infill redevelopment. Kennesaw is getting some proposals to build unfinished properties, but the standards will need to be relaxed (smaller units, not brick, etc.).
- Kennesaw has antiquated zoning and is looking to eliminate some of the existing zoning categories and to streamline the ordinance; they are also likely to do a senior resident overlay.
- West Cobb has a lot of un-built lots and conservation subdivisions where everything is sitting vacant. This part of the County experiences a slow-growth political environment.
- South Cobb wants to see redevelopment.
- East Cobb is open to mixed use/aging-in-place as long as it is a quality product; residents are concerned about retaining the suburban residential character.
- Need a model to identify industrial/distribution areas that should be protected as industrial land in the future (industrial preservation area) – could this something ARC could do region-wide.
- Mixed-use developments have not fulfilled Powder Springs' vision for traditional neighborhoods and there are no associated retail and office developments supportive of residential uses.
- Aging of the 1st ring suburban areas of South Cobb, Cumberland CID, Smyrna, and Marietta and their need to continue redevelopment efforts; aging shopping centers and vacant big box stores and their impact on commercial corridors.
- Acworth redevelopment: Working on mixed-use village of residential and commercial applicable to LCI.

Transportation

- The County is looking to do an Acworth, Kennesaw, Marietta transit linkage (loop shuttle looks most feasible).
- The City and County are trying to update the Delk Rd. LCI – when BRT went away the focus of the study wasn't accurate.
- The business community and residents desire to have rail transit in Cobb County as a way of providing alternative transportation modes for regional connectivity. People want rail on the US41/I-75 corridor somewhere.
- More focus should be on pedestrian and bicycle facilities, rather than just saying there needs to be transportation alternatives. Better connectivity of pedestrian facilities is needed.
- Regional freight traffic is an issue that negatively impacts Cobb County.

Housing

- Kennesaw's biggest challenge is getting a balance of senior, workforce, and student housing to downtown in order to achieve mixed income, and a diverse housing stock.
- Marietta's Housing Authority is doing a lot of new projects and has added about 100 units per year.
- The rental dynamic issue– some areas have too much rental as it is; this becomes an issue of how to approve new proposed rental if there's a ton of old that is no longer a community asset, etc. but overall the urban area isn't meeting the market need right now for apartments. What's the changing face of rental housing in the region?
- Senior housing – can you build too much of it? Should we be concerned over this?
- Cumberland residential development– mixed uses aren't moving, single use apartments/townhomes are moving.

Economic Development

- The County is not experiencing construction– there have been some re-zonings, but not of the highest quality.
- Sandy Plains and East Piedmont are in need of redevelopment – this is perhaps the biggest need in the County.
- Marietta has a lot of developments with money in the ground, but nothing is going vertical.
- Marietta's Franklin Road – Global Green Technology Corridor – is flipping its use from residential to green technology; they are looking to do a feasibility study to see what it would take to encourage firms to relocate here.
- SPLOST projects have been very successful, with 27 ground breakings reported.
- There are lots of mixed use projects in Powder Springs that have stalled; the city has been approached by developers to restart the projects, but the projects would be less progressive than originally planned.
- Powder Spring's Ind/Off development have not kept pace with residential; these are needed to provide a balanced tax base.
- Limited access on US 278 limits Powder Springs' economic growth and the ability of the City to balance its tax base.

Community Facilities

- Paulding County is the only surrounding county whose growth places a great deal of stress on the local infrastructure.

DeKalb County (including City of Atlanta) - Plan 2040, Local Issues and Opportunities

Land Use

- DeKalb County has identified the I-20 corridor as key to future development. The county is also proposing increased density along Buford Hwy, which may have opposition because of the stress it will put on existing infrastructure.
- DeKalb has been consistent with the unified plan (using mega corridors/MARTA stations for major development). But to redevelop existing apartment complexes developers need realistic densities, which the neighbors often oppose.
- Many DeKalb residents want their neighborhoods to stay the way it was when they moved in. Some of this is age difference, people over 50/60 do not want what the younger generation wants.
- Atlanta single-family neighborhoods are sacred; but there is support for rezoning non-residential areas around them.
- The link between planning and health is being given more attention, and this could be a good way to talk about density—talk about health, lifelong communities, quality-of-life and how it relates to development/ transportation.
- Atlanta focuses on sustainability, and is trying to reshape how the city does business to be more sustainable.
- The main development focus area in Dunwoody is the Perimeter Center area. Envisioned development: “higher and more dense” townhomes, condos- but not apartments. Currently the area has some big DRIs approved (waiting). Citizens have accepted that densification will occur here, but will “protect the rest” of the city.
- Other Dunwoody (re)development hot spots include a couple of nodes along I-285 (older ½ story office buildings), along PIB and Winters Chapel Road (older apartment buildings), abandoned Old Shallowford Hospital, and the “Village” (N. of Perimeter Center). The rest of Dunwoody consists of single-family neighborhoods.
- Most of the firms initially interested in the old GM plant in Doraville have pulled out.
- Due to undevelopable terrain, it is expected that much of SE DeKalb will see little development activity going forward.

Transportation

- Ideally the Plan2040 could help to highlight the region’s infrastructure deficiencies. DeKalb has to retrofit things, which puts stress on existing infrastructure—water, sewer, etc. A comprehensive infrastructure deficiency assessment could be beneficial to the process and county.
- In Dunwoody the transit station potential “has not really clicked yet”.
- Chamblee bought into the idea of TOD’s— created new zoning ordinance, and allowed supporting density. But then felt let down by MARTA guidance (lack-of) after these necessary steps were taken.
- Key priority areas should be MARTA stations.
- There are challenges/inconsistencies with TOD development proposed in LCI and comp plans, and what MARTA wants.
- The funding is not there for transportation improvements in high growth/dense areas.

Housing

- Southside DeKalb has many foreclosed, vacant subdivisions (south of I-20). A housing assessment could be beneficial to get a grip on the vacancies and foreclosures, priority areas, and what is happening in the county.
- In Atlanta luxurious, large homes affordable to 10% of population were overbuilt, so while there are a lot of housing units available now, they are not affordable to everyone. The \$500K house is overbuilt.
- In certain communities, no more affordable housing development is supported.

Economic Development

- Atlanta and DeKalb are highly affected by the collapse of housing, vacant office and foreclosed and/or abandoned homes.
- In Atlanta there is a distinct disadvantaged area with low graduation rate, jobs, income. These areas need addressing and actual strategies for improvements. These strategies must be different than traditional activity center strategies.

Community Facilities

- Atlanta consistently hears about the lack of green space in the city; city is now finishing greenspace plan.

Intergovernmental Coordination

- Local ordinances and regulations guide the county, but citizens and elected officials have other approaches on occasion.
- There is need for more training (through ARC) so local governments can implement concepts of Plan 2040. ARC could have training on how mixed use, density, transportation, transit works with high density to help local staff have the conversation with constituencies and elected officials because currently they can’t understand that increasing density does not automatically increase trips, and mixed use promotes multi-modal. Help is needed.

Douglas County - Plan 2040, Local Issues and Opportunities

Land Use

- The Douglas County Board is considering allowing more density elsewhere in the county to compensate for the restrictions in the Dog River area. There are no plans for extending sewer to the Dog River area.
- The Highway 92 Corridor LCI is a likely target for future growth—mixed-use is being encouraged from I-20 to the county line in both directions, at a density of up to 8 units/acre.
- The new Manchester Tributary's planned build out population was 15,000, although that may not happen now.
- There is no major pending residential in eastern Douglas County, but it is zoned for low and medium density residential.
- Thornton Road is likely to stay Douglas' industrial corridor; an SR6 study encouraged the consideration of mixed-use here.
- What is going on in southern Fulton County (Foxhall development) will shape what happens in Douglas south of Hwy 166. The Douglas portion is mostly second homes, but success could spur additional development of primary residences.
- Most growth will be north of I-20, with avg. densities of 0.3 u/a, and 15% impervious restrictions on residential, 25% on commercial. This area is likely to develop before that south of Hwy 166. Some growth could push south of I-20.
- Douglasville is targeting the area south of I-20 between the western and eastern halves of the city for possible annexation.
- The Chapel Hill Road (Arbor Place) corridor's development could in the future "shift east" to around Hwy 92.
- Villa Rica has an agreement not to annex any more area in Douglas County; but much of their growth will be in Carroll.

Transportation

- The State is moving SR5 designation to the Brightstar Connector.
- There are two new park-and -ride lots in Douglas County.
- Douglasville is funding bike/ped under CMAQ, TE, and LCI funds with some local general funds. Douglas County also applied for safe routes to school funds.
- The Highway 92 project is looking to connect between neighborhoods with multi-use facilities.
- There is a lack of east-west connectivity in the county, resulting in I-20 being used for short trips.
- The interstates, railroad and the river are natural barriers for connectivity.

Housing

- Douglasville has done some residential redevelopment recently off Blair's Bridge Road in the Old Egg Farm area.
- Douglasville typically zones apartments at 8 units/acre, but in their DCDs (similar to PUDs) they allow up to 13-14 units/acre. Three years ago they had approved 4,500-5,000 units but that activity has stopped.
- There is likely to be some future multi-family development in the Hwy 92 corridor near the interchange with I-20, and around Lee Road. The Lee Road corridor on the whole is likely to be high growth.
- Douglas County has not zoned any multi-family units in the past eight years.
- The board is having trouble getting a handle on senior housing, and whenever it is built it fills up quickly.
- There are many incomplete subdivisions that have gone bankrupt.

Economic Development

- There is demand for a new conference center in Douglasville as the current one is booked a year in advance.
- Retail sales are down at Arbor Place Mall, and there have been big-box closures leading to 'greyfield' sites.
- Douglasville now has a development authority to develop empty big boxes.
- There is very little Class A office in the County, placing much of the tax burden on residential (66% of residents leave the County for work); there was some planned Class A at New Manchester Tributary, but this may not be built.
- There is a lot of vacant industrial speculative space in the County, and in general the area is close to build-out as difficult topography leads to high development costs. There could be some growth along Bankhead Highway but this is not a strong employment base for the County as productivity gains have reduced employees per square foot in this space (note: the Inner Harbor site in south County is 800 acres but has only five small buildings).
- WellStar Hospital and Arbor Place Mall are the major job centers; no new major employers are anticipated for the County.
- Arbor Place Mall is experiencing a lot of vacant retail and major chains are closing the stores within the area.
- There is a DRI for Douglasville Place (1 million sqft of mixed-use, including theater).
- There is no active SPLOST in the county.

Community Facilities

- The county has plenty of water supply, and Villa Rica is working on it agreements with Douglas and Carroll.
- Douglasville will build a new police building in the Hwy 92 LCI area.

Fayette County - Plan 2040, Local Issues and Opportunities

Land Use

- The unincorporated area is characterized as an exurban/rural area containing single-family residential subdivisions, large estate/agricultural lots, and some commercial/industrial areas.
- Unincorporated Fayette County has primary residential zoning areas of 2-acre lots, and has some areas that zoned for estate lots (5 acres per unit).
- The existing incorporated areas, especially those served by a public water system and a centralized sewerage system, are the centers of intensity and density in terms of development in Fayette County.
- The historic Courthouse Square in Fayetteville should be a destination point containing specialized retail and restaurant opportunities for residents of Fayetteville and the surrounding areas, as well as tourists.
- The area around the Piedmont Fayette Hospital on Hwy 54 is a key growth area. The area has been master planned to provide medical services and job opportunities to the Fayette County area.
- The reconfiguration of SR 74 on the edge of the downtown has created two “main” streets for which desired transportation roles need to inform the type of development allowed along them.
- As opposed to a centralized “downtown” area, Peachtree City’s master plan identified a series of villages with distinct village retail centers.
- All the State Route corridors in unincorporated Fayette County are regulated by overlay zones in the Zoning Ordinance. Due to annexations, many of the primary development areas are not consistently controlled by city or county development practices and regulations.
- Fayette County has about 1 decade worth of available land; Fayette has been consistent on their message about non-expansion of sewer, but there will be septic failures that will demand the issue be addressed.

Transportation

- The State Routes are key transportation corridors in the county.
- Currently, there are no mass transit opportunities available within Fayette County other than Georgia Regional Transportation Authority (GRTA) vanpools.
- Peachtree City has over ninety miles of multi-use paths. The County is also interested in developing multi-use paths throughout the county.

Housing

- Over the next 20 years, the Baby Boomer generation will enter their retirement years. Tyrone will need to consider additional local healthcare, housing options, and senior services.
- In Fayette County new development should include a mix of housing types including traditional neighborhood development style residential subdivisions.
- The County anticipates slower growth, and therefore demand for housing over the next decade.
- Fayetteville’s Comprehensive Plan calls for alternative housing types that appeal to “empty nesters,” single adults, and childless couples.
- Small, neighborhood-based businesses and mixed-use developments are needed to revitalize the Downtown Historic District in Fayetteville.
- Foreclosures have been focused in the northern half of the county.

Economic Development

- The hospital area in Fayetteville is becoming an important economic engine for the entire county.
- New College and University satellite campuses have been discussed in the county.
- Currently the county and cities are performing relatively well in terms of keeping commercial and office space occupied.
- Development Authority is expecting an overall balance between jobs lost and gained during this recession.
- The overall economic goal for the County is to attract businesses that provide employment of a highly educated workforce matching the demographics of the county.
- Tyrone currently lacks excess sewer capacity. Tyrone will need to add capacity via private systems, public investments in wastewater plant(s) or contracting with another municipality.

Community Facilities

- Peachtree City owns and maintains approximately 30% of the total acreage in the city as dedicated greenbelts or open space.

North Fulton - Plan 2040, Local Issues and Opportunities

Land Use

- The City of Milton intends to establish the City as being unique among the cities of northern Fulton County by nurturing its equestrian, agricultural, and rural residential community to set the City apart from the surrounding cities.
- Johns Creek currently has no central gathering place. The City has an opportunity to create this area, allowing for more control over design features.
- Alpharetta anticipates that the rapid commercial development of the past twenty years will plateau and that the city will mature from a bedroom residential community to an economic center of significant proportion.
- Many of Roswell's existing activity centers could accommodate redevelopment, including more intense, mixed uses and pedestrian amenities. Though many people still consider it a 'bedroom community' and resist major redevelopments.
- There is opposition to change occurring in single-family neighborhoods surrounding high density nodes where development will occur.
- Forested areas within Sandy Springs help define the character of the city and should be preserved.
- The potential redevelopment of suburban non-residential uses (such as one-story an automobile-oriented commercial and office facilities and campus style office parks) is critical to creating mixed-use development in Milton.

Transportation

- Due to Alpharetta's growth in both its residential and non-residential populations, traffic congestion has become a problem within the city.
- Roswell has limited road capacity to help manage growth. Other areas in north Fulton have invested heavily in transportation facilities that have ultimately induced more demand for access and development pressure along these corridors.
- Limited roadway connectivity funnels almost all traffic through already congested intersections. These congested intersections constrain the overall capacity of these arterial corridors.
- Neighborhoods are not well connected to schools, parks and community facilities with sidewalks and bicycle facilities.
- Longer distance bicycle and trail routes are needed to provide access to community amenities and alternatives to automobile trips for commuting or errands.

Housing

- A variety of housing types, including multi-family should be permitted in transit-oriented live-work areas in Sandy Springs. Higher density housing should be placed near commercial centers, transit lines and parks, to enable more walking, biking and transit.
- A large portion of the Mountain Park community is changing to become rental.
- As the residents of Sandy Springs age, there may be a need for new and different group quarters accommodations, such as nursing homes. "Life cycle" or "mixed generation" communities that provide for persons of different age groups (including seniors) should be encouraged. Other jurisdictions in north Fulton also see the need to accommodate individuals that would like to age-in-place.
- High income and high housing cost create a lack of mixed income housing in Johns Creek; this creates challenges for the work force including teachers, police and firemen, as well as other service providers who would like to live where they work.

Economic Development

- Economic development efforts in Sandy Springs will focus primary attention on redevelopment – including the implementation of specific strategies for the revitalization and redevelopment of the Roswell Road corridor and the Town Center area. Redevelopment areas in Sandy Springs should be pedestrian and transit friendly.
- The northeast portion of Roswell contains almost exclusively nonresidential development.
- There may be additional opportunities for centers within Milton, but these sites would need to be carefully considered before they could be identified as neighborhood or community centers.

Community Facilities

- The Chattahoochee River corridor is a critical natural resource in north Fulton and is shared by many jurisdictions in the area.
- There are significant issues related to the location and ownership of sewer lines and facilities.
- It is becoming increasing difficult to provide the same levels of service in north Fulton that residents and property owners are accustomed to.

South Fulton - Plan 2040, Issues and Opportunities

Land Use

- Fulton County is working on a plan to maximize the potential of the Fulton Industrial Boulevard area. Currently, there is no overlay or TAD/CID in the Fulton Industrial area.
- Commercial areas are looking to intensify within existing nodes.
- It is the same distance from Buckhead to Downtown Atlanta as it is from Downtown to College Park.
- About half the neighborhoods in College Park want to see redevelopment, others may be resistant.
- Hapeville is open to higher densities. In fact, Hapeville has some the higher allowed densities in the region, but no MARTA station.
- In 2006 Fairburn doubled its size through annexation. Most of the land is agriculture or low density, and most of the residents don't want change south of I-85. All of it should be rural within the future (1 acre lots are larger).
- East Point has a lot of vacant properties.
- The College Park LCI has not been incorporated into the city's comprehensive plan.
- College Park has 150 acres of redevelopment potential (AirTran property). However, the City of Atlanta owns land that College Park wants to buy and Atlanta won't sell – This is a challenge for redevelopment.

Transportation

- Campbellton-Fairburn Road should be widened.
- An access management plan for Old National Highway is needed.
- Could a shuttle be beneficial for the Tri-City area? Where could the shuttle run?
- Fairburn's big concern is transportation interchanges at I-85 at GA 74—a new interchange is needed to serve the CSX facility. CSX doubled traffic at their facility, and added two large industrial parks. All is being funneled onto GA 74 interchange with commuter traffic (causing obvious issues).
- Is commuter rail through south Fulton to Peachtree City a viable option?
- Fairburn is a good location to serve commuters with rail infrastructure and interchanges.
- The area would like to see better transit than a single bus addition.
- College Park wants commuter rail but current council is very opposed to density.

Housing

- College Park has an issue with absentee landlords; 80% of housing is rental.
- College Park residential development has been dead in the water; some infill but nothing significant.
- East point has many housing options, but also has problems with a lot of vacant properties.

Economic Development

- There is a lot of crime in the Fulton Industrial Boulevard area.
- South Fulton CID has been a great partner and is successful in keeping projects going.
- The downtown Fairburn property owners are long term property owners and do not necessarily want to improve their properties.
- Fairburn opened a college campus with Georgia Military (but no student housing yet); MARTA has helped by adjusting their bus routes.

Community Facilities

- Islands of unincorporated land in the county make a service delivery difficult.

Natural and Cultural Resources

- College Park is the 4th largest historic district in the state.

Intergovernmental Coordination

- Coordination with Cobb County would be beneficial in dealing with the Six Flags area.
- College Park needs better coordination with the Airport—there have been lawsuits between the airport and property owners.
- East Point, Hapeville, College Park don't cooperate and coordinate as much as they should.
- East Point staff is moving ahead with planning, and formulated a good master plan, but staff is unsure if it will be approved by Council.

Gwinnett County - Plan 2040, Local Issues and Opportunities

Land Use

- There is limited space left in Norcross for any greenfield development.
- Older shopping centers in Lilburn are doing well, no tear downs along US29; desire to redevelop Lilburn's Old Town area.
- Sugar Hill has developed/expanded as "islands" due to flexibility afforded to developers.
- Norcross contains a lot of late 70's / early 80's office buildings and parks that have become empty the last 2-3 years. These are now Class C office and have trouble competing with office parks in the NE corridor along I-85. A huge incentive for redevelopment of these office parks would be MARTA or light rail extension through Norcross.
- There are many aging in place seniors around downtown Norcross that are resistant to development.
- There is interest in Loganville for vacant properties for more senior development. The City is also discussing with Walton added sewer capacity to support development in unincorporated area along Hwy 78.
- Snellville is historically resistant to density, no more multifamily projected. No recent re-zonings (used to be 20 a month).
- Suwanee has a 27% retail vacancy, but it is still hard to convince developers to stop building retail.
- According to Stakeholders in the County's 2007 Regional Assessment, the County's existing Development Regulations do not sufficiently promote the quality of the built environment nor adequately protect the county's environmental resources.
- Gwinnett has significantly aged demographically the last 10-15 years, which has led to Partnership Gwinnett initiatives to develop places/ activities for younger residents.

Transportation

- There is an ongoing study for Buford Hwy, which could involve widening, with lower intensity and slower speeds.
- The County anticipates that future congestion may lead to out migration of important employers as well as current residents.
- Land use decisions need to be related to the efficiency of our road and transit system.
- The county and State should continue to explore commuter rail to improve good air quality and relieve road congestions; the potential for commuter rail lines along both the CSX and Norfolk Southern lines should be fully explored and evaluated.
- The County's residential and non-residential communities are in need of more effective internal and external connectivity.
- Opportunities for additional pedestrian and bicyclist mobility need to be explored.

Housing

- Code enforcement difficulties are endemic.
- Norcross believes housing will be OK when the economy turns, but lowered price points are critical. Hope for increased affordability with recessionary changes.
- There is a 1,000 lot supply with 6 abandoned subdivisions in Loganville. Grayson has 100s of abandoned units, at least 40 abandoned subdivisions; City anticipates subdivisions asking for changes in conditions – smaller lots, higher density, etc.
- The core is the only area of multifamily zoning in Sugar Hill; there won't be any more such zoning outside the current area.
- Gwinnett's housing choices and the housing needs of its evolving demography and employment base need to be better matched. Research should be conducted to identify the needed types of housing that are not presently being provided.

Economic Development

- Buford Highway through Norcross is an "income divider" with northern incomes 2x greater than south of Buford Hwy.
- 145,000 square feet of office space in Suwanee, where the Falcons used to be, will become an employment center (Opus Gateway / Falcons Nest). Currently the city experiences 48% office vacancy; although a 5-story office building was just finished, which could be inflating the number.
- Major growth in biotech along Hwy 316 expected in unincorporated Gwinnett County.
- The County's average wages and incomes are declining as the lower-wage service jobs are increasing.
- The county anticipates the I-85 corridor will continue to evolve from commercial-light industrial to a more office and services orientation.

Community Facilities

- Lilburn recently bought a 25-lot subdivision for a library site, and City Hall is proposed @ Hwy 29 and Main – the city will also redevelop on 10 acre site between these two sites (library and City Hall).

Natural and Cultural Resources

- Opportunities to set aside significant open and green spaces will diminish over the next 20 years. Many of the County's older areas need "green space" retrofitting.

Henry County - Plan 2040, Local Issues and Opportunities

Land Use

- There is a need to promote new developments that create a sense of place and preserve valued elements in the county. In the past the County and its cities have been reactive to the needs of a growing population, rather than being supportive of where growth can best be supported.
- Henry County is rapidly losing its vacant developable land, agricultural land, scenic areas, and open space to development. In 2009, growth and annexations have slowed compared to previous years.
- Land use could play a larger role in small water supply watershed protection. Currently there is a conflict between lot size and impervious surface in the watershed district.
- Matching School Board actions and policies related to siting and design is crucial for local governments.
- County planning staff has not been able to get buy-in on mixed use development. The Comprehensive Plan needed to be amended to reflect commercial as a future land use in areas originally planned for mixed-use development.
- Cities and Henry County are using small area planning efforts (like LCI) to determine appropriate densities in the county's activity centers. These activity centers are to be strategically located throughout the county and serve as focal points for development. They also should be designed so as to provide opportunities for walking and biking.
- Henry County does have a new comprehensive land use and transportation plan, but many of the assumptions that the plan is based on may not hold true with the new economy.

Transportation

- Existing north-south and east-west corridors are impacted by congestion. Poor coordination within the county and other stakeholders hampers the overall transportation network.
- The county's role as a major center for warehouse/distribution centers has resulted in significant problems with truck traffic in some locations.
- Overall the county's transportation system is dominated by highways, but the county is looking to have Park-and-Ride lots at every interchange along I-75 to support GRTA bus operations. Commuter rail is also desired in the City of Hampton.

Housing

- Housing prices in Henry County are considered relatively affordable compared to urban counties in the region, but until the previous recession costs have risen more rapidly than incomes.
- There are a growing number of non-family member households that have limited housing options in the county.
- Henry County should be prepared for meeting the needs of Baby Boomers as they making choices about where to relocate. Many are looking for alternatives to large-lot, single family dwellings.
- The county has many vacant subdivisions, particularly in western Henry County.

Economic Development

- Education and increasing the educated workforce is the biggest issue within the county. There are currently limited post-secondary education opportunities. A local technical college is needed to improve the skills of the labor force.
- The County has a low jobs-housing balance illustrating that is currently a 'bedroom community'. This results in a fiscal imbalance, as well as longer commutes.
- Past success in developing industrial/warehouse space has lead to many speculative buildings which are currently vacant.
- The Atlanta Motor Speedway attracts tourism, but could help attract nation and international industries to the county.
- There is an opportunity to nurture emerging medical, technical and other professional fields, but the cities and county must find appropriate areas to promote office development.
- Economic development is an issue within the county. Currently there is no economic development department, except the Development Authority whose main focus is attracting warehouse/distribution facilities.

Community Facilities

- The County is facing growing demand for many of the services that they provide.
- Location of community facilities (including schools) could be a way for the county to foster a sense of community, including clustering these uses in major activity centers.

Rockdale County - Plan 2040, Issues and Opportunities

Land Use

- Rockdale County might be close to its capacity for land use and growth.
- Majority of growth occurs along both sides of I-20 within a 2-3 mile zone north and south of interstate. Employment and population growth is expected to continue along this corridor. Any growth north of the I-20 buffer will be minimal, because of very rocky soils (one unit per acre or less).
- North of East Hightower Trail in the county is a watershed area, and is not expected to develop much.
- Conyers zoning ordinance needs updating.
- Conyers focus is in the Historical District. From the RR track south, and all the way to the city is where development is going to occur, including the possibility of higher-density multifamily south of I-20.
- Conyers LCI area on West Avenue is developing with mostly new construction anticipated rather than redevelopment.
- The willingness to increase density is going to be a new discussion for the county; development pressure in LCI Area is 30-40 units/acre, In S. Rockdale density is about 1 unit/acre.
- The area around the hospital and Old Town needs supportive density.

Transportation

- Rockdale County and Conyers need to become attractive to younger residents; commuter rail could be an attractive draw to the county, although Conyers wonders if light rail is feasible in this plan 2040 process.
- It is tough to sell the density without the transit discussion.

Housing

- The county has seen no new permitting activity and has roughly 20-25 abandoned subdivisions.
- Long term goal for Hwy 138 is increased residential to balance with commercial development already present.

Economic Development

- Small-scale commercial development and prime retail exist south of 2-mile beltway (138 and 212) in Conyers, and further east along Salem Road near I-20 (mixed-use).
- Hwy 212 and Hwy 138 development could be further leveraged if the Daniels Road DRI (in DeKalb) gets traction.
- SR138 corridor employment southeast of Conyers expected to decrease and residential development to increase.
- SR138 & Union Church has a small commercial node; if tunnel goes through, increased development pressure is expected.
- Rockdale wants to transition from a bedroom community to a mixed use community to provide better jobs.
- The area around Stonecrest could be a potential new center (LCI study area).
- The area around the horse park was envisioned to be high-tech jobs, but this has yet to significantly materialize.
- Conyers has lost a lot of its industrial base.
- The county is trying to get more information and tech-type jobs into the county, but there is a lot of competition for these jobs.

Community Facilities

- There are some geologic restrictions to sewer capacity. There are plans for expansion of sewer sometime in the future in areas south of I-20 (138 Salem Road side). While all of Conyers has sewer, increasing capacity near DeKalb will depend on DeKalb's development around Stonecrest. New development will have issues with sewers.
- The Path's plan for Arabia Mountain is driving expanded pedestrian byways and parks.
- Tunnel concept plan (interbasin) is proposed at far southwestern corner of the county, across Rockdale from DeKalb into another part of DeKalb. There could be some capacity increase associated with this that might allow development of a smaller-scale at the I-20 corridor from Pole Bridge to Henry line.

Natural and Cultural Resources

- There are protected areas near Arabia Mountain and the Monastery of the Holy Spirit. Arabia Mountain and the horse park are key important resources.

Intergovernmental Coordination

- There is currently no intergovernmental agreement for sewer or water.