

CHAPTER 8 URBAN DESIGN ELEMENT

Urban design has been a key public policy concern in Roswell for more than three decades. The architectural design of development within the Historic District has been reviewed and approved by the Historic Preservation Commission (see Chapter 6 of this Comprehensive Plan), formerly established as an Civic Design Commission before the Historic Preservation Act of 1980. In addition, for more than two decades, a Design Review Board has reviewed the architecture, site design, landscaping. Long before the adoption of design guidelines was the “trendy” thing for proactive municipalities to do, Roswell prepared, adopted, and implemented design guidelines for selected areas of the City. Together, these programs of architectural and site design review have helped Roswell to preserve its past, ensure quality development, and guide its future in a way that maintains and enhances its character.

An Urban Design Element is not required by State rules for local planning, but given it’s past emphasis on urban design, Roswell prepared and adopted an Urban Design Element in 2000, as a part of its 2020 Comprehensive Plan. In 2000, the need to recognize all adopted design guidelines was the primary concern of the Urban Design Element. Another concern at that time related to the character and design of the City as a whole. Having divided the City into different design districts, there was some concern that the City and its Design Review Board might be losing sight of its character as a whole. Hence the Urban Design Element in the 2020 Comprehensive Plan established Citywide urban design policies.

Urban design and the City’s architectural and site design review processes affect the outcome of the City’s development pattern. In many respects, design review offers a “front line” opportunity to implement the City’s visions and Comprehensive Plan policies for encouraging redevelopment, preserving historic resources, conserving natural resources, enhancing the natural environment, and imposing order and compatibility in land use. Urban design also plays an important part in the economic well-being of a community. Urban design extends in important ways into all elements of planning, including historic preservation, land use, transportation, housing, economic development and redevelopment, utilities and community facilities, and the environment.

The Urban Design Element is a concerted effort to recognize the positive attributes of the City, to enhance and conserve those attributes, and to improve the built environment where it is less than satisfactory. Urban design involves visualizing alternative forms and then choosing actions that will achieve the best possible results for the City.

As the City of Roswell evolves, new and varied planning issues are created. Given the fact that people are more mobile in today’s society, there are increased opportunities to choose where to live, work, shop, and spend leisure time. The physical appearance of a community and its amenities weigh heavily on this decision. Addressing urban design issues has remained and continues to be critical to Roswell, as mixed land use policies and redevelopment efforts take shape. Good urban design can help generate a sense of place for the City and make it more of a destination, rather than a place to pass through. Issues such as architectural scale, density, and aesthetic character will continue to be considered to ensure that new development supports and enhances the overall character of the City and its special places and neighborhoods.

Urban design principles and recommendations should apply to both the public environment, as expressed through elements such as City buildings, streetscapes, parks, and plazas, and the

City's policies and regulations for private development. Research and experience has shown that there is a positive return on investment for quality design features, for both government and property owners. For example, the money a City spends on landscaped roadway medians, sidewalks, and street trees is likely to be amply returned in the form of increased tax revenue resulting from the overall increase in property values that accompanies attractive and desirable urban areas.

BUILDING BLOCKS FOR CITY PATTERN

The pattern of a City is a combination of its natural and built environments. The pattern of Roswell contributes greatly to its overall appearance. Arguably, it is the appearance of a community that draws people in to live, work and shop. In some ways the pattern is seen in two dimensions as though it were a map; in other ways it has a three-dimensional form. The City's two-dimensional pattern need not be viewed as a rigid order but, rather, as a sense of balance and compatibility among its residents and businesses. The pattern is made up of the following:

WATER, specifically the Chattahoochee River, defines the southern boundary for the City and a part of its recreation and way of life. The river serves as open space, a focus of scenic views, a fragile ecosystem, and even a place of human activity (mostly recreational). The City's other tributaries, creeks, and streams also form the City's riparian system that contributes to its natural landscape.

RIDGES, which allow the City to be seen and help define neighborhoods and districts.

OPEN SPACES AND LANDSCAPED AREAS, whose green patterns enrich the color of the City and help to identify districts and provide places for recreation.

STREETS AND ROADWAYS, which connect the built environment and in doing so unify the pattern. When they follow a ridgeline or meander through a valley, streets and roadways can provide vistas of open spaces. The character of their design also influences the character of land use development. Streets and roadways are of many types, each with their own functions and characteristics, and together they make up a system that accommodates the movements of persons and commerce that make up the daily hustle of the City.

BUILDINGS AND STRUCTURES, which reflect the character of districts and centers for activity, provide reference points for human orientation, and may add to (but can detract from) topography and views. Some buildings and structures, such as City Hall and churches, stand out as single features of community importance.

People perceive this pattern from many places and during many activities; from their homes and neighborhoods, from parks, from places of work, from the streets while traveling, and from entranceways and observation points while visiting the City.

ELEMENTS COMPRISING THE PATTERN

Peter Calthorpe (2003)¹ contends that only four elements are needed to design complete regions, cities, and towns. They are: *centers, corridors, preserves, and districts*.

¹ Calthorpe, Peter. 2003. "The Regional City." In Donald Watson, Alan Plattus, and Robert Shibley, eds., *Time Saver Standards for Urban Design* (New York: McGraw Hill, 2003).

Classifying all areas in terms of these four elements can be difficult. Sometimes, a given area fits into more than one category. For instance, the local historic district was designated in a prior amendment to the Comprehensive Plan as a “center,” since it functions as a center for commerce, government, civic activities, and social functions, yet by definition it is a “district.” Similarly, Parkway Village, has been referred to a “districts” but may be more worthy of the term “corridor.” As another example, the Garrison Hill Design Guidelines could be viewed in terms of a corridor (Marietta Highway, a.k.a., SR 120), a district, and a neighborhood.

Another issue with trying to impose a classification scheme for design and character areas is that a given element can itself be further subdivided into character types. Centers and corridors may have further distinguishable features. For instance, Parkway Village has discernable neighborhood “centers” or “villages” within it at Hardscrabble Road and Crabapple Road.

After considering what fits best with Roswell’s pattern, the following five elements are proposed to conceptualize the City’s pattern: centers, corridors, districts, preserves, and neighborhoods. This typology adopts Calthorpe’s framework as a visioning strategy but also adds an element absent in his classification scheme – *neighborhoods*. In proposing this typology of character elements, it is recognized that geographically it can become messy or that there are equally valid alternatives for conceptualizing the elements of pattern in the City. The first two elements – centers and corridors – are consistent with evolving policy of the Atlanta Regional Commission’s Regional Development Plan. Including neighborhoods in the typology is consistent with Roswell’s character as a collection of fine neighborhoods which require their own attention (see Chapter 7, Framework for Neighborhood Planning).

Centers

Centers are local and regional destinations at the neighborhood, village, town, or urban scale. Centers are made up of multiple uses (retail spaces, housing, services, and civic buildings), but they are dominated primarily by retail.

Influenced by the Atlanta Regional Commission’s Regional Development Plan, Livable Centers Initiative, and regional reviews of local plans, Roswell re-conceptualized its land use plan in part to recognize activity centers which differ in their size, scale, and function. In addition, there are evolving efforts such as the Holcomb Bridge Road revitalization study which can also be viewed in terms of corridor, district, and neighborhood elements. There are at least five recognizable centers in Roswell:

- Roswell Historic District (Activity Center)
- Georgia 400 @ East Holcomb Bridge Road Activity Center
- SR 9/ Holcomb Bridge Road/Alpharetta Hwy./Crossville Road (Town Center)
- Crabapple Road at Houze Road (Activity Center)

Corridors

Corridors are connecting elements based on either natural systems or infrastructure and transportation lines. They represent a flow – of water, traffic, or habitat movement. General examples include Main Street, riverfront, strip commercial corridors, abandoned railroad tracks, and utility corridors. Within Roswell, there are at least five corridors that are particularly recognizable (others are possible).

- Chattahoochee River Corridor
- Parkway Village (SR 92 or Crossville Road) Corridor
- Midtown Roswell (SR 9 or Alpharetta Street) Redevelopment Corridor
- Garrison Hill (SR 120 or Marietta Highway) Corridor
- Holcomb Bridge Road (SR 140) Corridor

Districts

As conceptualized by Calthorpe, districts are special use areas which are necessarily dominated by a single primary activity. Examples provided by Calthorpe (2000) include university campuses, airports, industrial districts, and military bases. By definition, they are functionally separate from centers and neighborhoods.

Roswell has a number of areas formerly designated as districts but which have been reclassified here as centers and corridors. However, there is at least one primary activity area that is apparent in Roswell:

- Employment District (NE Roswell north of Hembree Road)

Preserves

Preserves are open space elements that frame the City and preserve critical habitat. Examples given by Calthorpe include productive agriculture and wildlife management areas. In Roswell, three preserves are evident:

- Big Creek Unit of National Recreation Area
- Big Creek Passive Park Preserve
- Leita Thompson Memorial Park
- Chattahoochee Nature Center

Neighborhoods

Neighborhoods are primarily residential subdivisions but within which some civic and recreational uses may also exist. Roswell is mostly a City of neighborhoods, and considerable effort could go into defining neighborhood boundaries. As noted in the preceding chapter of this plan, however, delineation of neighborhood boundaries is better left to the residents than superimposed by planners. However, it is worth reiterating here four particular types of neighborhoods based in part on Chapter 7 of this Comprehensive Plan:

- Intown settlements
- Master Planned Communities (e.g., Martin's Landing, Brookfield West, Willow Springs, Horseshoe Bend, and Saddle Creek)
- Conventional subdivisions (throughout Roswell)
- Rural development

Using these five elements, a character area or overall development concept map is prepared that includes all of the City's land area. This overall development concept map may become useful in a variety of planning contexts.

DESIGN GUIDELINES

Roswell has two boards/commissions that review and approve architecture and site designs for private development projects. The Historic Preservation Commission reviews and decides on development proposals within the City's historic district. The Design Review Board reviews non-single-family development proposals in all other parts of the City outside the historic district. The intent of the City in adopting and implementing design guidelines is well captured in the statement below:

Design guidelines are a set of criteria, uniformly applied in the planning approval process, to evaluate the appropriateness of proposed changes to individual properties in a designated district. The ultimate goal of design guidelines is to direct physical and visual changes in the district to create an architecturally and physically cohesive area of specified character. Design guidelines are meant to create a strong identity for the area as a distinctive place to shop, visit, work, and live. Design guidelines are a means of bringing together the interests of individual property owners and the general public to achieve mutual benefits.

As alluded to above, Roswell has had a long history of establishing design districts. The 2020 plan established six different design districts, starting first and foremost with its local historic district (see Chapter 8 of this Comprehensive Plan) and including Parkway Village, Midtown, Commerce, Riverbanks Campus, and Garrison Hill. At one time, the City's economic development strategy centered around an earlier conception of districts which included a medical district (around North Fulton Regional Hospital) and a "neon zone" that was abandoned as a concept and replaced by the Midtown Roswell redevelopment corridor overlay district. Another set of design guidelines, for the "Commerce District" (SR 9/Holcomb Bridge Road/Crossville Road) has also been abandoned² and has been mostly subsumed as part of Midtown Roswell or otherwise designated as a center. Yet another district, the "Riverbanks Campus" District, resulted in basic guidelines that were eventually adopted as Citywide policies. The Riverbanks Campus district is also generally included as the Holcomb Bridge Road corridor and the regional activity center at Georgia 400 and Holcomb Bridge Road.³

² In 1995, the Brookwood Design Group prepared design guidelines for the Commerce District, which includes development surrounding the intersection of State Route 9 and Crossville Road/Holcomb Bridge Road. The commerce district lies east of the Parkway Village district and extends east along Holcomb Bridge Road to the intersection of Warsaw Road. A distinctive feature of the commerce district design guidelines was the recommendation that gatehouses and towers be installed on private property, and that ivy-covered trellises be installed at the major intersection in the district and over pedestrian walkways. Trellis facades are also supposed to be part of the architectural facades of buildings. Due primarily to the significant cost associated with the installation of gatehouses, towers, and trellises, the overall signature element for the commerce district as envisioned in the guidelines has not been implemented. For all practical purposes, the concept of installing trellises was abandoned by 2000 given cost constraints and little private support to implement them as an overall design theme for the district.

³ In 1999, Roswell's Community Development Department hired Sizemore Floyd Architects to produce a set of design guidelines for the mostly commercial area east of the commerce district, centered on Georgia Highway 400. The city council adopted the design guidelines by resolution on November 1, 1999. The "signature element" of the River Banks Campus District was the construction of two parallel brick walls placed in or near the right-of-way, with a meandering sidewalk running in between the walls. Gateway arches were also envisioned over entrances to developments to link wall segments. The total cost of implementing the signature element was estimated at \$676 per linear foot. On June 5, 2000, the Mayor and City Council passed a resolution that extended the River Banks Campus

Historic District Design Guidelines

To guide the Historic Preservation Commission in making decisions about certificates of appropriateness and other requested actions, a set of design guidelines was prepared and adopted by the Roswell City Council on December 1, 1997. The historic district guidelines provide a summary of Roswell's history and various architectural styles in the district and detailed guidelines for residential and commercial uses. An appendix contains the U.S. Secretary of the Interior's *Standards for Rehabilitation*. The design guidelines for the Historic District are expected to be amended from time to time, especially in order to implement the recommendations of the Historic Preservation Element (Chapter 6). Specifically, the local historic district has three character areas of its own: Town Square and Mimosa Boulevard, Mill Village, and Canton Street.

Parkway Village District Design Guidelines

In 1992, a blue ribbon committee with voluntary assistance from two architectural firms (Sheffer and Grant; and Carruth and Carruth) prepared a set of design guidelines that applies to properties along Crossville Road (SR 92). Preparation of the guidelines was based on precepts that development within this corridor exhibits a vernacular architectural tradition and that the corridor remain unique in character. Among the several guidelines of the village district are a "build to" line, location of parking areas behind buildings, and a signature element (or defining feature for the district) of wood-rail fencing with stone piers at major intersections. The City amended its zoning ordinance to establish Parkway Village as an overlay zone and provides for a second option to the underlying zoning for development (one that allows for the conversion of single-family dwellings to office uses and also allows for commercial development and townhouses if tracts are large enough for such uses).

Garrison Hill District Design Guidelines

In 1999, after extensive citizen participation in the proposed design of Maxwell Properties, Inc.'s Kroger shopping center development at the intersection of Marietta Highway (SR 120) and Coleman Road, the City Council authorized development of a set of design guidelines for this highway corridor. This design area includes the southwest portion of Roswell and abuts the City's historic district. The City hired Talka and Connor Architects and Hughes, Good, O'Leary, and Ryan to prepare guidelines for the corridor. The guidelines were adopted by City Council in March 2000. The guidelines address the Marietta Highway streetscape, architectural features, and site arrangements. Specific guidelines are provided for commercial, office, and residential/institutional developments.

Unique to the Garrison Hill District was a "double boundary" approach, which specifies two areas. The first area is the highway corridor itself, within which design guidelines apply. The second area is the surrounding residential subdivisions, within which certain recommendations are made with regard to streetscapes, fences, intersection designs, and traffic signs. Generally, the streetscape features and architectural design characteristics suggested in the Garrison Hill District Design Guidelines are intended to extend the historic character (e.g., period lighting) existing east of the district along the highway into the district.

District design guidelines (including the signature element) to the area known as the "eastside annexation." The current study of the Holcomb Bridge Road corridor east of GA 400, includes the Riverbanks Campus District.

Midtown Roswell Design Guidelines

Midtown Roswell extends along Alpharetta Street from Woodstock Street to Holcomb Bridge Road and beyond, forming primarily a commercial corridor but also including residences and civic buildings. A number of key issues that face this corridor, especially its outmoded commercial strip centers have been addressed in the Midtown Roswell Redevelopment Plan (see Chapter 4, Redevelopment Element, of this Comprehensive Plan). To provide additional guidance to the Midtown Roswell Redevelopment Plan, design guidelines were prepared and adopted.

The Midtown Roswell Redevelopment Plan was based on a citizen defined vision for the community. City leaders created a plan to influence neighborhood stability, outline commercial redevelopment strategies, define street beautification plans, and improve the traffic and pedestrian safety in the corridor. The plan identified transportation investments, land use controls, streetscape improvements and other investments in public spaces that support the vision of a more livable Midtown Roswell, where pedestrians, cyclists, transit users and motorists peacefully coexist within a vibrant commercial environment surrounded by healthy residential neighborhoods.

The Redevelopment Plan recognized that even within the Midtown Roswell District a variety of unique development conditions exist that will dictate different redevelopment approaches. The Redevelopment Plan outlines a "three lens strategy" (revitalize, reposition and reorganize) that identifies three unique conditions within Midtown Roswell with a specific approach for each area. For more information on the three lens strategy, see the Midtown Roswell Redevelopment Plan.

Generally, the conceptual streetscape program envisions the installation of historic streetscape amenities (period lighting, park benches, trash receptacles, and stacked stone walls within the historic district and similar streetscape amenities, but with slightly different characteristics) in the corridor north of the historic district. The City is currently working toward getting the detailed plans in place to begin installing landscaping and streetscape improvements (including bus shelters) along SR 9. Funds have been specifically earmarked for landscaping and streetscape improvements along Atlanta and Alpharetta streets.

Citywide Design Guidelines

On June 5, 2000, the Mayor and City Council passed a resolution that extended the ten general criteria of the River Banks Campus District design guidelines (excluding the signature element, landscaping palette and color/material schemes) to all areas of the City, including the historic district, unless the criteria conflict with adopted design guidelines that are more specific to a particular district. The ten guidelines are listed below.

1. Shield Parked Vehicles from View (use a tall hedge or at least partial screening via an earthen berm).
2. Shield Parking Surfaces from View (vary the elevation of the parking surface in relation to the street).
3. Safe Sidewalks (install a 4 to 6 foot planter strip between sidewalk and street).

4. Treatment of Large Flat Wall Areas (use evergreen or at least some deciduous trees to screen them).
5. Signage (monument style, ground signs only are preferred).
6. Softscapes (Vegetation) (install hedge, trees, and grass, or at least trees and grass, along street rights-of-ways).
7. Visual Patterns on Building Facades (vary visible façade wall planes to create shadows and visual interest).
8. Site Lighting (use down shades on curved arms, mounted on ornate metal poles no more than 30 feet high, for parking areas).
9. Contextual Appearance (vary building rooflines and provide connections between neighboring buildings).
10. Visible Utility Lines (bury or at least conceal utilities).

CITYWIDE DESIGN ISSUES

Gateway Features and Area Markers

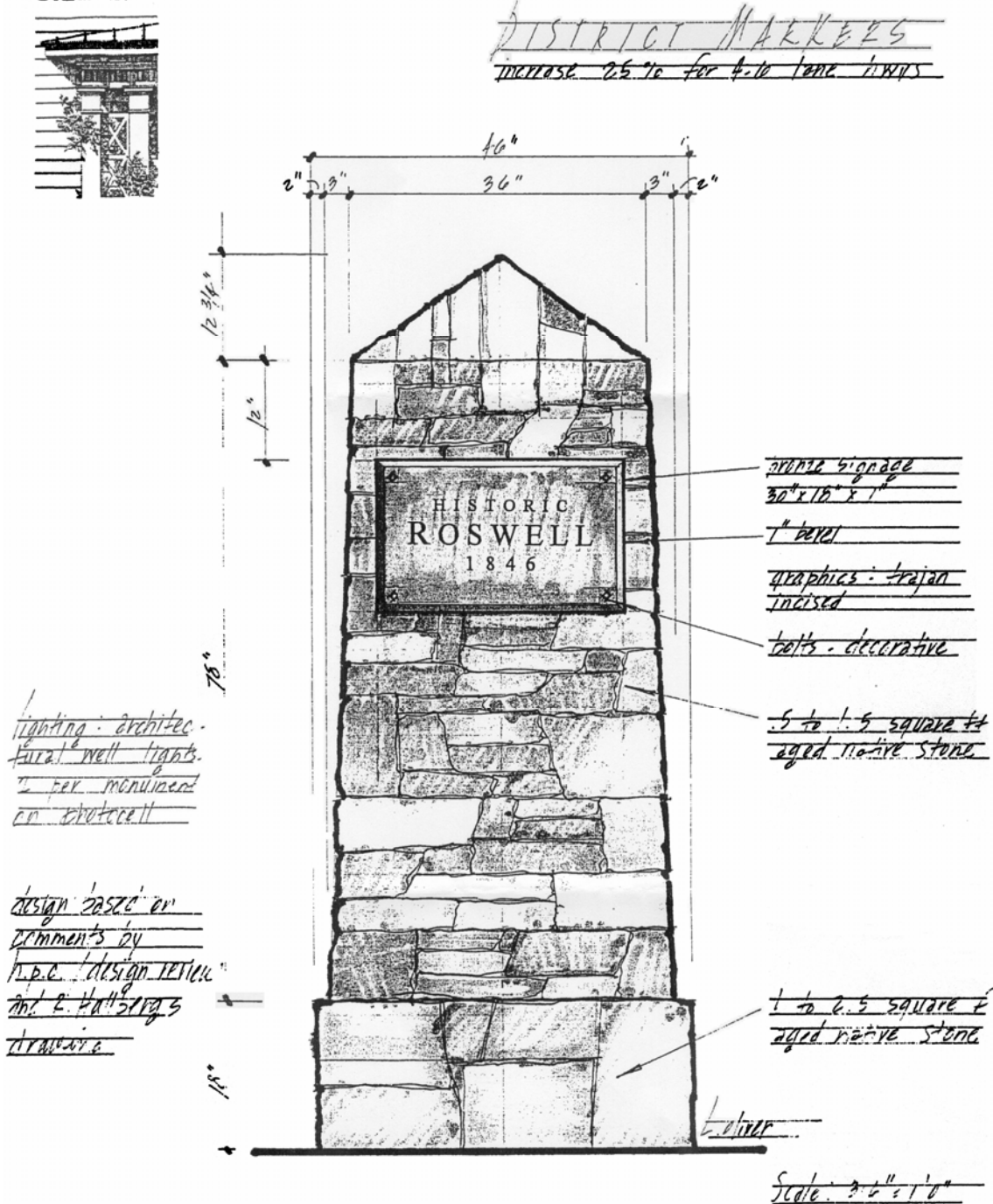
As part of the Garrison Hill District Design Guidelines and the SR 9 streetscape improvement program, Roswell has set forth recommendations for installing monuments that mark entrances to the City and to various character areas. Upon review of the Garrison Hill district marker proposal, the Design Review Board advocated one unified design for all district markers throughout the City (see Figure 8.1). A collaborate effort between the Historic Preservation Commission and the Design Review Board during the year 2000 resulted in agreement on the design of a district marker that would be architecturally appropriate in the historic district and in all other districts of the City. No funds have been appropriated for the gateway features and district markers.

Design Review Processing

Design Review is a part of the development process that pays special attention to areas within the City that possess historical, architectural or cultural merit. Roswell uses Design Review as a tool for maintaining the City's special character areas, Citywide appeal, and high quality of life. The purpose of Design Review is to protect the character of the City, and to ensure that new development, or changes to existing development, are compatible with the surrounding neighborhood. Design Review works to keep Roswell from looking and feeling like "Anywhere, USA."

Design issues include such things as open space and natural features, pedestrian and traffic circulation, building scale and massing, architectural history and details, landscaping, site lighting, utility connections and stormwater runoff. Each issue considered may appear individually small. However, in combination, they can make the difference between a bad project and a good project.

GARDEN HOUSES OF THE 1920S



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Figure 8.1
District Marker Design

In 1999, the Community Development Department began to address the issue of increasing the efficiency of the development review processes. Flow charts of the various development processes, including design review, were prepared, and reforms to the design review process were made and integrated into a comprehensive rewrite of the City's zoning ordinance, which includes the design review provisions.

URBAN DESIGN GOALS, POLICIES, AND OBJECTIVES

Urban Design Goals

Goal 1. Enhance the overall appearance of the City.

Goal 2. Strengthen the visual image and identity of Roswell as a historic City.

Goal 3. Provide for efficient and effective design review processes that implement the Comprehensive Plan.

Goal 4. Preserve and enhance the natural resources of Roswell.

Policies to be Implemented During Design Review

In addition to the purposes set forth in the City's zoning ordinance, the following policies are to be implemented during design review:

1. Promote well-designed developments that respect and utilize the best natural features of the land.
2. Set a standard of quality in the design of public projects for the private sector to follow.
3. Review proposed developments for compliance with urban design policies of the City and for consistency with applicable design guidelines.
4. Encourage well-planned and inviting streetscape designs and improvements as a part of all commercial redevelopment efforts.
5. Ensure through the design review process that commercial and office developments will be compatible with abutting residential neighborhoods.
6. Encourage the installation of indigenous, drought-tolerant plant species and the use of xeriscaping approaches in landscaping plans for developments.
7. Ensure the fulfillment of the tree protection ordinance via the design review process.
8. Require new highway commercial developments, and new non-single family residential developments larger than three acres, to submit lighting plans and demonstrate compliance with lighting standards.

9. Integrate transportation planning in the urban design review process by: evaluating the extent to which new developments provide for safe and adequate pedestrian and (where appropriate) bicycle access; requiring interparcel connections to adjacent compatible developments; providing linkages to existing or planned greenways; and encouraging transit-friendly development principles.
10. In areas where appropriate, encourage commercial developers to provide outdoor seating and pedestrian plazas that contribute to a human-scale streetscape.
11. As a progressive, forward-thinking alternative to the traditional methods of stormwater management, encourage developers to design natural stormwater management systems, such as wet ponds, and integrate them as amenity features of the development.
12. Eliminate energy waste, where possible, without increasing costs, decreasing design qualities, or disrupting lifestyles.
13. Municipal road improvement plans should be reviewed by the Design Review Board or the Historic Preservation Commission (whichever had jurisdiction) for compatibility with urban design policies and adopted design guidelines.
14. When new traffic signals are installed by the State, City, or private developer, the City strongly encourages that decorative mast arms be used to support the traffic signal, as opposed to supporting the traffic signal by wire strung across the intersection.
15. Periodically analyze the design review process to ensure that it operates as efficiently as possible for applicants.

Objectives

1. Continue to apply for federal and State funding to enhance the streetscapes of road corridors in the City.
2. Implement a gateway master plan for major entrances to the City that incorporates various recommendations of adopted design guidelines.
3. Implementation of the SR 9 Streetscape Improvement Program should be complete by calendar year 2005.
4. Install landscaping in the median of State Route 120.
5. Recommendations for urban design and streetscape improvements, as described in various design guidelines, should be included in the City's capital improvement plan for funding via the annual capital improvement budget.
6. Periodically revisit adopted design guidelines and amend them as necessary to be consistent with changing or anticipated future conditions. Generally, the various design guidelines should be evaluated for implementation success concurrent with review of the Comprehensive Plan.

7. Maintain provisions in the zoning ordinance that provide for innovative designs of mixed-use projects.

CHAPTER 9 LAND USE ELEMENT

While every element of the Comprehensive Plan is central to implementation of the City's vision, goals, policies, objectives and strategies, it is this Land Use Element that is most influential in terms of everyday decision-making. The Land Use Element is most often (and properly) cited in support or denial of zoning and other land use changes. The most important graphic of the Comprehensive Plan is the Future Land Use Plan Map, contained and described in this element. It is that map which will continue to be cited as an overall expression of the City's land use policy, though care must be taken to interpret that map with due regard for this text and its goals, policies, strategies, tools, and objectives.

In many ways, the Land Use Element is the central organizing element of the entire Comprehensive Plan. Natural resource protection goals and policies are necessarily implied within the Land Use Element, where they have not been reiterated or referred to explicitly. Community facilities and services plans are based in large part on the land use patterns and future development potential described in this Land Use Element. The recommended land use patterns reflect the City's vision and history. Housing policies are integrated in the land use recommendations of the land use plan. Economic development objectives are fulfilled, if not directly recognizable, in terms of the overall design of the land use plan. Transportation plans influence land use patterns and vice versa, and those occurrences are taken into account.

This chapter begins with data and descriptions of how land use has evolved in Roswell since 1969. It is important to recognize and build on prior planning efforts, which include a "701" plan during the era of urban renewal, a development plan in the late 1970s, and Comprehensive Plans prepared for the years 2010 and 2020. The historic data have more than historical value, however, in the sense that Roswell today is a product of prior development patterns and land use outcomes of earlier decades.

A detailed existing land use inventory was provided in the 2020 plan. Existing land use was updated in this rewrite to account for changes between 2000 and 2004. Major development trends during that time period are summarized here. The 2020 plan provided a detailed analysis of land use issues, including possible transitions in land use, and prospects for incompatible land use arrangements, among others. Much of that analysis in the 2020 Comprehensive Plan is still relevant for the 2025 planning horizon and is therefore retained in this Land Use Element update. The 2020 plan organized the discussion of land use issues around eight planning areas, which at the time included some unincorporated fringe areas north and northeast of Roswell. The planning areas have been retained in this revised Land Use Element to the extent that the detailed descriptions of land use trends and issues provided according to those eight planning areas. Unincorporated lands have been dropped from the description and assessment in this update for the year 2025.

Since the 2020 plan was adopted in the year 2000, the Georgia Department of Community Affairs adopted new minimum planning standards (those effective January 1, 2004). Compliance with that set of planning standards necessitated some additions to the 2020 Land Use Element as adopted in 2000. The 2020 Land Use Element, however, provided extensive information on infrastructure needs, protection of natural resources, identification of infill and redevelopment potential, and other factors directly affecting land use (not required to be discussed in the Land Use Element at that time but which received adequate treatment in the

2020 plan). To the extent new trends have emerged, or the information in the 2020 plan would now be incorrect or outdated, this Land Use Element has been modified, updated, or corrected.

This chapter represents a minor update of the adopted 2020 Comprehensive Plan's Land Use Element. The land use plan, which has been amended in minor ways since the 2020 plan was adopted in 2000, is still an accurate reflection of the City's vision and goals and policies. There are some minor changes made to the map to account for differences between actual and planned land uses, but these changes from the 2020 plan are quite limited in substance.

Finally, the framework for regional planning has further evolved since the 2020 Land Use Element was written. Since the 2020 Comprehensive Plan was prepared and adopted, the Atlanta Regional Commission substantially revised its Regional Development Plan. That new regional plan necessitated significant changes to the Land Use Element adopted in the 2020 plan in order to realign local and regional policy statements and expectations for land use programs.

HISTORIC LAND USE TRENDS, 1969-1999

Historical Land Use Patterns, 1969

Roswell's first land use plan was developed in 1969 and 1970 using funds from the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954. In 1969, Roswell covered only about 2,300 acres and had a population of approximately 5,500 and 1,600 housing units. The City limits extended only as far southwest as Willeo Road, the Lake Charles subdivision to the northwest, Alpine Drive to the north, part of Grimes Bridge Road to the northeast, and Big Creek on the east. At that time, the City had annexed land for what later developed as the North Point subdivision.

The overall population density of the City in 1969 was only 6.2 persons per acre. The City in 1969 was generally served by public water. A sewerage collection system serving all of the City's residential areas was not available, but a general obligation bond referendum had been passed for the construction of a sewer system.

Table 9.1
Roswell's Land Use in 1969

Land Use	Acreage	Percent of Developed Land	Percent of Total Land
Residential – single family	850	68	36
Residential – two family	19	2	1
Residential – multi-family	22	2	1
Public and semi-public	76	6	3
Commercial	71	6	3
Industrial	13	1	1
Streets and highways	189	15	8
Total developed land	1,240	100	53
Vacant	1,107		47
Total land within the City	2,347		100

Source: Field Survey, Kidd-Wright Associates, Inc., November 1969. In Kidd-Wright Associates, Inc. March 1970. Existing Land Use and Housing Study, Roswell, Georgia.

The urban area in 1969, as defined by the Existing Land Use and Housing Study, extended (in a clockwise direction) west to Willeo Creek (the Cobb County line), a straight line running east-west north of Jones Road and Mansell Road, Foe Killer Creek, and a large area east of the North Fulton Freeway (Georgia 400). Much of the land in the “urban” area was scattered rural residential uses, but “rapid” residential development was occurring outside the City limits of Roswell. The first phase of the Martins Landing development was underway along Riverside Road, with perhaps a few dozen homes already constructed. The Existing Land Use and Housing Study notes that Roswell had excellent potential for development of relatively high-income housing. It notes further that the regional development trend was one of outward mobility of higher income groups from Atlanta to the north.

Multi-family development within the City limits existed at Mimosa Boulevard, Renee Drive, Frazier Street, Grove Way, and Myrtle Street. Such developments included 62 units operated by the Roswell Housing Authority. Areas that were considered “blighted” in 1969, or at least potentially qualifying for inclusion in redevelopment projects, were residential neighborhoods along the following roads: Pleasant Hill Street, Bush Street, Sloan Street, and Webb Street. Areas identified as “rehabilitation areas” included Zion Circle, Minhinnette Drive, South Atlanta Street at Jones Drive, Bannister Drive, and West Side Drive.

Commercial development in 1969 was oriented primarily toward U.S. Highway 19 (now SR 9), with older businesses concentrated at Crabapple Road and Alpharetta Street. The study notes that commercial activities in 1970 were “scattered” along the highway in a “random strip fashion.” Moreover, commercial strip development was continuing in a “random, leapfrog pattern” north on U.S. 19 outside the City limits. However, the strip commercial development was found to be not as severe as what was occurring south of Roswell along Roswell Road in Sandy Springs. Roswell had a very small industrial area, containing only six industries, operating close to residential neighborhoods.

Historical Land Use Trends, 1969-1979

Roswell adopted a Future Land Use and Thoroughfare Plan in 1970. However, it quickly became outdated. Due to rapid in-migration to Roswell and the north Fulton County area in the 1970s, Roswell’s basic character underwent a dramatic transformation from a small urban fringe town to a rapidly growing suburban City. Roswell grew from a population of 5,430 in 1970 to more than 20,000 persons by 1978. Major suburban retail development along Alpharetta Street and Holcomb Bridge Road began to occur by 1972. Industrial development had not occurred to any significant extent, although the potential for industrial development was recognized in the Roswell Development Plan (1978). In 1975, commercial employment densities were approximately 6.5 employees per acre, while industrial-wholesale uses averaged approximately 13 employees per acre.

Factors that contributed to the rapid transformation of Roswell during the 1970s included, in addition to an aggressive annexation program: freeway access via Georgia 400 to Perimeter Mall and adjacent employment centers; the availability of large tracts of developable and relatively inexpensive land; increasing disposable incomes of Roswell’s residents; and the existence of public services and utilities. Land use problems and trends during the 1970s included extensive strip commercial development along Alpharetta Street and Holcomb Bridge Road, environmental degradation, and “sprawl and poor land use patterns” (Roswell Development Plan 1978).

Land uses in Roswell's planning in 1975 are summarized in Table 9.2 below.

Table 9.2
Land Use in 1975 - Roswell Planning Area

Land Use Category	1975 Acreage	Percent of Developed Area	Percent of Total Area
Residential, very low to low-medium density	3,180	76	20
Residential, medium to high density	155	4	1
Commercial	175	4	1
Office-Professional	50	1	--
Light Industrial-Wholesale	55	1	--
Government-Institutional	150	4	1
Parks, Recreation, and Open Space	420	10	3
Total Developed Area	4,185	100	27
Vacant and Agricultural	11,557	---	73
Total Area	15,742	---	100

Source: Roswell Development Plan, 1978 (Table 9). Percentages calculated by Roswell Planning Staff, 1999.

Roswell began development of a new land use plan in 1975. The Roswell Development Plan, however, was not adopted until Fall 1978. Roswell, by the late 1970s, had substantially expanded its urban area to Willeo Creek, Woodstock Road and Hardscrabble Road to the north, Foe Killer Creek along the northeast, and a substantial area of land east of Georgia 400. Single family residential developments were scattered in all areas of the City. By 1979, major subdivisions had been constructed, including Northpoint, Martins Landing, and Saddle Creek. Subdivision development was also occurring along the north side of Old Alabama Road.

Public sewerage was still a limiting factor on growth in several areas of Roswell by the late 1970s. However, Fulton County was planning construction of a sewer interceptor system to serve most areas within the City limits by the mid-to-late 1980s.

Diversification, 1979-1985

The Roswell Department of Zoning and Inspections (now Community Development) completed an inventory of rezoning actions that were approved between January 1979 and June 1985. These figures, summarized in Table 9.3 below, provide insights as to the nature and type of development activity during that time period.

As can be inferred from Table 9.3, Roswell, in addition to providing for more single-family subdivisions, expanded its multiple-family land (and housing stock) and substantially expanded its non-residential land supply through rezoning. Based on this rezoning information, the Roswell staff compared the numbers to the land use projections for the year 1995 as provided in the Roswell Development Plan. The staff concluded that the City had greatly exceeded many of the future land use projections. In particular (assuming rapid development of rezoned parcels, as was generally the case), by 1985 the City had already exceeded its commercial acreage projected for 1995; there was almost double the acres of office-professional zoning/use that was predicted in the development plan for the year 1995. Industrial zoning was four times the amount in 1985 that was projected for 1995. Interestingly, though not noted in the 1985 report,

Roswell had rezoned almost 600 acres of land for medium to high-density residential (i.e., multi-family and townhouse) use, which was roughly equal to the plan's projection for medium and medium-high residential land in 1995. Hence, in a period of just seven and one-half years, Roswell had met or exceeded the expected pace of development for commercial, office, light industrial, and multiple-family residential uses. During this period, the City had, through the rezoning process, provided for a diversified mix of residential uses (including apartments and townhouses) and a substantial commercial and industrial economic base.

Table 9.3
Acres Rezoned by Selected Zoning District, 1979-1985,
City of Roswell

Zoning Abbreviation	Name of Zoning District	Acres Rezoned, 1/79 to 6/85
E-2	Single Family Residential District	121
R-1	Single Family Residential District	172
R-2	Single Family Residential District	462
R-3	Multiple Family Residential District	270
R-4	Multiple Family Residential District	121
R-TH	Fee Simple Townhouse District	188
C-3	Highway Commercial District	291
I-1	Light Industrial District	502
O-P	Office Professional	272
OPMS	Office Professional Multi-Story District	95

Source: Roswell Department of Zoning and Inspections. July 1985. Summary of Rezoning Petitions Approved January 1979 to June 1985: Implications for Planning.

Residential Subdivision Platting Activity, 1980-1989

Table 9.4
Residential Subdivision Lots and Acreage Approved, 1980-1989

Year	Number of Lots	Acreage
1980	483	135.2
1981	678	222.0
1982	472	112.7
1983	758	440.1
1984	1,377	719.3
1985	501	364.9
1986	158	103.5
1987	467*	166.16*
1988	390	275.1
1989	153	124.5
Total, 1980-1989	5,437	2,663.9*

Note: Figures include fee simple townhouses. * Incomplete data. Source: Roswell Department of Community Development, 1999.

In 1980, the Roswell Planning Staff began compiling statistics regarding the number of lots and acreage involved in approved final plats. During the decade of the 1980s, subdividers in Roswell platted almost 5,500 lots on approximately 2,800 acres. Table 9.4 summarizes that information.

Prior to the development of the Comprehensive Plan 2020, the most recent acreage estimates for land use were prepared for the year 1990. Table 9.5 summarizes land use existing in 1990.

Table 9.5
Roswell Land Use in 1990

Land Use Category	Approximate Acreage - 1990	Percent of Total Area
Residential	10,977	51.5
Commercial and office	1,105	5.2
Industrial	510	2.4
Public and semi-public	310	1.5
Parks and open space	720	3.4
Historic (mixed use)	540	2.5
Right-of-way	1,334	6.3
Vacant	5,129	24.0
Undevelopable	680	3.2
Total	21,305	100%

Source: Roswell Comprehensive Plan 2010

Rezoning Activity, July 1985 to 1999, and Implications

The Roswell planning staff undertook an analysis of the rezonings approved since the 1985 Summary of Rezoning Petitions Approved January 1979 to June 1985 was completed. That analysis was done in an effort to identify major land use trends during that period. In addition, such information is useful to the planning commission in considering the amount of land zoned for particular categories, which is one of many criteria for considering rezoning requests. The analysis excluded rezonings that were changes of conditions or rezonings of properties that were already partially zoned for the approved zoning category. Attention was also given to the amount of property zoned “from” particular categories as well as “to” various zoning districts, so as to gauge the “net” result of rezoning actions during the fifteen-year period.

Although Roswell rezoned approximately 215 acres to the I-1, light industrial, zoning district, approximately 203 acres were rezoned from the I-1 category. There was very little increase in light industrial acreage during the time period, suggesting that land reserved for light industrial use has been sufficient and/or developed for other uses. Given few, if any, recent requests for I-1 zoning, it appears that the City reached the end of its light industrial land supply given market trends by 1999.

Although the City rezoned 102 acres to O-P, Office Professional from July 1985 to December 1999, it also zoned 99 acres from O-P to other categories, leaving in effect, no net increase in the number of acres of office professional zoning.

However, there was a marked trend toward rezoning to the City’s “multi-story” zoning categories during the time period. Approximately 276 acres were rezoned to office commercial, office

professional, and hospital multi-story zoning districts. The implication of this finding is that the office market shifted from offices for individual establishments to a planned mix of office uses in mid-rise structures. Most of these “multi-story” rezonings occurred in the mid-to-late 1990s.

Commercial zoning, primarily highway commercial, increased by 261 acres from 1985 to 1999, suggesting that opportunities for retail and service development were still strong in the marketplace. However, almost all of the areas identified in the City’s land use plan for future commercial development by 1999 were largely built-out, and the City as a result denied commercial zoning requests that were found to be inconsistent with the land use plan.

With regard to multi-family development, there was an increase of approximately 400 acres during the time period. All but approximately 86 acres (most within the “Archstone” apartment complex east of Georgia 400 on Holcomb Bridge Road, which is zoned R-4A), was zoned R-3 which allows up to eight units per acre. Many of the R-3 rezonings occurred during the 1993-1995 time period and were townhouse developments. The higher level of multi-family rezonings approved (not to mention those that were requested but denied), along with more recent trends such as development of townhouses in commercial and industrially-zoned parcels, suggests that there was a significant market for R-3 multiple-family residential development during the time period.

Residential Subdivision Platting Activity, 1990-1998

Final subdivision platting in the 1990s amounted to less than one-half of the number of lots and acres platted in Roswell during the 1980s. However, the amount of subdivision activity was quite significant. Table 9.6 summarizes the annual trends. Note that subdivision platting activity trailed off noticeably in the late 1990s, as vacant residential parcels in Roswell become increasingly scarce. Platting activity for 1999 dropped below 1997 and 1998 paces.

Table 9.6
Residential Subdivision Lots and Acreage Approved, 1990-1998

Year	Number of Lots	Acreage
1990	122	73.3
1991	3	5.0
1992	275	120.5
1993	439	221.8
1994	547	302.5
1995	368	167.5
1996	286	190.2
1997	107	56.0
1998	150	102.2
Total, 1990-1998	2,297	1,239.0

Source: Roswell Department of Community Development, 1999.

Land Use as of 1999

In 1999, Cooper-Ross conducted a detailed inventory of existing land uses. The current use of every property in the City (by planning areas, which included some unincorporated land) was identified. Many sources of information were used: the Fulton County Tax Assessor’s office maintains existing land use data, which were updated through analysis of aerial photographs of

the area, and through field checks where the actual use was unclear. Zoning maps and inventories of public properties were also helpful in determining actual land usage.

Table 9.7 presents a summary of the acres of land by land use category in the City.

Table 9.7
Existing Land Use in Roswell, 1999

Land Use Category	City of Roswell	
	Acres	Percent
Single-Family Residential	12,178.5	49.6%
Multi-Family Residential	1,245.3	5.1%
<i>Subtotal--Residential</i>	<i>13,423.8</i>	<i>54.7%</i>
Office/Professional	398.1	1.6%
Commercial/Retail	903.5	3.7%
<i>Subtotal--Commercial</i>	<i>1,301.7</i>	<i>5.3%</i>
Industrial	408.6	1.7%
Public/Institutional	966.4	3.9%
Park/Rec./Conservation	1,340.7	5.5%
Trans/Comm/Utilities	120.0	0.5%
Roads	2,448.1	10.0%
<i>Subtotal--T.C.U.</i>	<i>2,568.1</i>	<i>10.5%</i>
Water	572.6	2.3%
Vacant Land	3,971.6	16.2%
<i>Subtotal--Undeveloped</i>	<i>4,544.3</i>	<i>18.5%</i>
Total	24,553.5	100.0%

Source: Cooper Ross, 2000.

EXISTING LAND USE CLASSIFICATIONS

Single-Family Residential

Defined: Residences consisting of individual houses, usually on separate lots, and often developed in subdivisions.

Single-family development occupies the vast majority of land in Roswell, reflecting its modern roots as a suburban bedroom community. From the historic City center, subdivisions extend out to the east, west and north. Although new residential development clearly clustered around the historic City center during the late 1960s and early 1970s, the burst of suburbanization over the past three decades has spread single-family subdivisions from East Cobb County across Roswell, Alpharetta, and unincorporated John's Creek and Shakerag to north DeKalb and Gwinnett Counties, in a relatively seamless continuum.

Multi-Family Residential

Defined: Residential buildings containing two or more dwelling units, such as duplexes, triplexes, townhouses and apartments.

Since 1970, multi-family residential land in the City has increased from 41 acres to over 1,200 acres. Since 1970, however, the City has grown considerably through annexation, such that the percentage of the City's land area in multi-family use has increased only from about 2 percent to a little over 4 percent. Multi-family uses have developed primarily in "central nodal" areas along major thoroughfares. Townhouse developments and garden apartment communities represent the largest share of multi-family uses, characteristically at suburban densities of 6 or 8 to 14 dwelling units per acre. The City's largest concentration of multi-family development rings the GA 400/Holcomb Bridge Road interchange with such townhome and apartment communities as Riverwood Village, Roswell Gables, Wood Creek, Belcourt and Roundtree. Other notable concentrations occur off Atlanta Street at the Chattahoochee River (the old "Beau Rivage" apartments, River Mill, Roswell Springs, and Riverwalk), and in the Nesbit Ferry/Holcomb Bridge Road area (Tree Ridge, Riversong Manor, Champions Green) (part of the Eastside annexation). Multi-family complexes have also been developed in the Alpharetta Highway commercial corridor north of Holcomb Bridge Road, including Morris Manor, Eagle Crest and the Roswell Commons townhomes off Mansell Road, and Roswell Greenhouse and Rosemont complexes south of Hembree Road.

Office/Professional

Defined: Developments predominantly occupied by establishments that primarily provide a service as opposed to the sale of goods or merchandise. Examples include medical or engineering offices, real estate offices, insurance agencies, and corporate headquarters.

Few office/professional uses presently exist in Roswell outside of predominantly commercial/retail areas. Some 400 acres (about 1 percent of the City's land area) were developed with stand-alone office uses, scattered throughout the City, as of 1999. Most of those uses are low intensity one- and two-story buildings. With the exceptions of the Kimberly-Clark complex on Holcomb Bridge Road at GA 400 and the Roswell Business Center across from the North Fulton Regional Hospital, corporate campuses, corporate office centers and office parks such as Windward in Alpharetta and Perimeter Center in Sandy Springs are not represented in Roswell. In some limited cases where existing single-family houses have been negatively impacted by nearby commercial development, office redevelopment has occurred (such as Colonial Park Drive off Grimes Bridge Road). Office/professional uses are often allowed in locations that provide a transition in land use intensity between higher-intensity uses (such as commercial/retail or major highways) and single-family neighborhoods.

Commercial

Defined: Commercial developments predominantly occupied by establishments that offer goods or merchandise for sale or rent, and other commercial uses that do not operate in "office" settings. Such uses include stores, shopping centers, hotels, restaurants, gasoline stations, automobile body shops, physical fitness centers, markets, building supply centers, and personal service and business service establishments.

Commercial development within the City of Roswell consists of both sales and service uses. These uses occur on individual lots clustered with other commercial uses, or within strip shopping centers. There is no clearly defined central business district in Roswell; the historic center along Atlanta Street and Canton Street predominantly consists of small shops and offices in a revitalized historic setting. This area is the institutional and cultural center of the City, including assets south of Canton Street, on Mimosa Boulevard, such as Bulloch Hall and

Barrington Hall, the City's oldest churches and cemeteries, and the City Hall and City Auditorium.

Outside of the historic center, the pattern of commercial development in the City consists primarily of community service shopping centers and specialty stores clustered around major road intersections, and highway- and business-oriented strip commercial corridors along Alpharetta Highway and Holcomb Bridge Road.

Most of the commercial development in the City has occurred over the past thirty years, and is clearly "suburban" in character and density. The oldest major commercial node established outside of the historic center focused around the Alpharetta Highway/Holcomb Bridge Road intersection and the Roswell Town Center shopping center (i.e., the "Town Center"). This area is now home to many other shopping centers, including King's Market, Crossville Square, Brannon Square, Roswell Market, Grimes Square, Crossings Roswell and (farther to the north) Roswell Exchange and (farther to the south) Riverview Plaza and King's Creek. In between, fast food restaurants, auto service establishments, banks, personal services and consumer shopping stores have filled in, forming a classic commercial "strip." A second major commercial node grew up around the Holcomb Bridge Road/GA 400 interchange, including the Village Shopping Center, Plaza at Roswell, Holcomb Bridge Crossing, Holcomb Place and the Market Center at Holcomb Woods. While the character of the "Roswell Town Center" area is primarily consumer-oriented, the "Holcomb Bridge Crossing" area includes more business- and traveler-oriented establishments, such as motels, business supplies and copy shops, as well as consumer-oriented shopping stores.

More recently, much of the commercial development has occurred in shopping centers, often organized around a major tenant such as a grocery store or "super-store" such as Target or Office Depot, although some major developments such as Home Depot have been built on individual lots close to other commercial properties. Several key commercial nodes are evident today at Nesbit Ferry/Holcomb Bridge Road (the Holcomb Corners and Rivermont Square shopping centers and nearby spin-off strip commercial development), the shopping center on Holcomb Bridge Road at Eves Road (in front of the new Centennial High School), and at Crabapple Road/Arnold Mill Road across from the Crabapple and North Farm shopping centers (both of which are in Alpharetta). All of these shopping centers were established in unincorporated Fulton County and subsequently annexed into Roswell before the year 2000.

A major commercial node has also formed along Woodstock Road/Crossville Road at King Road (including Home Depot) and nearby on Woodstock Road at Hardscrabble Road (the Roswell Corners Shopping Center). Neighborhood-level developments have been established at Crossville Road/Crabapple Road (Crabapple Square), Crabapple Road at Hardscrabble Road, and at the Marietta Highway/Coleman Road intersection.

Light Industrial

Defined: Land dedicated to warehousing, distribution or wholesale trade facilities as well as assembly, fabrication or manufacturing facilities, processing plants, and factories.

With few exceptions, industrial uses in Roswell are located almost exclusively in the corridor along Old Roswell Road north of Mansell Road and extending to the commercial strip along Alpharetta Highway. Light manufacturing, distribution and business park uses are located throughout this corridor in such developments as the Northfield Business Park and Hembree Park. Two small office/warehouse business park developments are located outside of the

primary industrial corridor: a small business park on Holcomb Woods Parkway near the Holcomb Bridge Road/Old Alabama Road intersection, and a small isolated business park on Holcomb Bridge Road near Champions Green. Another minor industrial use is a self-storage mini-warehouse facility off Alpharetta Street on Horton Drive (south of Holcomb Bridge Road). In addition, a small concentration of industrial uses are located in aging structures south of City Hall.

Public and Institutional

Defined: State, federal or local government uses, and quasi-public institutions. Governmental uses include City Hall, fire stations, libraries, post offices and public schools (but not parks). Institutional uses include churches, cemeteries, meeting halls, and other private non-profit uses that provide services to the public.

Public and institutional uses are typically not concentrated in specific locales, and this is the case in Roswell. While the majority of governmental administrative uses are located in the historic center of Roswell, schools and churches are located throughout the community. The City Hall, Library and Cultural Arts Center form an identifiable “government center” near (but not oriented to) the Alpharetta Street/Canton Street/Magnolia Street intersection at the Heart of Roswell park. Other City offices are located off Oxbo Road, including the Public Works facility, and at the intersection of Hembree Road and Maxwell Road. Fulton County human services facilities are also located in the historic central area, at 89 Grove Way.

Other than elementary and secondary schools, major public and institutional uses in the City outside of the historic center include the North Fulton Regional Hospital on Alpharetta Highway north of Hembree Road, the old County Work camp and maintenance facilities (now used primarily for school bus parking) at the easternmost edge of the City on Hembree Road at Maxwell Road, and the Green Lawn Cemetery at Alpharetta Highway and Mansell Road.

Parks, Recreation and Conservation

Defined: Land dedicated to active or passive recreational uses. These lands may be either publicly or privately owned and may include public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers, etc.

Roswell maintains an extensive system of public parks and recreation facilities, as described in the Community Facilities Element. These parks serve all levels of recreational demand, from small urban sites to major district parks, from passive areas for rest and reflection, to active athletic fields to indoor recreation centers. The City also operates three parks in conjunction with Fulton County schools, and is home to the Chattahoochee Nature Center (on the Chattahoochee River along Willeo Road) and the Vickery Creek Unit of the Chattahoochee River National Recreation Area. These many assets provide a richness and variety of experience demanded by the City’s residents and intrinsic to the quality of life expected in the City. As noted elsewhere, the City vastly expanded its parks acreage between 2000 and 2004.

Private recreation uses include amenity areas in residential subdivisions (usually including swimming and tennis facilities and often a community center), and major golf courses within large planned residential communities, including Willow Springs, Horseshoe Bend and the nationally recognized Brookfield West.

Agriculture and Forestry

Defined: Land being actively farmed, including crop cultivation or livestock operations, or set aside for commercial timber or pulpwood harvesting as an agricultural pursuit.

There are no lands in Roswell being farmed or under active forestry operation.

Transportation, Communication and Utilities

Defined: This category includes such uses as electric or gas substations, power generation plants, sewage treatment plants, railroad facilities, radio towers, public transit stations, telephone switching stations, streets and highways.

Streets and highways consume the vast majority of land classified in Roswell as "T.C.U."; there are no railroads traversing the City. Major T.C.U. uses other than transportation facilities include the Big Creek Water Reclamation Plant at the southwestern corner of the City, the John's Creek Water Reclamation Plant near the southeastern corner of the City, and the BellSouth maintenance and service facility on Wills Road immediately south of Alpharetta. These three uses comprise almost 90 percent of the "communication and utilities" portion of T.C.U.; the remaining few acres are scattered throughout the City in such uses as electric power substations.

Vacant/Undeveloped

Defined: Land where there are no buildings or other improvements or that is not otherwise being used for a specific purpose (including lakes and other bodies of water), and lands where development has been abandoned or where deteriorated, vacant buildings are located. (Land in public ownership but held in its natural state are shown under the Parks, Open Space and Conservation category.)

Undeveloped lands are relatively scarce now, in comparatively smaller acreages, and scattered throughout the City. As of 1999, about 18 percent of the City remained undeveloped, including both lands that are vacant but developable and lands that are relatively unusable due to ponds, flood plain or wetlands on the property. Undeveloped lands are relatively evenly spread throughout the City, with the most developed area being the historic City center, and the least developed area being the northernmost portion of the City, north of Woodstock and Hardscrabble Roads. This pattern of scattered undeveloped lands suggests strongly that land development activities in the future will be continue to fill in smaller, vacant properties surrounded by existing development.

DEVELOPMENT TRENDS, 2000 TO 2004

The City matured during this time period, as vacant land continued to be developed for residential subdivisions, retail spaces, churches, institutions, and businesses. The City responded to growth pressures with extensive new parks, a new fire station, and government facilities at Hembree Road and Maxwell Road. The Fulton County school system also added new schools in Roswell during this time period.

As of 2000, only 16 percent of the City's land area was vacant, some of which was found to be undevelopable because of wetlands, flood plains, and steep slope conditions. During this time

period, Roswell reached a stage of near build-out, where development patterns were relatively well-established and “Greenfield” land was becoming increasingly scarce. Redevelopment had not begun to any significant degree, due to the continuing high property values of the built environment, although there were some signs of redevelopment on the horizon.¹

Continued Single-Family Residential Development

As noted in the housing element of this Comprehensive Plan (see Table 2.3), Roswell added more than 2,300 housing units to its housing stock from the time the 2000 U.S. Census was taken to September 2004. The vast majority (1,843) of the units were detached, single-family residences. The locations of single-family development occurring during this time period were scattered throughout most sections of the City. Large, planned subdivisions such as “Ellard” and phases of the “Edenwilde” subdivision were developed during this time period. There was also significant subdivision and housing start activity in the northwestern corner of the City, north of the City of Mountain Park.

Extensive residential infill development also occurred during this time. That trend was especially evident in southwest Roswell (west of SR 9 and south of Crossville Road). It appears that more than half of the vacant land zoned for single-family residences was developed for single-family, detached, residential subdivisions in southwest Roswell during the time period. Infill residential development was less extensive, but noticeable, in parts of Roswell north of Crossville Road west of SR 9. Little single-family residential development occurred east of Georgia 400, and much of that occurred on platted lots within the Horseshoe Bend subdivision.

Townhouse Development

Every month from August 2002 through September 2004, Roswell added significant numbers (468) of townhouse units in various locations. The most extensive area for new townhouse development in Roswell during that time period was within the “Parkway Village” (SR 92/ Crossville Road) corridor. Other significant areas of new townhouse development included the Crabapple area (Houze and Rucker Roads), the old Roswell High School site (“Liberty”) on SR 9 in the historic district, a new complex north of Holcomb Bridge Road near Scott Road, and along the east side of South Atlanta Street.

Public and Institutional Development

As an urban area experiences growth, it is usually residential development that is built first, followed by commercial development. Institutions, such as schools and churches, tend to lag behind rapid residential development, then play “catch up.” That trend appears to be the case in Roswell during 2000-2004, when new public schools (including the complex at Elkins Road and Hembree Road) were constructed. Two substantial private schools were also constructed in west-central Roswell (south of Crossville Road and along Woodstock Road). A senior living complex was also constructed at SR 120 and Willeo Road during this time period. Roswell also expanded its public facilities in the Maxwell Road and Hembree Road area, where it constructed new office facilities and a burn building for the Fire Department.

¹ See Chapter 4, Redevelopment Element, for a capsule summary of redevelopment that occurred within Roswell in recent years.

Office, Commercial and Business Park Development

Office, commercial, and light industrial development slowed but still continued. The primary reason for the slower pace of nonresidential (and noninstitutional) development during this time period was the increasing scarcity of land, although market downturns also played a role. Nearly all of the remaining vacant, light industrially zoned land (primarily along Old Roswell Road and at the end of Old Ellis Road) developed during this time period. Office development continued in some scattered locations, including within the Holcomb Woods Business Park, south of Holcomb Bridge Road along the east side of the Old Alabama Road extension, and along the north side of Mansell Road near Old Roswell Road. The conversion of single-family residences fronting on Crossville Road to office use (i.e., “small tract” development) is another significant land use trend during this time period.

Commercial development also slowed, but a few significant commercial areas were added during the 2000-2004 time period. Those areas experiencing new commercial development include Ellard shopping center east of GA 400, a new Kroger shopping center at Mansell Road extension (just north of Crossville Road), parcels at the intersection of Rucker Road and House Road, and centers in the Parkway Village corridor at SR 92 and Woodstock Road.

Additions of City Park Land

During this time period, the City passed a bond referendum to purchase park land. As a result, Roswell added extensive park lands, including passive open space at Big Creek east of Georgia 400 and west of Old Alabama Road, Leita Thompson Memorial Park (north of Crossville Road near Mountain Park Road), an addition to East Roswell Park, and a new park at the Chattahoochee River at the City limits-Gwinnett County line.

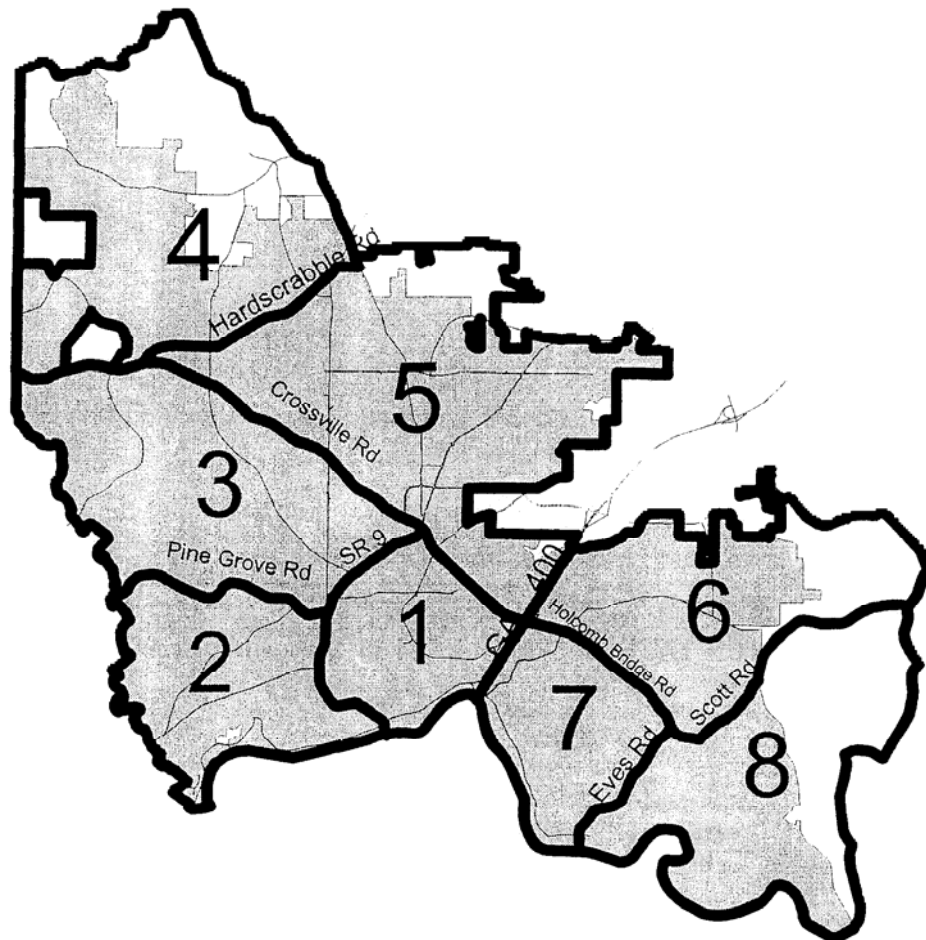
EXISTING LAND USE BY PLANNING AREA

The 2020 Comprehensive Plan presented existing land use by eight “planning areas” which also included nearby unincorporated lands north and northeast of the City (see Map 9.1). The findings in the 2020 plan relative to these planning areas provide useful assessments and are therefore retained in this Section. However, acreages by planning area are not presented in the 2025 plan update. Descriptions of existing land use have been updated where appropriate.

Planning Area 1: Central Roswell

Planning area 1 encompasses the oldest portions of the City, including the eastern portion of the historic City center. The area runs from the Chattahoochee River on the south to Holcomb Bridge Road on the north, between South Atlanta Street and Alpharetta Street on the west to GA 400 on the east. The least amount of undeveloped land is located in this Planning Area, while the City’s few deteriorating residential neighborhoods are located in the older portions of the area.

This area reflects one of the more vibrant parts of the City in terms of its mixture of uses, traditional neighborhood patterns, ongoing redevelopment activity and intensity and range of recreational opportunities. For all its variety, incompatibility of land use is not a serious problem in this area of the City.



Study Area and Planning Areas



Map 9.1
Planning Areas, 2020 Comprehensive Plan

Several parts of the area have experienced a transition to other uses. Some single-family residential streets that lie behind and parallel to Holcomb Bridge Road (and its intense commercial activity) have redeveloped as offices, and small office developments have appeared on Grimes Bridge Road from the old Post Office site to established single-family neighborhoods. What was an older neighborhood to the south of City Hall is likely in the future to transition to office uses or low-density multi-family housing. This trend may move into the older neighborhood to the east of City Hall. Several low-density multi-family developments exist along Norcross Street east of City Hall to the Hog Wallow Creek Bridge (which establishes a point of transition to the single-family neighborhoods to the east). To the north of City Hall, the former Roswell high school site was converted into condominiums, while new housing also developed on a former concrete plant site off South Atlanta Street overlooking the National Recreation Area.

Infill development has occurred along South Atlanta Street, including multi-family development overlooking the National Recreation Area. Infill development is also expected for properties east of City Hall. Protection of the City's historic resources will continue to be a prime concern in this planning area.

The Natural Resources Element (Chapter 5) discusses many areas that require special consideration in future land use planning and development activities. The City's water supply intake on Big Creek at Oxbo Road is located within this Planning Area. The restrictions that apply within the water supply watershed therefore apply to most of the Planning Area, including stream buffer and setback requirements and impervious surface limitations. The southern portion of the Planning Area is also located within the 2,000-foot wide Chattahoochee River Corridor and subject to intensity limitations on land disturbance and impervious surface. Flood plains, wetlands and steep slopes are also among the issues that the City has addressed through its Citywide environmental strategies and established goals and policies.

Planning Area 2: Southwest Roswell

Planning Area 2 was one of the earliest areas to come under "suburbanization" within the City in the late 1960s and early 1970s, along with portions of Planning Areas 1 and 3. The Planning Area fronts along the Chattahoochee River between the Cobb County line and Atlanta Street, and extends northerly to Pine Grove Road/Magnolia Street. A small portion of the Planning Area along the Chattahoochee River is not located within the City limits; this unincorporated area primarily includes a portion of the Chattahoochee Nature Center as well as parklands and recreation areas along the river.

Like most of the City, overall development patterns are well-established in Planning Area 2, and water and sewer infrastructure is adequate to support anticipated development. Some transition of land uses has occurred along South Atlanta Street at such side streets as Bannister Drive, Church Street and Jones Drive. Many small, aging houses have been fixed up and converted to commercial use. Because of the traffic impact of South Atlanta Street and relatively poor accessibility to adjoining properties, this trend is expected to continue and should help maintain economic vitality in the area. From 2000 to 2004, single-family residential subdivisions infilled approximately half of the vacant land (as of 1999) in this planning area.

The Garrison Hill District design guidelines apply to the Marietta Highway (SR 120) corridor, which traverses the Planning Area in an east-west direction. Infill along the remainder of the Marietta Highway corridor will be given careful attention under the requirements of the Garrison Hill District design guidelines.

The southern portion of the Planning Area is located within the 2,000-foot wide Chattahoochee River Corridor and subject to intensity limitations on land disturbance and impervious surface. Flood plains, wetlands and steep slopes are also among the issues that the City has addressed through its Citywide environmental strategies and the goals and policies established in the Natural Resources Element.

Planning Area 3: West Central Roswell

This planning area spans the central part of Roswell from Cobb County to Alpharetta Street between Pine Grove Road/Magnolia Street on the south and Woodstock Road/Crossville Road (SR 92) on the north. The character of Planning Area 3 changes from new homes on estate lots to the brick walks and gaslights of historic Canton Street. This planning area is predominantly residential, and it is almost exclusively single-family residential.

Limited vacant land area remains. Between 2000 and 2004, many of the vacant lands as of 1999 developed as single-family subdivisions and some larger lots were built upon for detached dwellings. Townhouse development within the Parkway Village (SR 92) corridor (the south side is in this planning area) was a significant development trend from 2002 through 2004.

The City's local historic district (and historic district design guidelines) extends into the eastern portion of Planning Area 3, encompassing the small but vital Canton Street area from Magnolia Street to Woodstock Road. The Midtown Roswell design guidelines also apply to properties in Planning Area 3 (the west side of Alpharetta Street). The Parkway Village District has design guidelines applicable to development in Crossville Road (SR 92) corridor (the south side of the corridor).

Crossville Road (SR 92) is one of the busiest road segments in North Fulton County. The route runs from I-575 in southern Cherokee County to GA 400 in Roswell, continuing on to I-85 in Gwinnett County, and I-20 in DeKalb County. The massive flow of traffic that is primarily passing through Roswell has helped support recent commercial development to Planning Area 3 at three distinct locations along the highway—Hardscrabble Road, King Road and Crabapple Road.

The triangle between Alpharetta Street (SR 9), Crossville Road (SR 92) and Canton Street/Crabapple Road is likely to witness transitions of land use during the planning horizon. The south side of Crossville Road near SR 9 (the northern segment of the triangle) still has infill development potential; individual properties fronting along the south side of Crossville Road were impacted by the expansion of this highway to a multi-lane, divided facility. Houses on lots that are relatively shallow have converted and will continue to convert to low-intensity office use in accordance with the small-tract provisions of the Parkway Village overlay zoning district. There are a limited number of deeper lots which may have redevelopment potential for medium-density residential use under Parkway Village zoning and design guidelines.

Also in this triangle, there are 1950s-era subdivision lots and houses that should continue to remain viable residential neighborhoods. However, they are also potentially threatened by land use transitions. For instance, at SR 9 and Strickland Road, commercial uses have “turned the corner” and front exclusively on the residential street. A neighborhood plan could also help define objectives for managing transitions of land use in this triangle, in particular, the effects of commercial land use encroaching into stable neighborhoods. Single-family neighborhoods in this area would be appropriate for neighborhood plans, particularly since they abut the Midtown

Roswell redevelopment corridor and could be impacted (positively or negatively) as redevelopment occurs. A specific objective of the Midtown Roswell Redevelopment Plan is to integrate and connect these neighborhoods with the corridor, at least in terms of pedestrian access.

Due to the single-family residential homogeneity of Planning Area 3 west of Crabapple Road, there is little concern about incompatible land use relationships. Retail and service centers along Crossville Road (SR 92) present the potential for incompatibility, but so far potential impacts have been mitigated by through Parkway Village District overlay zoning and design guidelines.

Planning Area 4: Northwest Roswell

Planning Area 4 extends north of Crossville Road (SR 92), abuts the Cobb County and Cherokee County lines, includes Hardscrabble Road, and reaching Arnold Mill Road (SR 140) to the east. Few undeveloped parcels remain in this planning area. Like Planning Area 3, the area is solidly single-family residential. The planning area is not well-served by sanitary sewer since it is in the Little River basin. The Little River Water Reclamation Plant is currently at capacity and is unlikely to be expanded or diverted. Several developments in the area were provided sanitary sewer service while the plant had remaining capacity, but this is no longer the case. Future development in the Little River basin will therefore most likely have to be on septic tanks.

There are no areas in Planning Area 4 where existing uses are transitioning to other uses through redevelopment, conversion or displacement. The potential for land use transitions, however, exists along portions of Hardscrabble Road, particularly those subdivision lots fronting Hardscrabble Road between the commercial shopping (at SR 92) and Roswell High School at King Road back up to the road. These areas might receive pressure to transition to nonresidential use. This potential would be heightened if the lots across Hardscrabble Road (in Planning Area 5) were allowed to redevelop for nonresidential uses.

Planning Area 4 surrounds the City of Mountain Park. In Mountain Park, there is Garrett Lake. The lake is topographically positioned to receive erosion runoff from development projects in Roswell, particularly since the area has relatively steep slopes. Development plan reviews in the area should be given close scrutiny for appropriate erosion control measures.

Planning Area 5: North Central Roswell

Planning Area 5 ranges widely from exclusive single-family neighborhoods to the Alpharetta Highway strip to the City's primary industrial area (i.e., employment district). Planning Area 5 is bounded by Hardscrabble Road on the northwest, Crossville Road (SR 92) and Holcomb Bridge Road (SR 140) from Hardscrabble to GA 400 on the south, and the City of Alpharetta on the north and east. Major north-south roads in the planning area are Alpharetta Highway (SR 9), Houze Road (SR 140), and Crabapple Road north of Crossville Road (SR 92). The planning area includes the north side of Mansell Road west of SR 9 (the south side is within the City limits of Alpharetta). There is not much undeveloped property in the planning area.

The southernmost part of the planning area (i.e., the north side of the SR 92 corridor) is covered by the Parkway Village overlay zone and design guidelines. Properties along the north side of the SR 92 corridor are likely to experience the same land use challenges as the south side of the SR 92 corridor (discussed under Planning Area 3). The corridor still has some infill

development potential. Houses on lots that are relatively shallow have converted and will continue to convert to low-intensity office use in accordance with the small-lot provisions of the Parkway Village overlay zoning district. Deeper and larger lots may have redevelopment potential for medium-density residential use under Parkway Village zoning and design guidelines.

Planning Area 5 includes the Roswell Town Center activity node. Along Alpharetta Highway (SR 9), there is a continuous strip of commercial and office uses up to North Fulton Regional Hospital, before continuing into Alpharetta. Commercial, office, and townhouse development has occurred along the north side of Mansell Road east of Alpharetta Highway, and also at Mansell Road extension and Crossville Road (SR 92). Commercial development during the past five years along Mansell Road has included shopping centers, big box retail (the relocation of Wal-Mart from Holcomb Bridge Road to Mansell Road), automobile sales establishments, and multi-story office buildings. There is still some commercial development expected because of undeveloped commercially zoned properties in this corridor, as well as some redevelopment. Note in particular the southwest and southeast corners of Mansell Road and Alpharetta Highway (SR 9), both of which experienced redevelopment from 2002 to 2005.

Within the far western point of Planning Area 5, along Crossville Road (SR 92), Hardscrabble Road and King Road, there may be pressure for expansion of commercial use (see also prior discussion under Planning Area 4). The activity center in the area of Hardscrabble Road, Crabapple Road, Houze Road, and Arnold Mill Road has developed further between 2000 and 2004 and continues to develop commercially. There has also been some multi-family development in or near this activity center.

Planning Area 6: Northeast Roswell

Planning Area 6 covers the area east of GA 400 and north of Holcomb Bridge Road (SR 140) to Scott Road on the east. Old Alabama Road divides the planning area into northern and southern halves. The planning area includes high intensity commercial and office uses at GA 400 (including the Kimberly Clark regional headquarters campus) and shopping centers along the north side of Holcomb Bridge Road. A shopping center on Holcomb Bridge Road at Scott Road anchors an area that still has undeveloped land with nonresidential development probable. Most of these properties were zoned by Fulton County prior to their annexation in 1999.

Several multi-family complexes exist in the planning area, such as Belcourt and Calibre Creek (now Archstone). Major single-family developments include Spring Ridge, Terramont, Weatherburne, Northpoint Oaks, Nesbit Lakes and the planned community of Willow Springs.

The extensive wetlands along Big Creek, running from GA 400 north of the Belcourt development toward Mansell Road, are an important and sensitive resource within this planning area. The City's purchase of park land in this area has helped to mitigate much of the development impacts that might have otherwise occurred, but there is still a privately owned tract containing most of the wetlands along Big Creek east of GA 400.

Planning Area 7: East Central Roswell

This planning area is bounded on the west by GA 400, on the north by Holcomb Bridge Road (SR 140), on the east by Eves Road, and on the south by the Chattahoochee River. It includes commercial and multi-family development along GA 400, the Martin's Landing planned

community, the Northcliff subdivision off Riverside Road, and several single-family subdivisions along Eves Road, including Woodfield and River Terrace.

Commercial uses along Holcomb Bridge Road are effectively separated from (but, on the other hand, not connected with), the area's multi-family complexes and single-family subdivisions. Some of the land remains undeveloped, much of which lies along Old Alabama Road between Riverside Road and The Plaza at Roswell shopping center on Holcomb Bridge Road, and along Holcomb Bridge Road west of Eves Road. Multi-story office development may present some incompatibility with the Martin's Landing subdivision.

The southern portion of Planning Area 7 is located within the 2,000-foot wide Chattahoochee River Corridor and subject to intensity limitations on land disturbance and impervious surface.

Planning Area 8: East Roswell

Planning Area 8 includes much of the area annexed into the City in 1999, known as the Eastside annexation. The Planning Area is bounded on the south by the Chattahoochee River, Gwinnett County and the Chattahoochee River to the east, and Eves Road and Scott Road on the west. Holcomb Bridge Road splits the planning area into northern and southern portions, though there is not much land north of Holcomb Bridge Road and east of Scott Road that is within the Roswell City limits. The planning area extends to the west side of Nesbit Ferry Road and follows Holcomb Bridge Road.

The planning area is predominantly residential, with the exception of properties along Holcomb Bridge Road (SR 140) (including a commercial node at Holcomb Bridge Road and Nesbit Ferry Road). The planned community of Horseshoe Bend is the largest residential development in the planning area. Other high-end single-family subdivisions and medium-density residential developments exist along Eves Road, such as Sentinel on the River and Riverfalls. There is extensive apartment development on the north side of Holcomb Bridge Road in this planning area, including Champions Green and Tree Ridge complexes.

Some new development potential exists within the Holcomb Bridge Road corridor. A few vacant lots that front on Holcomb Bridge Road (SR 140) and single family residences that front on Old Scott Road are likely to witness pressure to transition into office uses, possibly through land assembly and redevelopment. The southern portion of Planning Area 8 is located within the 2,000-foot wide Chattahoochee River Corridor and subject to intensity limitations on land disturbance and impervious surface. A large parcel on Holcomb Bridge Road between Eves Road and Fouts Road was acquired by the City for expansion of the East Roswell Park, and tracts at the Fulton County-Gwinnett County line, south of Holcomb Bridge Road, have been acquired for greenspace and the Fulton County Environmental Campus.

EXISTING LAND USE – 2004

**Table 9.8
Existing Land Use in Roswell 1999 and 2004
and Land Use Change, 1999-2004
City of Roswell**

Land Use Category	Roswell 1999		Roswell 2004		Net Change, 1999-2004, Acres
	Acres	Percent	Acres	Percent	
Single-Family Residential	12,178.5	49.6%	13,131.0	53%	952.5
Multi-Family Residential	1,245.3	5.1%	1,738.9	7%	493.6
<i>Subtotal - Residential</i>	<i>13,423.8</i>	<i>54.7%</i>	<i>14,869.9</i>	<i>60%</i>	<i>1,446.1</i>
Office/ Professional	398.1	1.6%	689.3	2.7%	291.2
Commercial	903.5	3.7%	1,136.8	4.5%	233.3
<i>Subtotal – Commercial</i>	<i>1,301.7</i>	<i>5.3%</i>	<i>1,826.1</i>	<i>7.2%</i>	<i>524.4</i>
Industrial	408.6	1.7%	381.3	1.5%	-27.3
Public/ Institutional	966.4	3.9%	1,348.1	5.3%	381.7
Park/ Rec./ Conservation	1,340.7	5.5%	1,874.8	7.4%	534.1
Trans/ Comm/ Utilities	120.0	0.5%	118.7	0.4%	-1.3
Roads	2,448.1	10.0%	2,645.15	10.5%	197.05
Water	572.6	2.3%	565.6	2.2%	-7.0
Vacant Land	3,971.6	16.2%	1,647.71	6.5%	-2,323.89
Total	24,553.5	100.0%	25,277.36	100.0%	723.86

Source: 1999 data from Cooper-Ross in 2020 Comprehensive Plan. 2004 data provided by Roswell Community Development Department based on information supplied by Jerry Weitz & Associates, Inc.

SUMMARY ASSESSMENT OF LAND USE

Infill and redevelopment potential, prospects for incompatible land uses, and service by infrastructure are summarized for each planning area in Table 9.9.

Table 9.9
Land Use Issues by Planning Area

Character Area	1 Central	2 SW	3 West Central	4 NW	5 North Central	6 NE	7 East Central	8 East
Infill and Redevelopment								
Residential Infill Potential	□	□	□	◆	□	□		
Commercial Infill Potential	◆		□		□	□	◆	□
Blighted Areas/Deterioration	□							
Redevelopment	◆				◆	□	□	
Land Use Conflicts								
Incompatibilities Identified	□	□	□	□	□	◆	◆	
Neighborhood Plan Priorities	◆							
Transitions in Land Use	◆		◆		◆			
Infrastructure								
Highway traffic congestion	◆	◆	◆	□	◆	◆	◆	◆
Water and sewer limitations	□			◆				
Limited Proximity to Parks								

- ◆ Significant
□ Minor significance

Historic Factors Leading to Current Development Patterns

Historic factors that have led to Roswell's land use patterns include decentralization of the regional development pattern, fast-paced suburban residential development, sewer availability, and transportation improvements, especially Georgia 400. A marked trend in Roswell's land use history has been large-scale private development of communities with golf courses, such as Horseshoe Bend, Brookfield West, and Willow Springs, all of which were developed in unincorporated Fulton County and annexed into the City limits. Roswell's well-admired park system and proximity to the Chattahoochee River have also contributed to its historic development patterns. Other historic factors influencing Roswell's land use patterns are described in detail in an earlier section of this element.

Patterns and Densities Related to Infrastructure

Roswell is generally well served with all infrastructure facilities. There are no areas where rapid development threatens to outpace infrastructure capacity, with a few exceptions. The Fulton County school system has historically had a difficult time keeping up with residential development in north Fulton County, but new schools have been built in the area in recent years. Secondly, the lack of sanitary sewer capacity in the Little River basin (see discussion of Planning Area 4) has not limited development but has reduced some residential densities since newer development in that area has been served by individual septic tanks. Third, the arterial

road system is generally at capacity, which might begin to limit future development in Roswell if it was not already reaching buildout, as it is today. Over time, the City through its land use policies and regulations has reduced its permitted residential densities from 14 units per acre to 10 units per acre, then down to 8 units per acre, down to 5 units per acre in an effort to reduce congestion (schools and roads) and ensure greater compatibility with existing neighborhoods.

Roswell's commercial uses follow a "strip" pattern along certain arterial streets, such as Alpharetta Highway and Holcomb Bridge Road. In other areas, however, such as Marietta Highway (SR 120) and Crossville Road (SR 92), Roswell has succeeded in directing commercial development into neighborhood shopping villages rather than forming continuous commercial strips. Success in avoiding strip commercialization in these two corridors is attributed to several things, including: a land use plan that guided nodal development, neighborhood and communitywide activism, a City Council willing to adopt sound planning principles, and preparation and implementation of design guidelines (Garrison Hill and Parkway Village, respectively) that help further define community desires for development. In particular, the Parkway Village overlay district provides a mechanism for commercial development, but only on the community's desired terms. That district also allows owners of dwellings to convert to office-professional and other allowed uses through a "small tract" development process.

Transitional and Blighted Areas

The preceding discussion of land use by planning area highlights areas of transitional land uses (also see Table 9.8). Properties east of City Hall and fringe neighborhoods west of South Atlanta Street may experience a transition from residential to nonresidential uses. Roswell has managed its transitional land use areas well through zoning and overlay districts, including buffering and intensity step-downs between incompatible uses. By and large, Roswell has limited blighted areas and they may require rehabilitation. One such area is the Midtown Roswell redevelopment corridor, which is not blighted but the City has been proactive in encouraging redevelopment there before physical and aesthetic conditions degrade below community standards. The City's industrial areas are mostly modern-day business parks and there are no signs of decline or obsolescence.

With regard to residential development, with the exception of lot-by-lot conversions of dwellings along Crossville Road in the Parkway Village Overlay Zoning District, most of the concerns about transitional neighborhoods relate to Central Roswell (Planning Area 1). The City's Comprehensive Plan provides a framework for neighborhood planning (see Chapter 7) which may provide a useful mechanism for addressing neighborhoods with older, smaller homes that no longer fit the needs and tastes of most households desiring to live in Roswell. In the Urban Design Element (Chapter 8), and in the following section of this chapter, there is discussion of "character areas," one of which is the City's older, intown neighborhoods. Those areas are prime candidates for neighborhood plans to assess needs and identify rehabilitation and redevelopment opportunities.

Infill Development Potential

The existing land use map indicates the most significant vacant lands. The preceding discussion of planning areas has highlighted the potential for infill development (see also Table 9.8 for a summary). Roswell is clearly running out of vacant land within the City limits. As already noted, some of the remaining undeveloped tracts cannot be developed because they are mostly water. Others have poor access (and in some cases appear to be landlocked, or

without their own direct frontage on a street). Yet others are difficult to develop, due to slope (especially along the Chattahoochee River).

Environmentally Sensitive Areas

Sensitive areas include the Chattahoochee River Corridor, flood plains, wetlands, and steep slopes. Roswell has put in place the regulations needed to protect sensitive areas, and in other cases it has acquired land with environmental protection in mind. Regulations include Metropolitan River Protection Act review, and zoning regulations that regulate wetlands and prevent development in flood plains. The policies of the Natural Resources Element address steep slopes, and the City addresses those policies through the preliminary platting process (in the case of subdivision approvals) and the design review process (in cases of development approval).

Sites of Historic or Archaeological Interest

As noted in the Historic Resources Element (Chapter 6 of this Comprehensive Plan), Roswell has a local historic district that protects its most valuable historic resources. The City's Zoning Ordinance, revamped in 2003, also extended the Historic Preservation Commission's jurisdiction to archaeological sites.

Single-Use and Multi-Use Districts

Roswell's first Zoning Ordinance, adopted in 1971, put the City on a course of single-function land use districts. Roswell's current Zoning Ordinance, though modified, still preserves single-function districts, and such single-use districts are still considered essential to protecting the character and value of Roswell's many fine residential neighborhoods. Where the community has accepted multiple uses and mixed use development, however, mixtures of land uses are permitted. Mixed-use districts include the local Historic District, the Parkway Village overlay district, and the Midtown Roswell Overlay District.

Traditional Neighborhood Development

Traditional neighborhoods have dwellings with little to no setback from the street and often are accessed with alleys. Generally, most of Roswell's conventional suburbs are unlike traditional neighborhoods. However, Roswell does have certain neighborhoods within the local historic district that have features of traditional neighborhood development. During the process of revising its Zoning Ordinance, Roswell considered but decided not to establish a separate zoning district for traditional neighborhood development. However, it reestablished a residential planned unit development district that permits innovative site arrangements and allows for designs that follow principles of traditional neighborhood development. Roswell has also encouraged this style of development within the Midtown Roswell redevelopment corridor (see especially the Midtown Roswell redevelopment plan and accompanying overlay district).

Transit-Oriented Development

Roswell is not served by a MARTA heavy rail line. It does have bus routes (see the Transportation Element), and certain land use regulations and policies encourage better connections to public sidewalks in commercial developments, in order to better serve transit riders. The Midtown Roswell Redevelopment Plan envisions more transit-friendly development.

There are no significant opportunities, however, to promote more compact development around transit stations since there are none in Roswell

Jobs-Housing Balance

Having 1.5 jobs for each housing unit is considered a good balance of residential and nonresidential development. As of 2004, the best estimate is that Roswell has 33,691 housing units (see Table 2.4, Chapter 2 of this Comprehensive Plan). Employment is estimated at approximately 40,000 (see Chapter 3). This equates to an approximate jobs-to-housing units ratio of 1.19 in the year 2004. This number is slightly lower than the range recommended in the planning literature, which is 1.3:1 to 1.7:1. However, this is not surprising given that Roswell developed historically as a bedroom community. Somewhat surprisingly the City's mix of jobs to housing has equalized substantially over time; hence, this numerical finding does not cause concern.

As noted in the planning literature on this subject, however, one should use quantifiable jobs-housing balance benchmarks with caution, since one simple numerical benchmark does not adequately reflect whether quantitative balances of jobs and housing exist.² Specific policies for jobs-housing balance are not considered necessary in Roswell's Comprehensive Plan. For more information, see the City's Economic Development Strategy (Chapter 3), which calls for diversification of the employment base, and the Housing Element (Chapter 2), which addresses housing needs.

LAND CAPACITY AND PROJECTION OF LAND USE NEEDS

As a part of the 2020 planning process, Roswell prepared a Demand and Capacity Analysis, which is a technical study that quantifies the amount of growth that is expected in the larger area, including Roswell, and compares that future "demand" for land to the land resources in the Roswell Study Area. The land resources themselves are constrained to those acres actually having development potential, and to the type and intensity of development that would be appropriate. Thus, the "capacity" of Roswell to accommodate future growth can be clearly defined within a land use planning framework.

As of 1999, the study found that there were only 4,544 acres of undeveloped lands, of which 3,421 were found to have development potential. Based on the expected land use (and attendant zoning classification) of each property, a density factor was applied to the net developable land to estimate the amount of development that the property was expected to be capable of accommodating. Density factors are: 1) the number of dwelling units per acre for residential uses and 2) square footage of floor area per acre for office, commercial and industrial uses. The density factors were based on the City's zoning requirements under the various zoning district categories. For more information on the densities and intensities utilized in that study, please contact the Community Development Department.

A key findings of the analysis was that, because demand for housing was expected to outstrip supply in Roswell, it was assumed that all of the land anticipated for future residential development in Roswell would be built out prior to 2020. Thus, the additional units, for which there was development capacity, established the 2020 forecast for residential land use.

² Weitz, Jerry, 2003. *Jobs-Housing Balance*. Planning Advisory Service Report Number 516. Chicago: American Planning Association.

Such a study was not repeated for the 2025 plan update. It is instructive to note that, given Roswell's almost built-out state, projections of population and nonresidential growth were themselves constrained by the availability of land. That is, Roswell's population and employment projections were determined based on the physical ability of the City to accommodate new growth and development (and some redevelopment), as opposed to forecasting or projecting population that might occur if there was an unlimited land supply. Hence, Roswell's 2025 land use plan is based more on land capacity limitations rather than land use needs.

As to other than residential or commercial land use needs, the City has recently purchased additional tracts of park land in anticipation of future needs. It has also quantified its parks and recreation needs for purposes of continuing to charge impact fees (see the development impact fee methods report in this Comprehensive Plan).

CHARACTER AREAS AND OVERALL DEVELOPMENT CONCEPT MAP

The notion of character areas is introduced in the optional Urban Design Element (See Chapter 8). Table 9.10 provides a summary of major character areas by planning area. The boundaries of the 2020 planning areas, which conform primarily to census tracts, usually follow major roads, such as Georgia 400, Crossville Road and Alpharetta Highway.

Table 9.10
Character Area by Planning Area

Character Area	1 Central	2 SW	3 West Central	4 NW	5 North Central	6 NE	7 East Central	8 East
Centers								
Historic District	♦	♦	♦					
400/Holcomb Bridge	♦				♦	♦	♦	
Crabapple/Houze				♦	♦			
Corridors								
Chattahoochee River	♦	♦					♦	♦
Parkway Village			♦	♦	♦			
Midtown Roswell	♦		♦		♦			
Garrison Hill		♦						
Holcomb Bridge Road						♦	♦	
Districts								
Employment					♦			
Preserves								
Big Creek Unit (NRA)	♦							
Big Creek Passive Park						♦		
Leita Thompson Park				♦				
Neighborhoods								
Intown Settlements	♦							
Master Planned Communities				♦	♦	♦	♦	♦
Conventional Suburbs	♦	♦	♦	♦	♦	♦	♦	♦
Rural Development			♦	♦				

As Table 9.10 makes apparent, a discussion of character areas (see Chapter 8 of this Comprehensive Plan) tends to include land uses along both sides of highways and centers that

straddle more than one planning area. Hence, Table 9.8 makes the case why further description by planning area (like that used in the 2020 plan) is no longer most instructive. While the preceding discussion of existing land use and land use trends is useful, description of land use aspirations requires a different geography. The character areas are better suited as an organizing tool for describing future land use aspirations.

The character area approach helps to conceptualize areas that may need to be redeveloped (such as the Midtown Roswell redevelopment corridor). It also helps to designate priorities for preparing area plans, such as the neighborhood plans recommended for one or more of Roswell's intown (original settlement) neighborhoods. By formally establishing corridors in the character area typology, Roswell's land use plan is more in keeping with regional plan policies and state recommendations for growth planning.

By and large, the measures that are needed to implement the character areas are already in place, summarized as follows:

- In terms of promoting overall design, a number of design guidelines already exist (see Chapter 8), and indeed the character areas shown on the overall development concepts map are a reflection of prior work by the City in maintaining and promoting unique character areas of the City such as the local Historic District, Parkway Village, Midtown Roswell, and the Garrison Hill corridor.
- Two of these development corridors, Parkway Village and Midtown Roswell, have zoning overlays that allow for mixed and/or multiple uses. Another study is underway to define character and redevelopment prospects in the Holcomb Bridge Road corridor east of Georgia 400.
- The City's long-standing Design Review Board is charged with ensuring that new development fits intended character and land use compatibility.
- The Chattahoochee River corridor is protected pursuant to State law adopted in 1973, a regional plan for the corridor (see the Chapter 5, Natural Resources Element) and local reviews conducted under authority of that law.
- Preserves are protected through municipal ownership.
- The rural development character area is implemented primarily through the City's two-acre minimum zoning district.
- The local Historic District has its own set of overlay regulations in Roswell's Zoning Ordinance. Refinement of the local Historic District (called a center in the character area typology) is underway, and the Historic Resources Element (Chapter 6) further defines that center in terms of three "historic character areas."
- The Georgia 400/SR 9 "Town Center" was planned for redevelopment as a part of the Midtown Roswell Redevelopment Plan.
- Other character areas, such as master planned communities, conventional suburbs, and the employment district, do not require special implementation measures above and beyond the City's current (conventional) zoning district regulations.

FUTURE LAND USE PLAN CATEGORIES

Although Roswell has elected to include an overall development concepts map, which delineates character areas for purposes of urban design and land use, its future land use plan map remains central to decision making.

The future land use plan map illustrates the preferred location of probable growth in Roswell over the next 20 years. As noted previously, extensive development of many vacant tracts has continued to occur during 2000-2004, and very little developable land will still be vacant in the City by the year 2020.

The future land use plan map for the year 2025 is not materially different than the 2020 plan map, as amended by the City. There are, however, some minor changes from the 2020 plan map, as amended, in order to bring into consistency certain properties that have developed differently from the plan's recommendations.

The following land use categories are shown on the future land use plan map.

Estate Residential: Single-family residences developed on separate lots, and often developed in subdivisions, having a density of ½ dwelling unit per acre (that is, lot sizes of at least two acres). The E-1 zoning district is consistent with this land use designation.

Low-Density Residential: Single-family residences developed on separate lots, and often developed in subdivisions, having a density of 1 to 1½ dwelling units per acre. The E-2 zoning district is consistent with this land use designation.

Suburban Residential: Single-family residences developed on separate lots, and often developed in subdivisions, having a density of 2 to 2½ dwelling units per acre. The R-1 zoning district is consistent with this land use designation.

Medium-Density Residential: Single-family residences developed on separate lots, and often developed in subdivisions, having a density of three to five dwelling units per acre. The R-2 zoning district and the R-5 zoning district are consistent with this land use designation. In some cases, attached dwelling units (e.g., townhouses and duplexes) can be constructed at medium densities.

High-Density Residential: Multi-family dwellings such as duplexes, triplexes, townhouses, condominiums and apartments, developed at densities not to exceed five dwelling units per acre. The R-3 and R-TH, zoning districts are consistent with this land use designation, depending on surrounding land use and zoning conditions, when limited to a maximum density of eight dwelling units per acre.

Office-Professional: Developments predominantly occupied by establishments that primarily provide a service as opposed to the sale of goods or merchandise, located in low intensity settings in one- or two-story buildings. Examples include medical or engineering offices, real

estate offices, retail print and copy centers, and insurance agencies. The O-P zoning district is consistent with this land use designation.

Office Campus: Developments predominantly occupied by establishments that primarily provide a service as opposed to the sale of goods or merchandise, located in high intensity settings in multi-story buildings. Examples include multiple-tenant office centers, mid-rise and high-rise office buildings, private hospitals and medical centers, mixed-use office and commercial multi-story buildings, and corporate headquarters. The OCMS zoning district can be consistent with this land use designation, depending on surrounding land use and zoning conditions.

Neighborhood Commercial: Commercial developments predominantly occupied by establishments that offer goods or merchandise for sale or rent to nearby residents. Such uses generally have floor areas no greater than 5,000 square feet and include such stores as convenience shopping facilities, personal service establishments, pharmacies, corner markets, and bakeries. The C-2 zoning district is consistent with this land use designation.

General Commercial: Commercial developments predominantly occupied by establishments that offer goods or merchandise for sale or rent to a broad shopping market. Such uses include stores, shopping centers, hotels, restaurants, gasoline stations, automobile body shops, and physical fitness centers, markets and building supply centers. The C-1 and C-3 zoning districts can be consistent with this land use designation, depending on surrounding land use and zoning conditions.

Light Industrial/Showroom/Wholesale: Land dedicated to warehousing, distribution or wholesale trade facilities as well as light assembly, repair or fabrication. The I-1 zoning district, which was reconfigured to support more office-showroom uses rather than warehouses and light industrial uses in the 2003 Zoning Ordinance, is consistent with this land use designation.

Transportation, Communication and Utilities: This category includes such uses as electric or gas substations, power generation plants, sewage treatment plants, railroad facilities, radio towers, public transit stations, telephone switching stations, streets and highways. These uses are appropriate in any zoning district where they are otherwise allowed.

Public-Institutional: State, federal or local government uses, and quasi-public institutions. Governmental uses include City Hall, fire stations, libraries, post offices and public schools (but not parks). Institutional uses include churches, cemeteries, fraternal meeting halls, and other private non-profit uses that provide services to the public. These uses are generally appropriate in any zoning district where they are otherwise allowed. Churches, however, may or may not be appropriate in residential areas, depending on surrounding land use and zoning conditions.

Parks, Recreation and Conservation: Land dedicated to active or passive recreational uses and public conservation of natural areas. These lands may be either publicly or privately owned and may include public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers, etc. These uses are appropriate in any zoning district where they are otherwise allowed.

Agriculture and Forestry: Land being actively farmed, including crop cultivation or livestock operations, or set aside for commercial timber or pulpwood harvesting as an agricultural pursuit. There are no such uses in Roswell today, and none are expected to be initiated over the next 20 years.

FUTURE LAND USE ACREAGES AND LAND USE CHANGE

Table 9.11
Land Use Acreages 2025 and Projected Land Use Change
City of Roswell

Future Land Use Category	Existing Land Use, 2004		Future Land Use 2020 Plan		Future Land Use 2025 Plan		Projected Land Use Change, 2004 (existing) to 2025 (future)	Difference Between 2020 and 2025 Plans
	Acres	%	Acres	%	Acres	%	Acres	Acres
Estate Residential	n/c	n/c	1,878.7	7.6	2,002.0	7.7	n/c	+124
Low-Density Residential	n/c	n/c	3,726.8	15.0	6,396.9	24.8	n/c	+2,670
Suburban Residential	n/c	n/c	3,726.8	15.0	4,089.9	15.8	n/c	+364
Medium-Density Residential	n/c	n/c	4,808.7	19.4	2,084.6	8.0	n/c	-2,724
High-Density Residential	n/c	n/c	1,376.2	5.6	1,431.3	5.5	n/c	55
Single-Family Residential	13,131.0	53	n/c	n/c	n/c	n/c	n/c	--
Multi-Family Residential	1,738.9	7	n/c	n/c	n/c	n/c	n/c	--
<i>Subtotal—Residential</i>	<i>14,869.9</i>	<i>60</i>	<i>15,551.6</i>	<i>62.7</i>	<i>16,004.7</i>	<i>62.0</i>	<i>+1,134.8</i>	<i>+453</i>
Office/Professional	689.3	2.7	488.4	2.0	472.9	1.8	n/c	+16
Office Campus	n/c	n/c	272.3	1.1	282.8	1.1	n/c	+11
<i>Subtotal—Office</i>	<i>689.3</i>	<i>2.7</i>	<i>760.7</i>	<i>3.1</i>	<i>755.7</i>	<i>2.9</i>	<i>+66.4</i>	<i>-5</i>
Neighborhood Commercial	n/c	n/c	89.2	0.4	72.8	0.2	n/c	-16
General Commercial	n/c	n/c	1,437.3	5.8	1,396.8	5.4	n/c	-41
Commercial (all)	1,136.8	4.5	1,526.5	6.2	1,469.6	5.7	+332.8	-56.9
<i>Subtotal—Commercial and Office Categories</i>	<i>1,826.1</i>	<i>7.2</i>	<i>2,287.2</i>	<i>9.2</i>	<i>2,225.3</i>	<i>8.6</i>	<i>+399.2</i>	<i>-61.9</i>
Light Ind./Show/Whole	381.3	1.5	575.8	2.3	551.8	2.1	+170.5	-24
Public/Institutional	1,348.1	5.3	1,160.6	4.7	1,225.0	4.7	-123.1	+64.4
Park/Rec./Conservation	1,874.8	7.4	1,789.7	7.2	2,069.4	8.0	+194.6	+279.7
Trans/Comm/Utilities	118.7	0.4	120.0	0.5	135.8	0.5	+17.1	+15.8
Roads	2,645.15	10.5	2,631.7	10.6	3,005.5	11.2	+360.35	+374
Water	565.6	2.2	669.4	2.7	565.6	2.1	0	-103.8
Vacant Land	1,647.71	6.5	0	0	5.86	0.002	-1,614.85	+6
Total	25,277.36	100.0	24,786.0	100.0	25,788.96	100.0	+511.6	+1,003

Source: Roswell Community Development Department, Acreages of Future Land Use Plan Map calculated by GIS, 2005.

PRINCIPLES GUIDING THE LAND USE PLAN

As noted at the outset of this chapter, the Land Use Element represents a culmination of the City's community vision, vision statements for subareas, and the goals, policies, strategies, and objectives of other Comprehensive Plan elements. Reiterating all of them would not be appropriate here. Rather, it is appropriate to focus on those principles that have not already been illuminated in the various plan elements. Such principles include but are not limited to consistency with the Atlanta Regional Commission's Regional Development Plan (RDP) policies, best land use practices, and the City's own guiding principles, policies and objectives.

REGIONAL DEVELOPMENT PLAN (RDP) POLICIES

This section of the Land Use Element describes 11 of 14 RDP policies and assesses the extent to which Roswell's Land Use Element is consistent with them.³

RDP Policy #1: Provide development strategies and infrastructure investments to accommodate forecasted population and employment growth more efficiently.

More efficient development is possible in certain instances in Roswell. Roswell strives to provide superior levels of service for community facilities and services so that continued development and redevelopment are likely, as opposed to displacing development into unincorporated areas of North Fulton County. Efficiencies are encouraged by providing for residential planned unit developments and encouraging revitalization within designated corridors, and maintaining development permissions within mixed-use and multi-use centers and corridors.

RDP Policy #2: Guide an increased share of new development to the Central Business District, transportation corridors, activity centers and town centers.

By adopting an overall development concept map with designated centers, corridors, districts, and other character areas, Roswell has re-conceptualized its development policies to be consistent with this RDP policy. Designated centers include the local historic district (historic center), the Town Center at SR 9 and Holcomb Bridge/Crossville Road, and the area surrounding the interchange of Georgia Highway 400 and Holcomb Bridge Road. Transportation corridors are also recognized in the overall development concept map, including the Midtown Roswell redevelopment corridor, Holcomb Bridge Road, Crossville Road (SR 92, also known as Parkway Village), and Marietta Highway (SR 120, also known as Garrison Hill). Because these centers and corridors have the greatest remaining development and redevelopment potential, Roswell's land use plan and overall development concept map are consistent with this RDP policy.

RDP Policy #3: Increase opportunities for mixed-use development, infill and redevelopment.

³ RDP policies 12, 13, and 14 relate to "coordination" and are therefore not discussed in this section. RDP policy #13, "Coordinate local policies and regulations to support the RDP," is addressed by virtue of including this section in the Comprehensive Plan.

Roswell has made great strides, however, to integrate additional opportunities for mixed-use development and redevelopment into its Comprehensive Plan. The local Historic District provides for mixtures of land uses and has permitted such mixtures for some time now. The Parkway Village overlay district (SR 92 corridor) permits commercial, office, and townhouses to be developed in close proximity to one another. The Midtown Roswell redevelopment plan and overlay district specifically provide for residential-office-civic-commercial mixed use developments.

Infill development has been occurring without additional specific policies, because the land values in Roswell (and its high quality of life) make continued development economically viable. Developing infill sites will become increasingly more challenging, however, as the sites remaining become scarcer, difficult to develop physically, and more challenging in terms of development approvals particularly where higher densities are involved.

RDP Policy #4: Increase transportation choices and transit-oriented development (TOD).

As noted earlier in this Land Use Element, Roswell is not served by heavy rail transit stations. It does have MARTA bus service, and transit-friendly development regulations have been instituted in Roswell's 2003 Zoning Ordinance. Nonetheless, there is little Roswell can do to implement transit-oriented development.

Roswell's multi-modal transportation plan (see Chapter 12 of the Comprehensive Plan) addresses several efforts to increase transportation choice, including the development of a Citywide trails network, sidewalk improvements, bikeway planning, and integration of multi-modal objectives into more specific plans such as the Midtown Roswell Redevelopment Plan.

RDP Policy #5: Provide a variety of housing choices throughout the region.

This RDP policy is addressed in the Housing Element (Chapter 2 of the Comprehensive Plan). The City's Housing Element includes an assessment of the types of housing units available and the forecasted needs of Roswell's future population. A wide variety of housing types are available (and diversification opportunities possible), including detached single-family dwellings, townhouses, apartments, condominiums, loft dwellings, and accessory apartments. Although a regional allocation of affordable housing units has not been proposed in the regional development plan, it appears that Roswell has its fair share of multi-family units.

RDP Policy #6: Preserve and enhance the stability of existing residential neighborhoods.

This policy is especially important in Roswell, which is mostly a collection of suburban-style subdivisions. Most of Roswell's neighborhoods have high-value housing and are expected to remain stable throughout the planning horizon (2025). There are some neighborhoods, however, that may require special attention in order to remain stable. The combination of age (many units in these neighborhoods were constructed in the 1950s and 1960s), size (they are smaller than most households find suitable today), and transitions in terms of social demographics make these intown neighborhoods more susceptible to change, transition, and possibly decline. The neighborhoods designated as "intown settlement" on the overall development concepts map may require special attention in the future for these reasons. Neighborhood plans targeted at one or more of these intown neighborhoods are recommended, as they offer an opportunity for the City to ensure that these older settlements remain stable and are better connected with commercial redevelopment areas.

RDP Policy #7. Advance sustainable greenfield development.

This policy is increasingly irrelevant to Roswell as almost all of its vacant, fringe-area lands have already been developed and emphasis has shifted to infill sites and redevelopment. Nonetheless, Roswell's land use regulations provide for "conservation subdivisions" which provide opportunities for set-aside of green space which promotes a more sustainable suburban form. Roswell's Zoning Ordinance also provides for residential planned unit developments, which promote open space set-asides and more efficient development. In short, Roswell has done what it can do to implement this policy, considering its relevance to the City's future development policies is increasingly remote.

RDP Policy #8. Protect environmentally sensitive areas.

As described more fully in the Natural Resources Element of this Comprehensive Plan, as well as earlier sections of this Land Use Element, Roswell has remained a leader regionally in terms of its natural resource protection. It has protected the Chattahoochee River corridor and enhanced it with multi-modal transportation and recreational opportunities. Its watersheds, wetlands, and flood plains are adequately protected. It has policies for protecting against inappropriate development on steep slopes which are enforced during a design review process.

RDP Policy #9. Create a regional network of greenspace that connects across jurisdictional boundaries.

Roswell adopted a greenspace plan (see the Natural Resources Element), when the Governor's greenspace program was initiated under then Governor Roy Barnes. In the past year (2004), the greenspace commission was in the process of being reinvented under Governor Perdue. The Chattahoochee River is the primary opportunity for linkage to the larger, regional open space network. By installing a multi-use trail along the river, purchasing additional land along the river (with the help of the Trust for Public Land), and taking over park lands previously managed by Fulton County, Roswell has demonstrated its commitment to ensuring that the river corridor in the City provides attractive greenspace consistent with regional (and indeed, national, considering the Chattahoochee River National Recreational Area lands) greenspace objectives. The City has also expended funds to develop Oxbo Park, which runs between Oxbo Road and Big Creek in the central part of the City.

A key desire of the City is to link the Chattahoochee River greenway with the Big Creek greenway developed in the adjacent City of Alpharetta. Such connections present practical challenges, as most if not all of the land along Big Creek between the Alpharetta City limits and Oxbo park are developed. There are also substantial financial challenges as well to making that connection, even if it is determined physically possible to link the Oxbo Park (which connects or can connect to the Big Creek Unit National Recreation Area (shown as a "preserve" on the overall development concepts map) with Alpharetta's Big Creek greenway.⁴

While not crossing into other jurisdictions, it is important to note that citizens participating in the City's visioning workshops strongly suggested that Roswell do more to connect its own park

⁴ As recently as December 30th, 2004, Roswell Mayor Jere Wood was quoted that such a project (connecting to Alpharetta's Big Creek greenway) is a worthy project but faces challenges. The Mayor invited citizens to speak up on projects that might be funded with a new bond referendum in 2006. See: "Saving by Borrowing," Atlanta Journal-Constitution, December 30, 2004, page JH3.

system together by bike lanes and sidewalks and/or multi-use trails. Hence, in addition to continuing to explore alternatives to connections with greenspace outside the City, Roswell desires to pursue connections of greenspaces and park lands within the City itself.

RDP Policy #10: Preserve existing rural character.

Roswell's suburbanization and maturing as a City has left fewer and fewer opportunities (or desires) to preserve rural character. One exception is a still-rural area in west-central Roswell, south of Crossville Road. That area has been designated as rural development on the overall development concepts map, and it is adequately implemented by the City's Zoning Ordinance through a two-acre lot minimum. No other areas are described in this plan as being appropriate for preservation as rural.

RDP Policy #11: Preserve historic resources.

As the Historic Preservation Element of this Comprehensive Plan makes clear (see Chapter 6), Roswell has been a regional leader in preserving its historic resources. The City clearly implements this regional development plan policy.

COMPREHENSIVE PLAN BEST LAND USE PRACTICES

The Atlanta Regional Commission's Regional Development Plan Guidebook (2004) summarizes various quality growth tools that local governments can implement in their Comprehensive Plans, land use regulations, and development review processes. For each tool, the guidebook articulates "best policies" for land use, intergovernmental coordination, housing, and environment. Table 9.12 identifies, for each development-related and corridor planning tool, those best land use practices related to Land Use Elements of Comprehensive Plans and provides notes on the extent to which they are implemented in Roswell. Generally, Roswell achieves 90-95% compliance with those best land use practices that pertain to tools consistent with the City's land use policies.

Table 9.12
Regional Development Plan “Best Land Use Practices”
and their Application in Roswell

Tool	Best Land Use Practice	Applicability in Roswell
Transit-oriented Development	Opportunities are assessed and identified	Complies although TOD opportunities are minimal in Roswell
Transit-oriented Development	Density bonuses for transit-supportive development are considered	The Midtown Roswell Redevelopment Plan offers higher densities for mixed-use redevelopment along a bus transit corridor in selected redevelopment areas
Mixed-use Development	Opportunities are assessed and identified	Complies (see discussion in this Land Use Element)
Mixed-use Development	Incentives, such as density bonuses, are considered and if appropriate, provided.	Incentives such as process streamlining are encouraged in the redevelopment strategy (see chapter 4, Comprehensive Plan)
Mixed-use Development	Densities and intensities within mixed use development are higher than average in the community	The Midtown Roswell Redevelopment Plan offers densities/intensities consistent with redevelopment needs and City objectives
Mixed-use Development	Strive for a job-housing balance within a three to five mile area around a development site	Not directly implemented but considered for developments of regional impact
Traditional Neighborhood Development	Opportunities are assessed and identified	Complies. TND was considered and is implemented in part, but there is no specific TND district proposed
Infill Development	Acreage data for infill areas and redevelopment areas by type of land use are provided	Limited data are provided. More specific study of infill opportunities and responses to them is recommended
Infill Development	Residential infill development opportunities are identified, barriers are identified, and expected buildout is quantified	Constraints are identified, opportunities in a broad sense are identified; quantifying infill opportunities could be more refined
Infill Development	Incentives for encouraging infill development are considered	Market has resulted in development of infill sites, but more attention to this is needed
Infill Development	Non-residential infill development opportunities are identified, barriers are identified, and expected buildout is quantified	Limited data are provided. Strategy has focused on corridors. Barriers are addressed in redevelopment strategy (see Chapter 4)
Mixed-income Housing	Opportunities and barriers are identified and expected buildout in dwelling units is quantified	See description in Housing Element (Chapter 2)
Redeveloping Corridors	Corridors identified for redevelopment are identified and shown on growth policy map	Complies; Midtown Roswell (SR 9) is identified as a redevelopment corridor; study of Holcomb Bridge Road corridor is pending (2005)
Redeveloping Corridors	Expected buildout of redevelopment is quantified.	Complies; Midtown Roswell Redevelopment Plan quantifies desirable land use mixes
Redeveloping Corridors	Density bonuses and other incentives are considered and provided as appropriate	Complies; see Redevelopment Element (Chapter 4)
Greyfield Redevelopment	Opportunities are assessed and identified	Not referred to as such but reasonably implied within Redevelopment Element (see Chapter 4)
Greyfield Redevelopment	The amount of land zoned commercial is reduced if necessary to support this tool	Complies; Roswell's commercial strategy is the reuse of centers versus zoning for new ones
Overlay Districts	A map or definition of areas where overlay districts apply is provided	Complies; see overall development concept map and descriptions of character areas
Conservation Subdivisions	Conservation subdivisions are permitted in at least one zoning district by right and built within designated areas	Complies; see Article 28 of City Zoning Ordinance
Jobs-Housing Balance	Ratios of jobs-to-housing units are provided for appropriate geographic areas	Plan does not meet this best practice.
Jobs-Housing Balance	Jobs-housing balance policies exist	Plan discusses jobs-housing balance but finds specific policies are not needed

ROSWELL'S GUIDING LAND USE PRINCIPLES

Upon showing the relative consistency with the Atlanta Regional Commissions Regional Development Plan (RDP) policies and best land use practices, the policy framework for land use in Roswell shifts attention to its own set of guiding principles and policies for land use.

Guiding Land Use Principle #1: Protect, support and maintain the City's many fine and stable neighborhoods.

Emphasis is placed on land use compatibility using such techniques as creating transition in land use intensity stepping down from high-intensity commercial or industrial uses to low-intensity single-family residential developments. This is often achieved by locating intervening uses that have intermediate intensities (professional offices or townhouses, for instance) or creating separations through natural buffers. Intrusions into neighborhoods by incompatible uses that would proceed domino-fashion up local streets as an extension of commercial uses fronting on major thoroughfares should be avoided.

Guiding Land Use Principle #2: Respect and maintain prevailing land use patterns.

Very little of Roswell's land remains vacant and available for development. With the exception of a few large vacant properties in the far northwestern portion of the City, future development will occur on tracts ranging from 10s (not 100s) of acres down to single lots within existing neighborhoods. Prevailing land use patterns are well established by existing development that surrounds or borders these development properties and clearly indicate appropriate use of these vacant lands. Infill is therefore encouraged if compatible with surrounding existing development.

Guiding Land Use Principle #3: Encourage a higher level of livability in future multi-family communities while reducing their impact on the City.

High-density housing in Roswell should continue to be primarily clustered within major transportation corridors where transit services can be economically provided, and should be located near commercial areas where pedestrian access can be encouraged.

Past experience with multi-family development in Roswell—especially the suburban garden apartment type of complex—has resulted in unrelieved seas of rooftops and parking lots with little open space and minimal amenities. To a great extent, this has been due to a basically low-density design developed at a higher density (up to 14 units per acre). As a policy, Roswell intends to discourage multi-family densities over five units per acre (with the exception of the overlay districts) in order to encourage design that will create more livable multi-family communities in the future.

Guiding Land Use Principle #4: Encourage redevelopment of obsolete or economically deteriorating areas.

Obsolete or heavily impacted areas can devolve into slums unless viable alternatives are available that can generate economically sound reuse of the area. Deteriorating residential areas (such as those close to and east of downtown) should be encouraged to transition or redevelop to appropriate uses that will not disrupt the fabric of the neighborhood or the City. This principle has specific and unique application to suburban-style commercial developments

that are being passed over by retailers seeking more modern facilities or better competitive locations. For more information see the Redevelopment Element (Chapter 4).

Guiding Land Use Principle #5: Emphasize redevelopment over expansion of commercial uses into new and unforeseen areas.

Encourage redevelopment of obsolete or deteriorating commercial sites, and support the redevelopment to provide a mixture of uses (including residential). Give preference to development proposals that increase intensities on properties that are presently commercial over the establishment of new and unforeseen commercial areas that may result in the abandonment and boarding up of older shopping centers and stores.

An important strategy to encourage redevelopment over excessive expansion is to discourage any new commercial rezoning that is not consistent with the land use plan, particularly for general commercial (as opposed to neighborhood commercial) uses. To the extent that the future land use map shows less land for commercial development than the market may demand over the next 20 years, the economic feasibility of redeveloping and densifying existing commercial centers will increase.

Guiding Land Use Principle #6: Restrict light industrial development opportunities to employment-oriented non-manufacturing uses in appropriate locations.

Roswell's light industrial area is appropriately located relative to similar uses in neighboring Alpharetta, and has excellent access to the State highway system (limiting traffic impacts on City residents) provided that development intensities are kept low. Since vacant light industrial land within the area is roughly adequate to meet anticipated future market demand, no new industrial areas are proposed in the City. Uses that should be encouraged in the industrial area include business parks, wholesale companies and showrooms, light assembly or fabrication, business equipment supply or repair, and distribution facilities for local deliveries.

Guiding Land Use Principle #7: Protect the capacity of major thoroughfares through nodal development techniques. Discourage additional strip commercial development.

New commercial areas should be focused in nodes around major intersections, rather than spread out lineally along roadways. Intervening areas along major thoroughfares between nodes should be developed or planned with residential subdivisions having reverse frontage lots that back up to the thoroughfare, or with multi-family communities. Where residential development is not feasible, low intensity professional office uses or institutional uses are acceptable alternatives to strip commercial.

The demand for "big box" redevelopment (uses similar to Home Depot, Sam's Warehouse and Target that have a regional draw) should be met only where appropriate, and then by restricting such uses to identified commercial nodes along major thoroughfares where traffic accessibility is optimized.

Guiding Land Use Principle #8: In newly annexed areas, respect the zoning and land uses previously approved by Fulton County.

Fulton County maintains a sophisticated and citizen-oriented planning program and completed plans for areas that are now a part of the City. The Comprehensive Plan and implementing

regulations should respect and protect the County's prior determinations of appropriate land use, as expected by the residents and property owners of such areas now within Roswell.

Guiding Land Use Principle #9: Detached Versus Attached Residential Ratio.

Roswell strives to maintain a detached residential versus attached residential ratio of 65:35. The residential ratios by Planning Area (see Table 2.2 of this Comprehensive Plan) should be utilized in deliberation of land use decisions. (Note, this was added by amendment October 11, 2004).

Guiding Land Use Principle #10: Density Changes.

It is the intention of the Mayor and Council that in the event that a land use classification corresponds with a zoning district and that zoning district's density changes due to a zoning text amendment, the zoning text shall supercede the land use density represented on the City's land use map and such land use map shall be amended with the next major update to the City's Comprehensive Plan. (Note, this was added by amendment October 11, 2004).

FUTURE LAND USE PLAN MAP

Development in Roswell over the next 20 years can be seen as a continuation—a build out—of land use patterns and trends that have been established over the past thirty years or more. Some older, non-historic areas will redevelop to more economically viable and appropriate uses when financially feasible. Some currently vacant properties will be developed for uses that are planned but for which the zoning is not yet in place. A trend toward intensification and mixed-use redevelopment of existing low-intensity commercial centers is anticipated, as well as an upswing in employment-oriented offices for people who are no longer dependent on long commutes to work (particularly where transit is available).

Virtually none of Roswell's land will remain undeveloped by the year 2020. Table 9.11 shows the amount of the City (in acres) that is expected to be developed for each of the future land use categories discussed earlier in this chapter, as well as totals and percent of total land area for each category. The future land use map has been prepared under the guiding land use principles, described above. For the purposes of the Comprehensive Plan, of course, all figures reflect the City limits as they currently exist since the dynamics involved in annexation are too complex and/or uncertain to allow accurate predictions of future expansions.

FUTURE LAND USE BY PLANNING AREA

Key implications of the future land use plan are articulated in this section according to the eight planning areas described earlier in this Land Use Element. Refer to Map 9.1 for boundaries of these eight planning areas. Description is limited here to major land use trends expected during the planning horizon.

Planning Area 1: Central Roswell

- Infill development, primarily commercial and townhouses, along the east side of Atlanta Street south of the town square.
- Single-family infill subdivisions may be developed on steeply sloping lands north of Riverside Road, and along the north side of Grimes Bridge Road.

- Additional commercial development may occur between Dogwood Road Extension and Georgia 400.
- A transition of the older residential neighborhood along Zion Circle and Myrtle Street to office and high-density residential uses may occur. This area has potential for new office uses adjacent to City Hall along Forrest Street and moderate-income residences along Myrtle Street and Zion Circle. Redevelopment will likely occur south of City Hall.
- Government uses, such as expansion of municipal facilities, may be needed during the planning horizon and might appropriately be located near or adjacent to the detention center and municipal complex.
- The small, light industrial area south of City Hall may witness some pressure to expand; however, the plan does not support expansion of this small industrial area.

Planning Area 2: Southwest Roswell

- Some pressure may be evident to expand the neighborhood commercial node at the SR 120/Coleman Road intersection to the east along Marietta Highway or north on Coleman Road, but such expansion is not supported in the Comprehensive Plan.
- There is also some potential for additional medium-density residential development along the north side of Marietta Highway. This is permitted and anticipated if density is consistent with the future land use plan map.

Planning Area 3: West Central Roswell

- The vast majority of development in Planning Area 3 will occur on infill parcels or individual subdivision lots.
- The existing residential land use pattern moving east to west from medium-density single-family neighborhoods to suburban densities to estate residential in the northwestern quadrant will be maintained.
- A continuing care residential facility is under construction at the southwest quadrant of Woodstock and Crossville.

Planning Area 4: Northwest Roswell

- By 2020, almost 80 percent of the area will be built out with single-family neighborhoods, variously at suburban residential densities to the east at Crabapple and to the west, south of Mountain Park; low-density in the central southern portion (including Brookfield West); and very low-density estate residential in the northern portion bordering on Cherokee County.
- The commercial nodes at (1) Crossville Road between Mountain Park Road and Hardscrabble Road and (2) Crabapple (silos) node (shared with Alpharetta), are not proposed for expansion beyond the area currently developed or already zoned for nonresidential use.

- Commercialization of Hardscrabble Road from State Route 92 is to be avoided.

Planning Area 5: North Central Roswell

- The industrial area may be completely built out within five years.
- The largest amount of new development is projected for the commercial category, particularly general commercial, as the SR 9, Mansell Road, and Holcomb Bridge Road strips reach full development. Some minor expansion of the Crabapple Road/Crossville Road node may occur with offices extending north and south. The Hardscrabble Road/Crabapple Road intersection may expand further with offices transitioning southerly to Sweetapple Elementary School at Etris Road.
- Commercialization of Hardscrabble Road from State Route 92 is to be avoided.

Planning Area 6: Northeast Roswell

- Additional office-professional development is possible in the Georgia 400/Holcomb Bridge Road interchange area.
- New office development with ancillary commercial uses along Holcomb Bridge Road is probable in the Centennial High School area.
- Prospects exist for infill at the development node on Holcomb Bridge Road at Nesbit Ferry Road.

Planning Area 7: East Central Roswell

- One of the larger undeveloped parcels in Roswell exists in this planning area, along Old Alabama Road between Holcomb Bridge Road and Riverside Drive, just east of Georgia 400. It is zoned for multi-story office and commercial use (OCMS).
- Residential development will fill in vacant properties and subdivision lots at densities already established by surrounding development and zoning patterns.
- A property of particular interest is the large vacant tract lying along Holcomb Bridge Road west of Eves Road. Directly across Holcomb Bridge Road from the site is vacant land already zoned for office. A low density residential use has been designated for the site because of its unusually steep slopes and resulting limited development potential.

Planning Area 8: East Roswell

- The majority of the new residential development planned for Planning Area 8 is single-family subdivisions at densities consistent with surrounding neighborhoods. The limited increase in high-density development is anticipated on infill parcels that are already approved for such use.

- Retail commercial and office development in the planning area are anticipated on vacant properties already approved for such uses. Importantly, no new retail commercial uses are shown on the southern side of Holcomb Bridge Road; all such nonresidential development is to be office-professional in nature.

POLICIES FOR SPECIFIC USES

The future development of several specific land uses are subject to policies of the Mayor and City Council that influence their location or other associated development factors.

Cell Towers

The City has adopted a policy and ordinance provisions regarding the location of telecommunications towers. The City's policy is generally to allow such uses only in commercial and light industrial areas or on City-owned properties (see master siting plan available from the Community Development Department). Alternative camouflaged or concealed tower structures may be considered for placement by the Mayor and City Council, regardless of zoning district.

Churches

Churches, when located in residential areas, can lead to several potential problems. The scope of development of modern church facilities has grown over the years from a scale compatible with residential areas to a scale that can have major negative impacts—traffic, noise and visual—on the quality of life in nearby neighborhoods. On the one hand, “mega-churches” have come into vogue that can seat 10,000 worshipers or more; on the other hand, “accessory” uses such as child and adult day care, K-12 parochial schools, outreach ministries and counseling centers can extend the impact of a church complex far beyond that of the sanctuary itself.

The Mayor and City Council welcome new churches and other places of worship into the community, support expansion of existing facilities, and value their contribution to the City's residents and the quality of life enjoyed by all. Locational issues and regulations, however, need attention in order to assure religious freedom and access to facilities for worship without unnecessarily impacting specific neighborhoods in the process.

Schools

Elementary, Middle and High Schools, like churches, are important elements of the fabric of society in Roswell and are welcome contributors to the City's quality of life. However, schools can also have negative impacts on neighborhoods depending on their location, scale, site planning and access patterns. Although the City has no regulatory authority over public schools, private schools are conditional rather than permitted uses in residential districts.

Housing for Seniors

The Mayor and City Council recognize that the population demographics of Roswell's residents, along with the country as a whole, will increasingly shift to an aging profile. As Roswell's residents get older and the children no longer live at home, the City wishes to assure that people who live in Roswell will be able to stay in the community as their housing needs shift away from the single-family detached home. With regard to assisted housing communities and nursing homes, the City encourages their development. Such facilities are considered

particularly appropriate in locations where transit, shopping and community facilities are available on a pedestrian scale.

Neighborhood Shopping

Much of Roswell's retail commercial development has been scaled at the regional level, attracting shoppers from communities and counties outside of the City. Such facilities are very appropriate on major thoroughfares where accessibility is adequate, and they serve Roswell residents as well as visitors to the City. In addition, the Mayor and City Council support development of retail uses at the neighborhood scale, at designated locations that are convenient to Roswell's neighborhoods and do not require long trips to shopping centers for minor purchases. Locations for such facilities are shown on the future land use map.

The Comprehensive Plan does not provide for small-scale uses (e.g., convenience store) within or near established neighborhoods. However, as a part of future mixed use developments, neighborhood serving commercial uses might be considered, as appropriate.

Office Campuses

As a policy, the Mayor and City Council support the development, in designated locations, of major employment centers occupied by businesses whose employee profiles match the executive and managerial occupations of the City's residents. These businesses would be employment resources for Roswell residents and contribute to lower vehicle miles traveled rates and shorter commutes. The future land use map shows appropriate locations for such development

Big Box Commercial

"Big box" redevelopment (uses similar to Home Depot, Sam's Warehouse and Target that have a regional draw) should be restricted to identified commercial nodes along major thoroughfares where traffic accessibility is optimized. The Comprehensive Plan supports regulations, already adopted, that limit single commercial retail occupants to no more than 65,000 square feet of floor area, unless such space already existed (with the exception of the Parkway Village designation for corporate campuses).

CHAPTER 10 COMMUNITY FACILITIES AND SERVICES ELEMENT

The purpose of this chapter is to provide an inventory of a wide range of community facilities and services and assess their adequacy for serving the present and future population growth and economic needs of the City of Roswell. The information contained in this chapter will assist the City in coordinating the planning of public facilities and services with new development and redevelopment projects, as well. This will allow for the efficient use of the existing infrastructure, the desired level of future investments and expenditures for capital improvements and appropriate set-asides for long term operation and maintenance costs. The City's goal is to provide the best possible public facilities and the highest level services in a cost-effective manner to all citizens and businesses.

Many of the services in this section are provided by Fulton County. This includes schools, libraries, water and sewer, sheriff department and justice, Countywide health, emergency management, and some medical services. Efforts were made to contact Fulton County staff, when necessary and collect data from County sources, including the draft 2025 Comprehensive Plan update for Fulton County. This chapter includes a series of policies and implementation recommendations intended to aid the City in attaining its community facilities and services goals.

The City charges development impact fees for certain facilities and services. Additional information is provided in Chapter 11, "Development Impact Fee Methods Report" on levels of service standards, service areas, and assessment of facility needs. For schedules of capital improvements, see Chapter 14. Transportation is addressed as its own separate element (see Chapter 12 of this Comprehensive Plan).

POLICE PROTECTION

The Police Department was internationally accredited on July 29, 1995, and it has continued to meet the required 439 standards relating to all phases of law enforcement for keeping this honored status through re-accreditation reviews in 2000 and 2003. The department is comprised of three major divisions: a Field Services Division, consisting of all uniform officers, detectives, traffic enforcement, crime suppression, and special investigators; an Administrative Services Division, including crime prevention, training, community relations, background investigators, research and planning, accreditation staff, permits and staff inspections; and a Support Services Division, including all communications, records, crime analysis and detention staff. Police units respond as back-up to calls outside of their established beats. Public safety services are provided on a City-wide basis. Thus, the service area for public safety facilities is the City limits of the Roswell.

A Citizens Police Advisory Committee was established in 1997 as a means of assuring quality police service to the community. The committee advises the police chief and the public safety committee of the City Council on matters related to law enforcement. The committee consists of graduates of the Roswell Citizens Police Academy and appointed members of the Roswell Police Department.

Special Services

In addition to uniformed patrols and criminal investigations, the Roswell Police Department provides bicycle patrols, neighborhood watches, crime prevention services, residential security surveys, traffic calming, speed enforcement, school crossing guards, and ready access to the command staff for problem resolution. The police department has successfully implemented a community oriented policing program (COPS) and received grants from the U. S. Department of Justice for new COPS officer positions and grants for DUI enforcement and commercial vehicle inspections. Roswell has an intergovernmental agreement with the City of Alpharetta regarding mutual assistance, where officers and detectives are sworn in both jurisdictions and are given limited authority to assist each other in investigations and traffic enforcement issues. Roswell also provides public safety services to the City of Mountain Park.

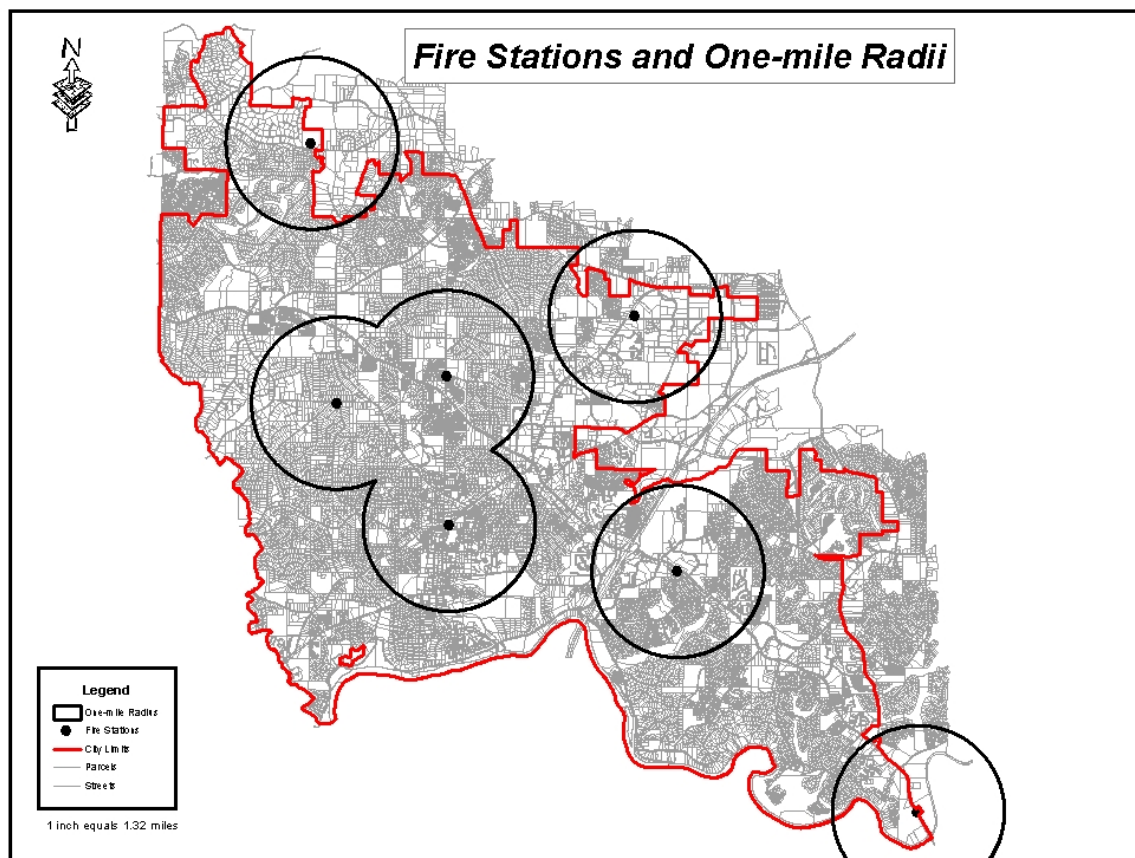
Level of Service and Facility Needs

The Roswell Law Enforcement Center was constructed in 1992 and is considered one of the finest and most modern facilities of its type in the State of Georgia. The 48,000 square foot facility includes a full-service jail with separate male and female areas. It also contains a state-of-the-art, centralized computer networking system that accepts input from officers utilizing laptop computers and a \$1.4 million communication system. A total of 51,150 square feet of police facility space currently exists. The City has adopted a level of service standard for purposes of impact fees that combines police and fire and rescue together. Long-term needs are identified in Chapter 11, Development Impact Fee Methods Report.

The City's police department has 1,500 square feet of office space located in fire station Number 7 at 1057 Holcomb Bridge Road east of Georgia 400. In addition to administrative space, an indoor police firing range is needed. Outside of equipment upgrades and roof replacement, there are no major needs identified or improvements scheduled for the police department in the capital improvement budget. For additional analysis and information regarding police facility needs, see Chapter 11, Development Impact Fee Methods Report.

ROSWELL FIRE DEPARTMENT

The City of Roswell is presently served by seven fire stations (Map 10.1) roughly evenly distributed throughout the City. The City presently has an insurance rating for fire of "4," which it has determined as its minimum. The Roswell Fire Department (RFD) is currently staffed with 140 personnel. Fifteen personnel are full-time paid positions at fire headquarters (City Hall). One hundred twenty five positions are part-time volunteers in the Fire Suppression Division. RFD is looking to employ about ten more part-time positions after January 1, 2005. Administrative space devoted to the fire department includes 5,300 square feet in City Hall, plus an additional 5,500 square feet in three of the City's seven fire stations.



Map 10.1
Fire Stations and One-mile Radii

The locations of fire stations are further described below:

Roswell Fire and Rescue Headquarters 38 Hill Street, Suite 235 inside Roswell City Hall.
(Hours of operation are Monday - Friday, 8am - 5pm.)

Station 1: 1002 Alpharetta Street at the intersection of Alpharetta Street and Norcross Street at the beginning of the Roswell Historic District. Size: 12,000 square feet; Bays: 6

Station 2: 1115 Crabapple Road, just north of the Crabapple Road and Crossville Road intersection. Size: 3,000 square feet; Bays: 2

Station 3: 740 Jones Road at the intersection of Jones Road and Lake Charles Drive; this is in the western section of the City. Size: 3,000 square feet; Bays: 2

Station 4: 1601 Holcomb Bridge Road, approximately one-half mile east of Old Alabama Road and one mile east of Georgia 400. Size: 4,295 square feet; Bays: 3

Station 5: 1200 Hembree Road, near the intersection of Hembree Road and Alpharetta Hwy in the shadows of North Fulton Regional Hospital. Size: 7,257 square feet; Bays: 3

Station 6: 825 Cox Road; located in the extreme northern section of the City just west of King Road. Size: 8,000 square feet; Bays: 3

Station 7: Located at 8025 Holcomb Bridge Road, one mile east of Georgia 400. Size: 6,500 square feet; Bays: 3

There is no distinction in Roswell between stations designed to serve residents or commercial land uses. For example, a ladder company responds to all structural fires whether commercial or residential. Stations physically located in residential areas may respond to commercial calls and vice versa. Since the fire insurance rating is applied to the entire City and not just particular parts that may have better or worse fire protection, future system improvements are geared toward assuring that the entire City maintains its fire insurance rating. Based on these considerations and the further consideration that all fire stations operate as a system, the City itself is the service area.

Level of Service and Facility Needs

The City has an adopted a level of service standard for purposes of impact fees that combines police and fire and rescue together. Long-term needs are identified in Chapter 11, Development Impact Fee Methods Report. The department has identified that one air/light unit will be purchased in 2006 for support on fire/EMS scenes.

Other Services

Emergency Medical Services (EMS) is a term used to describe the practice of the evaluation and management of patients with acute traumatic and medical conditions in the out-of-hospital environment. This practice is carried out by skilled technicians, operating under the medical oversight and guidance of knowledgeable physicians. The Emergency Medical Response Service is also part of the Roswell Fire Department. The service handles all EMS calls in the City and relies on Rural Metro Ambulance for transport service to hospitals. The Fire Department maintains overall regulatory compliance with State EMS laws; compliance of performance standards have been established within each contract. The RFD conducts regular performance reviews and meetings with the ambulance provider.

Intergovernmental Agreements

In addition to the City's Fire and Rescue Department, Fulton County has a full time, professional fire and rescue department serving unincorporated areas with fire and first-responder emergency medical services. Two of Fulton County's fire stations are located close to Roswell: Fire Station No. 14 (Arnold Mill Road at New Providence Road), staffed with three professionals comprising one engine company; and Fire Station 8 (Old Alabama Road at Haynes Bridge Road), staffed with an engine company, ladder truck with a total of six professionals (Fulton County 2004). A mutual aid agreement exists between Roswell and Fulton County for fire protection services.

ADMINISTRATION AND FINANCE

Functions

Administrative divisions of the administrative arm of City government include human services, legal services (office of the City Attorney), community information, management information, the City Clerk, City Administrator, and municipal court services. Building operations is also a component of the administration department. There are a total of 55 full-time positions in the administration department, of which 53 are currently filled.

The Finance Department provides for the safeguarding of all assets and collection of all receivables due to the City. This includes property taxes and utilities. The Department also provides the purchasing function of the City along with accounting and financial planning and reporting. Finally, the department provides technology planning and support and strategic planning and budgeting. There are 32 full-time employees and 2 part-time employees in the Finance Department.

Facility Needs

Roswell's City Hall was completed in January 1991 with bond referendum proceeds. That facility consists of 95,591 square feet and houses all of the City's administration and municipal court space as well as employees of the recreation and parks, community development, finance, and other departments. Certain employees work at the facilities on Dobbs Drive, and in various parks. The physical structure of City Hall was initially expected to provide adequate space through the year 2000. Given recent growth in the number of employees, the City undertook a space and study plan that recommended some internal reconfiguration of space which, according to the adopted Capital Improvements Plan is scheduled to be completed by 2006. The City is currently looking into several solutions to address this space shortage. Major capital projects are currently being considered, and the City may fund some of them with a 2006 general obligation bond issue.¹

The City of Roswell also owns property at Hembree Road which is used as a public works facility and accommodates some of the needs of the Transportation and Public Works/Environmental Departments. The old City Hall building on Sloan Street consists of 3,150 square feet and is currently used by the Convention and Visitors Bureau.

COMMUNITY DEVELOPMENT

The Community Development Department provides regulatory and administrative services, including planning, zoning, building inspections, economic development, code enforcement, engineering, and geographic information systems. There are 47 full-time positions in this department. Its office space in City Hall was reconfigured in order to be more customer-friendly and to provide work spaces for expanded positions.

¹ Kaplan, Paul, December 30, 2004. "Saving by Borrowing." Atlanta Journal-Constitution, p. JH 3.

TRANSPORTATION

The Transportation Department provides planning and design services to construct transportation facility improvements. Operations staff maintains and install signs, pavement markings, and traffic signals on local streets in the City. City transportation crews provide traffic control for accidents and other emergencies that require lane and/or road closures or the clearing of roads. Construction and maintenance staff provide street patching, street reconstruction and resurfacing, bridge reconstruction and repair, street sweeping, and overall maintenance of streets, curbs, gutters, sidewalks, and drainage structures within the City's right-of-ways and easements. There are a total of 52 full-time positions in the transportation department.

PUBLIC WORKS/ENVIRONMENTAL

The Public Works/Environmental Department consists of five functional areas: sanitation, garage, recycling center, and water and environmental protection. Water and solid waste functions are described in sections below. The Environmental Protection Division continues its volunteer program, "Keep Roswell Beautiful," as well as initiatives to improve air quality and enhance storm water quality. There are a total of 82 full-time positions in this department. The Public Works/Environmental Department is responsible for water supply, treatment, and distribution to parts of the City (see Roswell water service area map).

HEALTH, HOSPITALS, AND HUMAN SERVICES

Grady Health System provides regional healthcare to all citizens of Georgia but is funded only by Fulton County and DeKalb County. Although Fulton County has a fiduciary responsibility to Grady Health System, it is also home to several, other widely known hospitals and health centers throughout the Atlanta area. These are:

- Children's Healthcare @ North Point: 3795 Mansell Road (Alpharetta)
- North Fulton Regional Hospital: 3300 Hospital Boulevard
- Roswell Nursing & Rehabilitation Center: Roswell

Presently, seventeen (17) health care facilities comprise the public health delivery system infrastructure in Fulton County. Despite the large number of community based facilities, the current infrastructure does not allow the County, through its Department of Health and Wellness, to provide the level of programmatic service required to promote and maintain a healthy citizenship. Additionally, the age, obsolescence, inadequate size, and high cost of renovations to meet today's standards for health facilities serve in large part as the impetus for the development of a Comprehensive Plan for health center replacement and the regionalization of the delivery of public health services in Fulton County.

Level of Service and Facility Needs

To address this issue, the Fulton County has adopted a regionalization effort (1997) that would provides an opportunity to improve the number and kinds of services that are both available and accessible to the general public. This would result in the construction of facilities that meet the physical and functional challenges of carrying out a comprehensive program of public health. The effort recognizes that the health care needs of the public were being delivered in a facility infrastructure system that, in most cases, was more than 50 years old.

The concept behind regionalization of health care facilities focuses on collapsing, in most instances, two (2) geographically contiguous smaller centers into larger, modern facilities that would accommodate a wider range of services, improve access to care, and promote partnerships with other provider agencies to make other needed services readily available to County residents. Several planning documents, including facility design plans, financial projection analyses for operating and equipment needs, service/program needs surveys, as well as “visit trend analyses” for future growth planning have been completed.

During the last five years, with the approval of the Fulton County Board of Commissioners, several proposed regional centers were funded for programming and/or design activities. However, to date, no construction funds have been allocated to continue any project beyond the design phase. At this time, and in the foreseeable future, County resources for capital improvement projects will likely be less than \$35 million dollars annually. Given this, and recognizing the need to improve the infrastructure of the County's health delivery system, the Board of Commissioners called for the development of a plan that addresses regionalization of services and strategic replacement of health center facilities from the following perspectives:

- Service delivery as it relates to each district of the County;
- Cost to the County of not implementing a plan to improve health center infrastructure;
- Phased-in project development, design, and construction with projected start / finish dates for each regional center;
- Capital improvement funding requirements associated with a strategic planning approach for bringing new regional health centers on line; and
- Future impact on the operating budget of the Department of Health and Wellness.

A proposed matrix for the strategic replacement of existing health centers based on short-term, mid-term and long-term factors was developed. The third priority in this matrix is the North Fulton Regional Health Center, with a total cost of more than \$10,571,976. Design money has been allocated. This facility is needed to address population growth, including the growing number in the immigrant population.

Other Services

The Fulton County Human Services Department provides oversight and direction to the County's Human Services Delivery System. This delivery system is comprised of partnerships with various community stakeholders that include nonprofit service providers, the private sector, governments, volunteers, and citizen advocates. The Human Services Department operates and manages the facilities listed below in the North Fulton and Sandy Springs service areas:

- Crabapple Neighborhood Senior Center;
- Roswell Neighborhood Senior Center;
- Dorothy C. Benson Senior Multipurpose Complex;
- Sandy Springs Neighborhood Senior Center;
- North Fulton Career Service Center.

Clinic services include dentistry, children's health, communicable disease information, immunization, HIV advice and testing, primary pediatric care, school health screening, parenting programs, women's health information, and many others.

LIBRARIES

The Atlanta-Fulton Public Library (AFCPL) system began in 1902 as the Carnegie Library of Atlanta, one of the first public libraries in the United States. In 1935, the City of Atlanta and the Fulton County Board of Commissioners signed a contract under which library service was extended to all Fulton County. In 1982, voters passed a constitutional amendment authorizing the transfer of responsibility for the library system from the City of Atlanta to Fulton County. On July 1, 1983, the transfer became official, and the system was renamed the Atlanta-Fulton Public Library. The Atlanta-Fulton Public Library System is funded by the Fulton County Board of Commissioners, along with State and federal assistance grants. By State mandate, the Library System has a governing 17-member Board of Trustees, which oversees day-to-day operations and capital improvements. The Trustees are appointed by the Atlanta City Council and the Fulton County Board of Commissioners.

The mission of the Atlanta-Fulton Public Library System is to:

- Provide public access to the knowledge network to improve, enhance, and empower lives in our community, region and world;
- Guarantee all Fulton County citizens access to library resources (access is defined by hours of service, library usage as reflected in circulation, in-house use, and program attendance).

The Atlanta-Fulton Public Library System serves the citizens of Fulton County and the City of Atlanta (including the portion of the City in DeKalb County). As of April, 2004, there were 362,542 registered library cardholders. The library has a collection of more than 2,177,267 items for adults and children, including books, magazines and other periodicals, CDs, DVDs, and videocassettes. Services provided by the library include: reference services, data bases, internet access, on-line reference services, on-line periodicals, computer labs offering word processing and other learning services, on-line renewal and reservation processes for books and other materials, computerized literacy training, homework help centers, workshops, summer reading programs, story hours, art exhibits, special programs and telephone references.

Level of Service and Facility Needs

The library system is composed of the Central Library (located in downtown Atlanta), thirty-one branch libraries, two book mobiles, and The Auburn Avenue Research Library on African-American History and Culture. It contains one of the foremost collections of African-American literature and historical documents in the nation. There is one library located in the City limits of Roswell at 115 Norcross Street – Branch No. 25 in Roswell contains 21,700 square feet. There are also libraries in Alpharetta located at 5100 Abbotts Bridge Road and on Mayfield Road.

The library system has various types of libraries: Main, Regional, Area, Community, and Neighborhood. The following descriptions provide information about each type of library. The library system has five regional libraries which are approximately 25,000 square feet each in size. Regional libraries employ 20 full-time staff members. The Roswell library was built in 1989, yet is considered a regional library even though it does not comply with the standard.

In order to assess the adequacy of facilities, information regarding the level of service is provided. The library system assesses its performance based on size of library, proximity to

users, qualifications of full time employees, collection size, passport software, equipment, terminals, printers, and photocopiers.

In 1997, the Library Board of Trustees adopted a policy which established design standards for all new Branch Libraries as shown in Table 10.1.

Table 10.1
Atlanta Fulton County Library System
Adopted Design Standards

Standards	Neighbor- hood	Community	Area	Regional	Auburn Ave.	Central
Square feet	3,000-5,000	7,000	10,000	25,000	50,000	285,000
% compliance	33%	90%	100%	60%	100%	100%
Hours/week open	33	40	52	61	44	65
% compliance	100%	100%	0%	0%	100%	0%

Source: Fulton County Budget 2003, page 59.

The current level of service is based on a general view of the use of the library system over a variety of indicators. The material holdings of the Roswell Library are 140,741; in 2003, approximately 275,000 people visited the Roswell Library. Circulation in the Library was 432,057 and in-house use was 339,274, with 531 programs offered. There were 44 personal computers available for use; 126,059 questions were asked of librarians and 156 meetings were held. The Roswell library is deficient in terms of facility space and hours of operation. The facility did not reach the target hours of operation for 2003.

Operational and capital funds are budgeted through Fulton County's General Fund and State revenues. The system also derives some revenues through fees, fines, and fundraising activities. In the past, major expansions have been funded through bond referendums. The library system provides services to all residents of Fulton County, regardless of location of residence within the County (i.e., including municipalities).

Another potential source of funding for libraries is impact fees. Roswell's Development Impact Fee Methods Report (Chapter 12) provides an overall assessment of library facilities in terms of impact fees, but the City does not charge an impact fee for libraries. Such a fee would necessitate an intergovernmental agreement between the City of Roswell and the Atlanta-Fulton Public Library System. In lieu of impact fees the City has offered to donate a site for a new library.

CULTURAL FACILITIES

Fulton County operates cultural facilities and provides cultural services through the Fulton County Arts Council and the Parks and Recreation Department. Fulton County is the home of major cultural institutions in the Atlanta region and the State of Georgia. Many of these facilities, such as museums, theatres, amphitheatres, auditoriums, civic centers and botanical gardens are operated by private non-profit institutions and/or by municipalities within Fulton County.

Through the Contracts for Services Program (CFS), the Fulton County Arts Council (FCAC) invests public funding, in the form of contracts for services, to support the programs of Fulton County nonprofit arts and cultural organizations. The goals of the program are to foster artistic

development, to support arts services delivery, and to serve as seed money to leverage additional corporate and private dollars for arts programming.

In 2003, FCAC awarded over \$3 million to 110 nonprofit and community organizations that present arts and cultural programs in Fulton County. Funds are awarded in dance, literary, media, multi-discipline, museum, music, theatre, visual arts, community development, grassroots arts programs, the Woodruff Arts Center, and to cultural partnerships. The partnerships comprise: Art-at-Work, Hammonds House, Metropolitan Atlanta Arts Fund, National Black Arts Festival, South Fulton Festival and Warsaw/Ocee Community Arts Center, located to the north of Roswell.

Facilities

The Chattahoochee Nature Center, a County facility, is an educational and environmental center that serves an average of 35,000 children and 200,000 visitors annually. It contains over 100 acres of river marsh, fresh water ponds, woods, and a zoo for injured animals.

The Fulton County Arts Council (FCAC) operates five community arts centers. These facilities serve North Fulton County, Sandy Springs, Atlanta, South Fulton County, and Southwest Fulton County. FCAC operates the programs in the facilities while the General Services Department of Fulton County maintains the facilities. FCAC provides a variety of classes and workshops in visual and performing arts programming. Last year, approximately 6,000 residents participated in 349 classes. FCAC operates the following facilities near the City of Roswell:

- North Fulton: Ocee/Warsaw Arts Center, 9800 Medlock Bridge Road, Duluth, GA 30155;
- Sandy Springs: Abernathy Art Center, 254 Johnson Ferry Road, Sandy Springs, GA 30328

In addition to County services, the City of Roswell operates a 33,041 square foot cultural arts center which includes of a 600-seat theater, community/multi-purpose rooms, and a historic research archive and two visual arts centers located at Roswell Area Park and Leita Thompson Park. The City also operates three historic properties, Bulloch Hall, Smith Plantation and Barrington Hall. Improvements to the cultural arts center and historic properties are included as appropriate in the City's Capital Improvements Element.

Current and Future Needs

All areas of Fulton County are served by Fulton County Arts Council facilities. The level of service for these community arts centers is based on community needs. The goal of the department is to have 80 percent capacity at the facilities. The levels of service for the centers located near the City are as follows:

- The Ocee Arts Center capacity is 175. A needs assessment is necessary because the center operates at capacity.
- The Abernathy Arts Center operates at 352. A needs assessment is necessary because the center operates at capacity.

SCHOOLS

The Fulton County School System was founded in 1871. It is one of the oldest and the fourth largest school district in Georgia. The system serves the cities of Alpharetta, Roswell, Mountain Park, College Park, East Point, Fairburn, Hapeville, Union City, Palmetto and unincorporated portions of Fulton County. There are approximately 9,900 full-time employees, 5,400 of whom are teachers and other certified personnel, who work throughout the County in 88 schools and other administrative buildings. More than 75,000 students attend classes in 50-elementary schools, 18-middle schools, 12-high schools, 2-alternative middle/high schools and 4-charter schools. Two elementary schools operate on a year-round calendar.

Involved, active and informed parents and community members contribute greatly to the success of the system. Every school encourages parent involvement. All schools have business partners and local school advisory councils. The Fulton Education Foundation provides additional resources. With a focus on student achievement and a commitment to continual improvement, Roswell's schools have earned a reputation as a premier school system.

As the Atlanta metropolitan area has grown, so has the Fulton County school system. Fulton County is currently completing a five-year capital construction program that will result in nineteen (19) new schools and renovations at more than forty sites. The next 5-year building cycle proposes ten (10) additional schools and additions to several current buildings. The majority of the funds for these building programs come from a one-cent local option sales tax, which Fulton County voters overwhelmingly approved in 1997 and 2002.

Facilities and Need

Much of the County's school system is over capacity. Table 10.2 provides data on existing and projected student enrollments and capacities. Of the elementary schools in the Roswell area, four are over capacity and six are under capacity as of the 2004-2005 school year. Enrollment in elementary schools is not expected to increase substantially in Roswell area elementary schools between the 2004-2005 and 2009-2010 school years, with the exception of Hembree Springs Elementary, which will increase by approximately 150 students and thus reach capacity in the next five years.

Both middle schools, Crabapple and Elkins Pointe, are currently well under capacity according to data in Table 10.2. However, Crabapple Middle School has 18 existing portable classrooms. Crabapple Middle School's enrollment is projected to decline by the 2009-2010 school year, but Elkins Point Middle School will increase enrollment by approximately 150 students by the 2009-2010 school year.

Both of Roswell's high schools, Centennial and Roswell are currently well over capacity, and portable classrooms (32 and 16, respectively) are relied upon to meet classroom needs. Enrollments in Roswell's high schools are projected to decrease by the 2009-2010 school year.

The overcrowding of Fulton County's public schools has long been a concern in North Fulton County. Roswell's elected officials have expressed particular concern about school overcrowding and the pace of continued residential growth.

Table 10.2
Fulton County Public Schools in Roswell
Existing and Projected Enrollment and Selected Information

School Name and Type	Acreage	Existing Portable Classrooms	Enrollment 2004-2005	Over/ Under State Capacity	Enrollment 2009-2010
Barnwell Elementary	20.00	6	655	5	671
Esther Jackson Elementary	15.00	8	609	-16	667
Hembree Springs Elementary	58.20	0	706	-144	854
Hillside Elementary	21.00	0	716	-134	731
Mimosa Elementary	15.12	2	687	-38	748
Mountain Park Elementary	21.05	2	783	58	779
Northwood Elementary	26.51	4	853	53	892
Roswell North Elementary	10.46	4	790	65	826
River Eves Elementary	23.57	0	644	-131	682
Sweet Apple Elementary	44.76	14	836	-39	856
Crabapple Middle	20.00	18	835	-165	812
Elkins Pointe Middle	32.16	0	908	-292	1072
Centennial High	51.89	32	2023	273	1848
Roswell High	51.20	16	2341	616	2158

Source: Fulton County Schools. "Continuing to Close the Gap Between Enrollment Growth and Needed Classrooms: A Presentation to the Fulton County Board of Education, March 22, 2005."

Private Schools

U.S. Census Bureau statistics indicate that in 1990, 13.2 percent of Roswell residents, three years and over enrolled in school (approximately 1100 persons) attended private schools. As of the 2000 census, for grades 1 through 12, 1962 persons out of 13, 607 attended private schools, or 14.4 percent of the total students attending such school grades.

An inventory of private schools with Roswell addresses is provided in Table 10.3, along with addresses, grades of instruction, and current (2005) enrollment.

Table 10.3
Private Schools in Roswell

Name of Private School	Address	Zip Code	Grades	Enrollment
Blessed Trinity Catholic High School	11320 Woodstock Rd.	30075	9-12	657
Chrysalis Experimental Academy	1210 Warsaw Rd.	30076	6-12	24
The Cottage School	770 Grimes Bridge Road	30075	7-12	145
Cross of Life Montessori School	1000 Hembree Rd.	30076	PK-3	13
Eaton Academy	800 Old Roswell Lakes Pkwy	30076	5-12	14
Fellowship Christian Academy	480 W. Crossville Rd	30075	K-12	175
High Meadows School	1055 Willeo Rd.	30075	PK-8	258
The Howard School (North Campus)	9415 Willeo Rd.	30075	PK-9	11
The Porter School	200 Cox Rd.	30075	K-5	30
Queen of Angels School	11340 Woodstock Rd.	30075	K-8	496
St. Francis Day School	9375 Willeo Rd.	30022	K-12	677
Village Montessori School	1610 Woodstock Rd.	30075	PK-4	23

Source: Georgia Department of Education. Georgia Private Schools by System (Fulton County).
http://www.doe.k12.ga.us/dbs/schools/private.asp?u_SystemID=660

Higher Education

Reinhardt College, whose main campus is in Waleska, Georgia, has a North Fulton Center in the Town Center Mall in Roswell. Georgia State University has an Alpharetta Campus on Old Milton Parkway January 2000; the campus includes a 50,000-square foot classroom facility and can accommodate about 1,000 students a day. Other major colleges in the Atlanta Region include, but are not limited to, Agnes Scott College, Brenau University, Emory University, Georgia Institute of Technology, Georgia Perimeter College, and Kennesaw State University. A number of technical institutes, including DeVry Tech in Alpharetta and Lanier Tech in Cumming, are within convenient driving distances of Roswell.

COURT SYSTEM

Municipal court is authorized by the State Constitution and statutes and is mandated to dispose of violations of municipal ordinances. The mission of the Roswell Municipal Court is “to provide professional, efficient and courteous service for all people having business with the Municipal Court of Roswell, in a manner that reflects the positive quality of life within the community.”

The Municipal Judge is a full-time, elected official who provides judicial determination of alleged violations of municipal ordinances in a just, speedy and cost-effective manner. These procedures include the initial appearance (bond hearing), probable cause hearing, and arraignment where the defendant is advised of the charge and notified of his or her rights and possible sentence before a plea is accepted. The Court holds additional hearings to consider the possible indigence of the defendant and the need for an appointed attorney; issues administrative orders; and, rules on various motions presented to the Court. Additionally, the Court convenes for non-jury trials. Further duties as required by State law include record-keeping, accounting with monthly reporting to State agencies, and the disbursement of monies tendered for fines, bonds, courts costs and related fees. Dispositions of traffic offenses are reported to the Department of Motor Vehicle Services, as well as requests for suspension of driving privileges for failure to comply with terms of citations. The Roswell Municipal Court, as part of its administrative function, also includes a full-time Probation Division.

The Roswell Municipal Court also has a full-time Solicitor who prosecutes various State laws and Municipal ordinances. The Solicitor will conduct pre-trial negotiations, if requested, for defendants representing themselves. For defendants who are represented by attorneys, pre-trial negotiations are conducted in person or via telephone conference. An attorney may set an appointment through the administration office.

The Roswell Municipal Court is located at 38 Hill Street, Suite 210. Arraignments are held each Monday and Tuesday with sessions beginning either at 8:30 AM or 1:00 PM. Once a person is arraigned, trials are assigned for Tuesdays, Wednesdays, or Thursdays. All trial sessions begin promptly at 9:00 AM or 1:00 PM.

The State of Georgia is divided into 10 (10) districts containing several circuits and counties. Fulton County constitutes the Atlanta Judicial Circuit, First Judicial Administrative District. The Atlanta Superior Court provides services for administrative appeals, civil, major criminal and domestic relations cases. The Fulton County Justice system is composed of Superior Court, Superior Court Administration, Superior Court Clerk, State Court, Juvenile Court, Solicitor General, District Attorney, Public Defender, Medical Examiner's Office and the Sheriff.

There is a Fulton County Court Services facility is located at the North Fulton Service Center located at 7741 Roswell, Road.

RECREATION AND PARKS

The Recreation and Parks Department employs 87 persons full-time and numerous part-time/seasonal employees. The department has prepared a short-term recreation master plan for the year 2005, its fifth master plan since 1969. The master plan was based on public information meetings, workshops, and a leisure survey. This section draws on that work and also addresses facility needs for the long-term planning horizon.

The recreation master plan provides an inventory of existing recreation sites (see also the Greenspace Plan, Map 5.5). The Recreation and Parks Department has a joint development and operation agreement with the Fulton County School at Crabapple Middle School, North Roswell Elementary School and Roswell High School. The school properties are leased to the City and are maintained by the City.

Since Roswell charges development impact fees for parks and recreation facilities, more detailed planning is required in terms of assessment, delineation of service area, establishing level of service standards, and assessing facility needs. For more information, see Chapter 12, "Development Impact Fee Methods Report" of this Comprehensive Plan.

WATER

Supply and Treatment

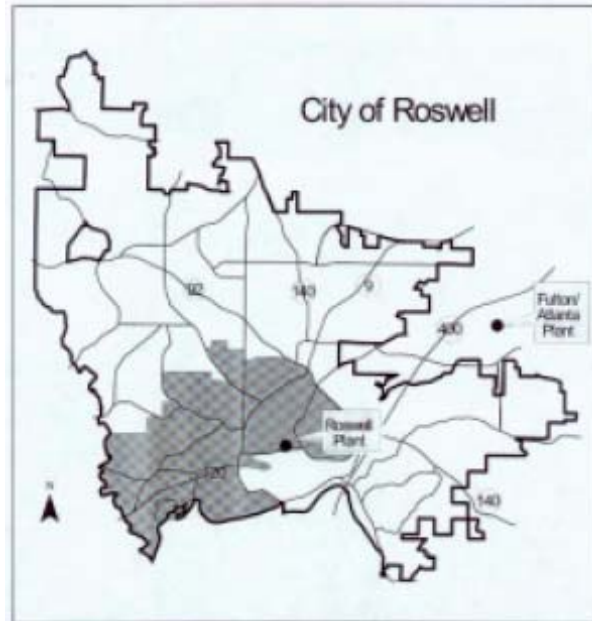
Water for the City of Roswell's water system comes from two sources. The primary source is the Cecil Wood Water Treatment Plant in Roswell. Water for this facility is withdrawn from Big Creek. The City's service area is within the shaded area on the map below. Supplemental water is purchased by the City from the North Fulton/Atlanta Treatment Plant in Alpharetta. The source for this plant is the Chattahoochee River. Since the City has two sources, Roswell's system is classified as a "blended water source." Both plants serve residential and commercial development.

Table 10.4
Geographic Service Area of Water Treatment Facilities and the
Predominant Types of Land Uses Served by the Facility

Water Treatment Plant	Geographic Service Area
Atlanta-Fulton County Water Treatment Plant	<ul style="list-style-type: none">• North Fulton County• Sandy Springs (majority)• Atlanta• Roswell• Alpharetta• Forsyth County
Cecil B. Wood Water Treatment Plant	<ul style="list-style-type: none">• Roswell downtown area

Source: Fulton County

The City of Roswell withdraws no more than 1.2 million gallons daily (mgd) of water from its intake on Big Creek, a tributary of the Chattahoochee River with varying water quality. The water treatment facility is approximately 60 years old. Roswell's water system serves approximately one-quarter of the City limits (see Map 10.2 for Roswell's water service area).



Map 10.2.
Roswell Water System Service Area

The City purchases the rest of its water, already treated, from Fulton County. The County service area serves approximately 75 percent of the City. The design capacity of drinking water facilities for the two plants is in Table 10.5. The useful life of the City's facility will not extend past the year 2020.

Table 10.5
Design Capacity of Water Treatment Plant

Water Treatment Plant	Plant Capacity in 2005	Useful Life of Facility
Atlanta-Fulton County Water Treatment Plant	90 mgd	Through the 2021-2030 period
Cecil B. Wood Water Treatment Plant	1 mgd	Plan to decommission during the 2011-2020 period

Source: Fulton County

The Atlanta Regional Water Supply Plan (as amended) includes Roswell in its forecast of water demand for Fulton County north of the Chattahoochee River. That plan provides estimates and projections of water demands for north Fulton County. These demands were based on a forecasted population of 82,000 people in the year 2020. According to estimates provided in Chapter 1 of this document (Population Element), Roswell has already exceeded that number as of 2005. According to demand forecasts made in 1999, the City will need 72.03 mgd in 2010. Based upon the design capacity of the facilities above, there will be sufficient water in the short term, but this issue will have to be examined in light of the City's projected increase in population as the need may grow to over 91 mgd by the year 2010.

Storage and Distribution

The City of Roswell's water system has more than 100 miles of water lines, 2 to 16 inches in diameter, which distribute more than 4 mgd through four separate pressure zones. The City needs more land for an additional water storage tower. A number of water distribution improvements are programmed, including major trunk line extensions, a fire hydrant upgrade and replacement program, a water line cleaning and lining program, and a water line looping program.

Fulton County owns and operates the water distribution, storage and pumping system outside the City's service area, which served approximately 62,000 customers in 2003. The ground storage tanks are used to maintain service during seasonal demand peaks and temporary service interruptions. The elevated storage tanks are used to maintain pressure in the distribution system as well as to provide the system with fire flow protection. Table 10.6 provides information on storage capacities of Fulton County's water system. It appears from the information available that Roswell will have adequate raw water supply during the planning horizon with purchases of water from the Atlanta-Fulton County water system and with the Roswell system at least until 2010.

Table 10.6
System Data
Fulton County Water Storage and Distribution System

Length:	275 miles of water mains
Size of mains:	8 inches and 54 inches in diameter
Elevated storage tanks:	Hembree Road - 1.0 mg Hembree Road - 0.2 mg Bethany Road- 2.0 mg Bethany Road - 2.0 mg Jones Bridge Road - 1.0 mg Jones Bridge Road - 0.5 mg
Ground storage tanks:	Webb Bridge Road - 1.0 mg Webb Bridge Road - 0.5 mg Freemanville Road - 4 mg
Note: mg represents million gallons	

SANITARY SEWER BASINS AND CAPACITIES

Sanitary sewerage collection and treatment is provided by Fulton County. Fulton County is the primary provider of sewerage and wastewater treatment for the County outside of the City of Atlanta. In total, Fulton County owns and operates six water pollution control plants (WPCPS). Three of the wastewater treatment plants serve North Fulton and the City of Roswell.

Fulton County's plants are currently permitted to treat a combined total average flow of approximately 43 million mgd. These plants treat wastewater generated inside and outside the County. Fulton County treats wastewater flows from neighboring Forsyth, Cherokee, Cobb, and DeKalb Counties. Forsyth and DeKalb Counties send wastewater to both the Big Creek WRF

and Johns Creek WPCP. The Little River WPCP is owned and operated by Fulton County but is located in Cherokee County. The total average wastewater flow received from outside the County and treated at North Fulton treatment facilities is approximately 4.9 mgd.

Big Creek

The Big Creek Water Reclamation Facility (WRF) was originally constructed in 1969 with a design capacity of 0.75 mgd. The plant was expanded numerous times and has a current capacity of 24 mgd. The collection area flowing to the Big Creek WRF consists primarily of residential and commercial users and covers approximately 63 percent of the sewered area in North Fulton.

Johns Creek

The Johns Creek WPCP was originally constructed in 1980 with an average design capacity of 5 mgd. The plant was expanded in 1992 to a design and its permitted discharge capacity is 7 mgd. The plant currently serves approximately 27 square miles or 26 percent of the sewered area in north Fulton County. This plant is proposed to be phased out and replaced by a new plant under construction on Holcomb Bridge Road at the Chattahoochee River.

Little River

The Little River Water Pollution Control Plant (WPCP) is in neighboring Cherokee County. The plant serves Mountain Park and nearby communities in North Fulton and parts of Cherokee County. The plant originally had a capacity of 0.175 mgd. In March 1992, the plant was expanded to 0.85 mgd. The Little River Land Application System (LAS) began operation. The LAS is permitted to discharge up to 200,000 gallons per day (gpd). The plant serves approximately 6 square miles or 6 percent of the sewered area in North Fulton.

The water pollution control plants and their design capacities, and their service areas are shown in Table 10.7. Each is operated by the Fulton County Department of Public Works. Service areas and predominant land uses served are shown in Table 10.8.

Table 10.7
Water Pollution Control Plants in Fulton County

Plant Name	Design Capacity
Big Creek Water Reclamation Facility	24 mgd
Johns Creek Water Pollution Control Plant	7 mgd
Little River Water Pollution Control Plant	0.85 mgd

Source: Fulton County

Table 10.8
Service Areas of Water Pollution Control Plants in Fulton County

Water Pollution Control Plant	Service Area	Predominant Land Uses Served by the Facility
Big Creek Water Reclamation Facility	North Fulton County, portions of Cobb County, portions of DeKalb County, and portions of Forsyth County	Residential and commercial
Johns Creek Water Pollution Control Plant	Large portions of Sandy Springs, portions of Roswell	Residential and commercial
Little River Water Pollution Control Plant	Mountain Park and nearby communities in North Fulton and parts of Cherokee County	Residential and light commercial

Source: Fulton County

The Johns Creek, Little River and Big Creek plants have experienced operational problems, some of which have resulted in permit violations. Several of these violations have resulted in the issuance of Consent Orders from the Georgia Environmental Protection Division (EPD). Operational problems at the facilities have been due primarily to limited plant capacity and high wet peak weather flows. As a result of the permit violations, in January 7, 2000, the Georgia EPD of the Georgia Department of Natural Resources issued a Consent Order that limited sewer service connections in the Big Creek and Johns Creek service areas. The problems have been corrected and the moratorium was lifted in January 1, 2003.

Service in Roswell

Sewerage has not been extended throughout the City and is not planned in very low-density residential areas. Most of the land in the City is drained by Big Creek. The wastewater treated at the Big Creek plant discharges at the confluence of Willeo Creek and the Chattahoochee River. The Big Creek facility has a diversion pump which can pump up to 3.0 mgd (one way) to the Johns Creek plant for treatment and discharge.

Some residential subdivisions north of Woodstock and Hardscrabble Roads lie in the Little River drainage basin. The Brookfield West and Litchfield Hundred residential subdivisions, among others, are in this basin. The Little River wastewater treatment plant is located just across the Fulton County border in Cherokee County. The Georgia Department of Natural Resources has determined that the Little River can assimilate no additional discharge. At this time, it is the policy of Fulton County that all new development in this basin will have to be served through septic tanks or the privately funded application of treated wastewater. The County has no plans to extend or expand sewerage in this basin.

Part of eastern Roswell south of Holcomb Bridge Road naturally drains into the Chattahoochee River. Much of the eastside annexation is within the Johns Creek wastewater treatment plant service area. As noted previously, the Johns Creek plant will be phased out and replaced with a new Environmental Campus at Holcomb Bridge Road and the Chattahoochee River.

Inflow and Infiltration (I & I)

Peak flows to wastewater treatment plants occur in wet weather as a result of inflow and infiltration. This means that when soils are saturated around cracks in pipes, or streams flow over manholes or other openings to the sanitary sewer pipes, rapid, dramatic increases in flow occur at the treatment plant. North Fulton County's treatment plants experience severe inflow and infiltration problems. This requires reserving over two million gallons a day (mgd) of capacity to treat wet weather flows. Reducing inflow/infiltration in the collection system is one way to recapture system capacity. Inflow/infiltration reduction and increases in the level of wastewater treatment are quite expensive.

Collection System

The Fulton County wastewater collection system serves approximately 285 square miles of service area. The County's wastewater collection system provides service to the cities of Alpharetta, Roswell, and Mountain Park in North Fulton and East Point, College Park, Union City, Fairburn, and Palmetto in South Fulton.

The collection system consists of approximately 2,100 miles of sanitary and interceptor sewers. The County's wastewater collection system is comprised of both privately-owned and County-owned gravity sewers, force mains, and pumping stations. The larger-diameter lines and service connections are generally made of concrete pipe. There are also 44 wastewater pumping stations within the system (see Table 10.9)

Table 10.9
Fulton County Wastewater Collection System Elements

Collection System	System Elements
Big Creek Collection System	7 pumping stations
Johns Creek Collection System	2 primary interceptors; 6 pumping stations
Little River Collection System	1 pump station (operated by Cherokee County)

Source: Fulton County

The total service area in North Fulton is approximately 104 square miles. The North Fulton Wastewater Service Area includes approximately 750 miles of gravity sewers and 17 pumping stations. Unsewered areas comprise approximately 46 square miles, or 33 percent of the land area in North Fulton.

Rapid population growth in North Fulton has resulted in wastewater treatment facilities operating near their design capacity. To provide flexibility in the system, the sewer basins are being tied together hydraulically, enabling the transfer of flows between basins to relieve hydraulic overloading at specific facilities.

The Big Creek collection system includes seven pumping stations and three primary collection trunk sewers. The interceptor trunk sewers range in size from 12 to 72 inches in diameter. The Riverside pump station handles the majority of the flow received at the Big Creek WRF. During rainfall events, overflows of manholes along Riverside Drive upstream of the Riverside pump station can occur. The County is currently planning modifications in this area that will help to relieve stress in this area of the collection system.

The John's Creek collection system consists of two primary interceptors located along Johns Creek and the Chattahoochee River. The system includes six pumping stations. The Old Alabama and the Chattahoochee III pump stations have the capability to divert up to 5.0 mgd to the Cauley Creek WRF. The Johns Creek diversion pump station diverts flow from the Johns Creek WPCP to the Big Creek service area to keep the influent flow to the Johns Creek plant within its design capacity.

The Little River collection system consists solely of gravity sewers from residential neighborhoods and light commercial areas. All flows from neighboring Cherokee County are pumped to the plant from the River Oaks pump station. This pump station is operated and maintained by Cherokee County.

Level of Service

The Water Protection Section of the Fulton County Public Works Department assesses level of service by comparing the maximum monthly flow to the average monthly flow. The higher the number above 1.0 means the greater the difference between average flow and maximum flow capacity. See Table 10.10 for treatment facility levels of service.

Table 10.10
Level of Service Provided by Water Pollution Control Plants
In North Fulton County

Water Pollution Control Plant	Ratio of Level of Service Ratio of Maximum Monthly Flow to Average Monthly Flow (Maximum divided by Average)
Big Creek Water Reclamation Facility	1.14
Johns Creek Water Pollution Control Plant	1.12

Source: Fulton County

Programmed Improvements

In order to maintain the current level of service and meet expected needs, the Department of Public Works has an approved plan for system improvements for wastewater treatment. The projects within this budget reflect the priority needs for the plants and the collection system. Table 10.11 indicates project improvements scheduled for 2004-2006.

Table 10.11
Phase I Wastewater System Improvements
Fulton County Wastewater System

Project Description	Amount (\$)
Water Reclamation Facilities Projects – Johns Creek WRF	\$93,000,000
General Wastewater System Projects	\$16,500,000
Program & Construction Management Services	\$11,246,823
Relief Sewer Projects	\$10,742,000
Pumping Station Projects	\$10,000,000
Wastewater Allocation	\$8,000,000
Infiltration and Inflow Projects	\$5,400,000
Total Phase I Wastewater CIP Projects	\$154,888,823

Source: Fulton County

STORMWATER MANAGEMENT

The City recognizes that stormwater management is an important function of local government. Land development generally increases the rate and amount of stormwater runoff and potentially the amount of water pollution. Excessive runoff contributes to flooding and associated damage. Water contaminated during runoff results in water treatment challenges and threats to habitat. For these reasons, stormwater management is a necessary function of local government.

Increased development along with the increase in impervious surfaces such as parking lots, rooftops, and roadways has resulted in significant increases in stormwater runoff. Flooding of homes, businesses, and City and County managed roads and bridges occurs because stormwater systems and stream channels simply cannot handle the amount of water entering them during and following rainfall events.

Since all actions within a watershed ultimately impact Georgia's and Roswell's downstream waters, a holistic approach to stormwater management is being developed by the City. The City is part of a joint permit that covers the entire metropolitan Atlanta region and is administered by the Atlanta Regional Commission (ARC). Annual reporting is sent to Fulton County and on to ARC.

Roswell has adopted the State's guidelines for stormwater management. The MS4 stormwater discharge permit establishes guidelines for municipalities to minimize pollutants in stormwater runoff to the "maximum extent practicable." It is the City's intent to issue a request for proposals to develop an action plan before June 30, 2005. The City recognizes that the overall purposes of a local stormwater management program are to:

- Minimize the adverse impacts of stormwater runoff on the community;
- Meet the State and federal regulatory requirements for stormwater runoff quantity and quality management; and
- Ensure that the community's priorities, needs and desires are taken into account in meeting stormwater management goals.

In addition, an effective local stormwater program requires an institutional structure that includes: Adequate legal authority; performance standards for development; design assistance and guidance; program funding and staffing; commitment to enforcement; public education; and citizen involvement

The City of Roswell will utilize the policy, criteria and information including technical specifications and standards in the latest edition of the *Georgia Stormwater Management Manual* and any relevant local regulations or procedures of the Engineering Division of the Community Development for the proper implementation of its stormwater management regulations. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring, and local maintenance experience.

The City's Recreation and Parks Department has developed a master plan for Big Creek Park that includes several recreational amenities. A portion of the property has been selected for a Wetlands Enhancement Demonstration Project. The project is intended to demonstrate improvements on the overall quality of an urban watershed and wetlands system through the use of innovative approaches to manage both quality and quantity of urban stormwater runoff. The project site includes approximately 30 acres of wetlands currently receiving urban stormwater runoff. The project objectives are to:

- Demonstrate urban stormwater “best management practices” for improving water quality;
- Demonstrate groundwater recharge through the wetlands to improve low-flow conditions in Big Creek during drought periods;
- Demonstrate wetlands enhancement such as improved wetland hydrology and habitat diversity; and
- Construct a network of trails for public use with the ability to provide public education pertaining to water quality, wetlands, and stormwater management.

SOLID WASTE MANAGEMENT

The Georgia Comprehensive Solid Waste Management Act of 1990 requires that local governments adopt solid waste management plans and update the short-term work program of that plan every five years. The plan is required to contain an inventory of existing solid waste management practices, identify potential alternative disposal methods, include strategies to reduce solid waste by 25 percent, and define disposal options for a ten-year planning period.

The City prepared and adopted its Comprehensive Solid Waste Management Plan in early 1994. An update to the work program was prepared in 1998 and adopted after State and regional review in 1999. Another update of the plan is underway at the time of this writing and is due to be completed and adopted in October 2005. Goals, objectives, and actions are stated in the City's solid waste management plan and update of the short-term work program.

The Georgia Comprehensive Solid Waste Management Act requires the City of Roswell to develop a strategy for reducing the amount of solid waste going into landfills and other disposal facilities. This reduction may be accomplished by many techniques, including recycling materials such as plastic, aluminum, and newspaper. It can also be accomplished by diverting yard waste from disposal facilities into backyard and other composting operations. Based on State goals, the City currently diverts 28.25 percent of its solid waste from Subtitle D landfills. Many other methods for reducing our local waste stream are also available. Summary

information about the Comprehensive Solid Waste Management Plan is provided in the following paragraphs.

Collection

The City provides weekly curbside collection of household garbage. The City has a fleet of rear-loading garbage trucks for residential collection operations. Backyard pickup is available to disabled and elderly persons via one-ton trucks. The City also provides commercial garbage collection and arranges to pick up bulky items like televisions, sofas, and larger quantities of yard waste for an additional fee. Additional equipment has been purchased to address new solid waste demands due to population growth and annexations. Private haulers contract with some multi-family residential properties, while others are serviced by the City.

The City's sanitation policies are designed to minimize waste in landfills and maximize recycling opportunities. Such policies help to protect the environment and preserve the quality of life for future generations. Roswell encourages recycling and disposal of trash in an environmentally sound and safe fashion. Building materials and/or construction debris are not collected by the City of Roswell. Such items cannot be mixed with garbage or yard waste. The Chadwick Road Landfill, which is located on Chadwick Farm Boulevard off SR140) near the Fulton/Cherokee County line, receives such materials.

Recycling

Recycled materials are collected at the curb and at a recycling center at Hembree Road and Maxwell Road. The City contracts with a private hauler-Dreamscan, to collect recyclables. Curbside recycling services are provided to single family residential units (1-4 dwelling units). Only approved recyclable materials inside a City of Roswell recycling bin are collected. Unapproved recyclable materials are left in the recycling bin.

UTILITIES

The City does not provide utility services, except for water to a portion of the City and sanitation services as described above. Electricity is provided by Georgia Power Company, Cobb EMC, and Sawnee EMC. Natural gas is provided by a number of different private companies, including Atlanta Gas Light Company. Bell South provides telephone services, and cable television services are provided by Media One.

EMERGENCY MANAGEMENT

Emergency Management is a term used to describe the steps taken by governments to plan, organize, and prepare for the saving of lives, protection of property, and the recovery from the effects of an emergency, disaster or catastrophe. The Atlanta-Fulton County Emergency Management Agency is a joint, cooperative effort between the City of Atlanta and Fulton County and serves the City of Roswell. It is responsible for maintaining and implementing the Emergency Operations Plan. The Emergency Operations Plan is the legal and organizational basis for coordinated emergency and disaster operations in the City of Atlanta and Fulton County. The Agency also assigns broad responsibilities to local government agencies and support organizations for disaster mitigation preparedness, response and recovery functions. Level of service guidelines have yet to be approved by the State.

COMMUNITY FACILITIES AND SERVICES GOALS, OBJECTIVES, AND POLICIES

General

1. Ensure cost-effective and timely provision of community facilities and services to support the needs of the City's neighborhoods, residents, and businesses.
2. Provide for the centralized locations of future municipal facilities, except in cases where decentralization is more cost effective or where other appropriate circumstances warrant deviation from this goal.
3. Maintain municipal buildings and grounds to the same high standard as exists today to ensure their continued attractiveness and superior accommodation of City customers.
4. Consider energy conservation techniques in all new municipal buildings and significant renovations of facilities. Periodically evaluate energy efficiency of facilities and vehicles.
5. Implement a customer service policy and action plan in each of the City's departments, with a consistent level of service throughout the departments.
6. Fully integrate the City's Capital Improvement Element (CIE), as required by State rules to be annually updated, with the City's capital improvement planning process, so that the two items are one and the same.
7. Where appropriate, consent to the creation of community improvement districts as a means of the private provision of necessary urban services (e.g., sanitary sewer, roads, etc.), provided that such districts do not program for new development that exceeds the recommendations of the Comprehensive Plan (specifically, the future land use plan).
8. Consider the purchase of alternative fuel vehicles, as appropriate.
9. Monitor the provision of municipal services and their ability to meet the diversifying needs of the City's population.

Police, Fire, Rescue, Emergency Medical Service, and Public Safety

Goal: Deliver municipal police protection, fire and rescue services, and emergency medical services that provide optimum degrees of security against loss or damage to persons and property.

1. Program to construct, during the planning horizon, additional space in the law enforcement center to meet the City's adopted level of service standard. In the alternative, consider as appropriate additional satellite substations in key locations as part of a community-based approach to policing.

2. Provide adequate municipal jail space or otherwise provide the most cost-effective method of temporarily housing prisoners.
3. Maintain adequate police staff as determined by the Police Chief (currently approximately 2.5 full-time positions per 1,000 residents).
4. Maintain adequate police, fire and rescue, and emergency medical service response times to all areas of the City and any areas outside the City where municipal services are provided via intergovernmental service agreement.
5. Implement traffic enforcement programs to the maximum extent budgets will permit.
6. Implement a community-based approach to policing, including Neighborhood Watch and other appropriate programs of the Crime Prevention Unit.
7. Continue reviews of proposed developments by public safety personnel for purposes of ensuring public and private security. This includes approval by police and fire and rescue department staffs of any "gated" communities.
8. Subdivisions that contain 30 or more single-family dwellings or 100 or more townhouses should be required to have more than one (1) entrance to the development, for purposes of evacuation and public safety access.
9. Subject to land availability, future fire stations should be carefully sited to provide optimum response times to the greatest number of municipal residents and businesses. Future fire stations should be sufficiently buffered from adjacent land uses, especially if located in residential areas.
10. Maintain the City's current Insurance Services Office (ISO) rating of 4.
11. Maintain the current system of volunteer and part-time firefighters, supplemented with full-time professional staff, as may be appropriate as determined by the Fire and Rescue Chief.
12. Continue programs of recognition to volunteer firefighters as a means of maintaining and encouraging increases in the numbers of volunteers.

Water

1. Develop a strategy to optimize pressure and flow throughout the City water system.
2. Continue to program and implement improvements needed to maintain and upgrade the City's water system. Because of the age of the City's water system, there will be a continual need for capital projects to correct problems.
3. Prepare, adopt, and implement a water conservation program.
4. Implement the recommendations of the water system strategic plan with regard to water production, storage, and distribution.
5. Water rates and fees should be periodically reviewed and modified to reflect the actual costs of service provision and to further system goals.

Sanitary Sewer

1. Do not provide for, or permit, the extension of sanitary sewer service into areas of Roswell designated as “estate residential.”
2. Participate in master planning for County sanitary sewer service provision to ensure a healthy expansion of the City’s economic base in accordance with policies of the Comprehensive Plan.
3. Encourage Fulton County to provide superior environmental operations at the Big Creek and Johns Creek Wastewater Treatment Facilities so that spills are avoided, odors are neutralized, and operations are as environmentally friendly as possible.
4. Complete programmed improvements to the new water reclamation facility on the Fulton County Environmental campus at Holcomb Bridge Road and the Chattahoochee River.

Roads and Bridges

1. Continue to program and implement improvements needed to maintain and upgrade the system of municipal roads, bridges, sidewalks, signals, and drainage. Because of the age of the City's street system, there will be a continual need for capital projects to correct problems.
2. Develop a traffic management system designed to take advantage of the newest signal technology to provide safe and efficient movement of traffic. This will include the development of systems that will work with and are compatible with surrounding municipalities.
3. Develop joint road and signal improvements with MARTA to improve the efficient movement of people.
4. Continue to prioritize road resurfacing projects, drainage maintenance projects, and sidewalk repair projects according to most urgent need, and implement a pavement management system and maintenance and repair programs according to such priorities.
5. Investigate the need for traffic calming and integrate traffic calming projects as may be appropriate in the City’s Capital Improvement Element/ capital improvement plan.
6. Develop and implement a program of bike and pedestrian multi-use paths to tie neighborhoods, communities, and recreational facilities together.
7. Develop a program incorporating landscaping/streetscaping into all major road projects to provide greater community identity and safety.

Stormwater Management

1. Continue to program and implement improvements needed to maintain and upgrade the stormwater management system (i.e., primarily the street system). Because of

- the age of the City's stormwater system, increasing levels of flow, and expanding needs to improve water quality, there will be a continual need for capital projects to correct problems.
2. Continue to ensure the implementation of stormwater quality management and monitoring efforts on private developments via the development review and approval process. Provide appropriate City resources to foster community-based watershed programs and facilitate erosion control and bank stabilization efforts.
 3. Continue to maintain watershed identification signs in appropriate locations to elevate public awareness of the need to protect watersheds and water quality.

Sanitation and Solid Waste

1. Maintain compliance with the State Comprehensive Solid Waste Management Act of 1990 and associated administrative rules, including the periodic updating of the City's Comprehensive Solid Waste Management Plan.
2. Implement the goals and strategies of the City's comprehensive solid waste management plan. Continue to foster education and encourage expanded recycling of waste material.

Schools

1. Cooperate with the school system in resolving problems of overcrowding in schools in North Fulton County.
2. Encourage the Fulton County Board of Education to work with the City and neighborhood groups with regard to the architectural features and off-site impacts of future schools constructed in Roswell. Voluntary review by the Design Review Board of new school sites, as well as staff review for erosion and other development management practices, are recommended.
3. Share municipal data and mapping databases with the school system for use in future planning efforts.
4. Maintain productive and cooperative relationships with providers of technical and higher education in the north Fulton area (e.g., DeVry, Reinhardt, Georgia State).

Recreation, Parks, and Open Space

1. Provide a superior system of municipal parks that meets level of service standards adopted in the City's recreation and parks master plan and/or Comprehensive Plan.
2. Revise the Recreation and Parks master plan every five years.
3. Implement the master plan for the Roswell Riverwalk.
4. Prepare and implement a Master Plan for the Historic District which focuses on pedestrian access and historic preservation.

5. Continue joint usage of schools with City recreation and park programs, and consider expansion of use agreements for City use of outdoor and indoor school recreational facilities.
6. Encourage dedication of parks and open space as part of new residential subdivisions and multi-family developments, or at minimum, encourage the donation of easements for an interconnected municipal greenway system.
7. Give priority to pedestrian system improvement projects and bikeway construction projects that will enhance access to City parks by foot and bicycle.
8. Take a leadership position in Fulton County's development of a greenspace plan; place emphasis on the acquisition of lands that will interconnect Countywide/regional greenway systems that preserve natural resources and provide passive outdoor recreation.
9. Continue to provide diverse recreation programs that will serve the needs of Roswell's growing population and that will maintain Roswell's standard and reputation of excellence in recreation programming.

Library

1. Work with the Atlanta-Fulton County Library System to improve and expand access to library materials (resource collections of all media) by Roswell's growing population.
2. Encourage the library system to expand library services in Roswell during the short-term (2005-2010).
3. Consider construction of a new library at Eves Road.

Historic and Cultural Facilities

1. Continue to monitor the conditions of municipally owned and operated historic and cultural facilities; program improvements to such facilities and grounds as appropriate.
2. Continue to work with area local governments to provide additional or improved cultural resource facilities in north Fulton County.
3. Prepare and implement a Master Plan for the local Historic District; program for additional historic streetscape improvements as budgets permit.
4. Implement the Historic Preservation Element of the Comprehensive Plan.
5. Implement the community cultural plan.

Community and Economic Development and Tourism

1. Periodically evaluate development approval processes and revise them for maximum efficiency without compromising compliance with the purposes of such codes.
2. Prepare, implement, and periodically reevaluate a system of dispute resolution in cases where there are discrepancies and/or disagreements between/among City departments with regard to development review and permitting.
3. Maintain and expand, as appropriate, the citizen deputies program of community-based code enforcement.
4. Maintain an economic development office and program that provides business location and business retention programs, facilitates redevelopment efforts, provides a voice for businesses in governmental affairs, and implements other programs as described in the economic development action plan and redevelopment plan work program.
5. Maintain a Convention and Visitors Bureau to promote and facilitate tourism.
6. Coordinate community development efforts, including the City's expenditure of Community Development Block Grant (CDBG) and HOME funds, with similar efforts of Fulton County to ensure the provision of adequate facilities to low and moderate-income populations in Roswell.

Community Information Services

1. Maintain a community information office and program to coordinate and provide timely information to the general public.
2. Prepare, implement, and revise as appropriate a community information plan and programs.
3. Maintain a management information office, program, and five-year plan to ensure the appropriate equipment and computer operations that will meet the needs of Roswell's employees.
4. Continue to develop and expand the City's geographic information system.
5. Continue to add features to the City's website.

Health and Human Services

1. While the City does not have direct responsibility for health and human services, it should take an active role in promoting effective health and human service delivery to City residents by encouraging and supporting the work of the County and other providers (including private, non-profit organizations) to meet identified needs.
2. Continue to add special services for the special populations, as defined in Chapter one, Special Needs Populations.

Emergency Preparedness and Disaster Mitigation

1. Periodically review and revise the disaster preparedness and emergency management plans in conjunction with Fulton County.
2. Continuously maintain sufficient contingency reserve funds to quickly restore municipal facilities and services that are damaged or interrupted by catastrophe and/or adverse weather conditions (e.g., damage to buildings and streets, toxic waste spills, etc.).
3. Develop a permanent command center and consider alternative sites for the City 911 Center.

CHAPTER 11 DEVELOPMENT IMPACT FEE METHODS REPORT

PURPOSES OF THIS CHAPTER

The purposes of this chapter include the following:

- To serve as a legal and methodological foundation for the continued assessment of development impact fees in Roswell.
- To critique the City's 1992 development impact fee program and to make improvements.
- To draw on the best available information, including a review of other impact fee programs and the professional literature, in modifying Roswell's impact fee methods.
- To make a complicated set of processes understandable to the reader; the methods should make practical sense, not just to planning or financial specialists, but also to the lay person.
- To fully document inherent assumptions and implications of the development impact fee methods.
- To address some of the issues associated with development impact fee programs.

HISTORY AND CONTEXT

Since the Development Impact Fees Methods Report (Nelson 1992) was prepared for the City of Roswell, and since the creation of the Road Facilities Impact Fee Study (Growth Management Consultants, Inc. 1994), the practice of capital improvement programming and impact fee program development has become more refined in the State of Georgia. These refinements are due in part to changes in the practice of impact fee assessments, the promulgation of standards for Capital Improvement Elements (CIE) by the Georgia Department of Community Affairs, and a growing recognition of the fiscal importance of capital improvement programming. All of these changes must be taken into account when completing any rigorous examination of the methodological foundation of the City of Roswell's development impact fees.

In 1992, when the City's development impact fee methodology was first written, there was no way to predict the changes that annexation and strong development would bring to the City. At that time, the projection of population in the year 2010 was 74,250 persons. The population estimate for the City in the year 2000 is 75,000. The discrepancy is due to substantial annexation of developed areas by the City in 1999, including the eastside annexation. Because of such annexations, impact fee calculations needed to be brought up to date with the existing and future population and employment figures of the 2020 Comprehensive Plan.

Given the Comprehensive Plan's projection that the City will be fully developed during the 20-year planning horizon, it is important to understand that new capital facilities are being planned on a "build-out" or "closed end" basis. That is, facilities being planned for now are the last improvements needed to serve the City, as it exists today. This chapter introduces the 2000 impact fee program, a product of the "build out" scenario for capital improvements programming.

The 1992 program was ended with adoption of the 2020 Comprehensive Plan and replaced with the adopted 2000 impact fee program. Collection of impact fees in Roswell is based on the 2000 impact fee program.¹

Previous Process of Impact Fee Adoption

The City followed all applicable statutory procedures in preparing and adopting its 1992 development impact fee program, including the establishment of a development impact fee advisory committee (O.C.G.A. 36-71-5). The development impact fee statute does not specifically require that an advisory committee be reconvened when revising impact fee methodologies or revising an existing development impact fee ordinance based on new methods. The results of the 2000 program, however, are consistent with the concepts embodied in the 1992 program which reflected review and comment by the impact fee advisory committee.

OVERVIEW OF DEVELOPMENT IMPACT FEES

Table 11.1 provides definitions of selected terms used in this chapter.

Table 11.1
Glossary of Development Impact Fee Terms

Term	Definition	Source
"Capital improvement"	An improvement with a useful life of ten years or more, by new construction or other action, which increases the service capacity of a public facility.	O.C.G.A. 36-71-2
"Development Impact Fee"	A payment of money imposed upon development as a condition of development approval to pay for a proportionate share of the cost of system improvements needed to serve new growth and development.	O.C.G.A. 36-71-2
"Encumber"	To legally obligate by contract or otherwise commit to use by appropriation or other official act of the City.	O.C.G.A. 36-71-2
"Functional Population"	The combination of residential population and employment.	2000 Impact Fee Program
"Impact Cost"	The amount of money required to be expended to provide service to a specific unit of measure.	2000 Impact Fee Program
"Level of service" (LOS)	A measure of the relationship between service capacity and service demand; levels of service quantify service capacities of public facilities or infrastructure by demand-to-capacity ratios or the comfort or convenience of use or both.	Nelson 1992
"Level of service standard"	The desired level of service, adopted by the local governing body as the future level of service to be applied to both existing development and future development occurring during the planning horizon.	

¹ This chapter is a reformatting of Chapter 16 of the adopted 2020 Comprehensive Plan. Reconsideration of impact fees was not a part of the 2025 plan work scope. No revisions were made except to reformat it as Chapter 11 of the Comprehensive Plan 2025 and minor language changes to correct or omit obsolete language. Since the development impact fee program is not being updated concurrently with the 2025 plan update (and such elements are considered under separate rules of the Georgia Department of Community Affairs), compliance review is not being requested for this Chapter. It received approval by DCA as compliant with the administrative rules for Capital Improvement Elements (CIE) in the year 2000, and annual amendments to the CIE have been made over time.

Term	Definition	Source
"Project improvements"	Site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project and are not system improvements. The character of the improvement shall control a determination of whether an improvement is a project improvement or system improvement and the physical location of the improvement on site or off site shall not be considered determinative of whether an improvement is a project improvement or a system improvement. If an improvement or facility provides or will provide more than incidental service or facilities capacity to persons other than users or occupants of a particular project, the improvement or facility is a system improvement and shall not be considered a project improvement. No improvement or facility included in a plan for public facilities approved by the governing body of the municipality or County shall be considered a project improvement.	
"Proportionate share"	That portion of the cost of system improvements which is reasonably related to the service demands and needs of the project.	O.C.G.A. 36-71-2
"Service area"	A geographic area defined by a municipality, County, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area. Service areas shall be designated on the basis of sound planning or engineering principles or both.	O.C.G.A. 36-71-2
"System improvement costs"	Costs incurred to provide additional public facilities capacity needed to serve new growth and development for planning, design and construction, land acquisition, land improvement, design and engineering related thereto, including the cost of constructing or reconstructing system improvements or facility expansions, including but not limited to the construction contract price, surveying and engineering fees, related land acquisition costs (including land purchases, court awards and costs, attorneys' fees, and expert witness fees), and expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the Capital Improvement Element, and administrative costs, provided that such administrative costs shall not exceed 3 percent of the total amount of the costs. Projected interest charges and other finance costs may be included if the impact fees are to be used for the payment of principal and interest on bonds, notes, or other financial obligations issued by or on behalf of the municipality or County to finance the Capital Improvement Element but such costs do not include routine and periodic maintenance expenditures, personnel training, or other operating costs.	O.C.G.A. 36-71-2
"System improvements"	Capital improvements that are public facilities and are designed to provide service to the community at large, in contrast to "project improvements."	O.C.G.A. 36-71-2

Source: As noted in table.

Legal Principles

Local governments are authorized under certain conditions to charge development impact fees pursuant to the Georgia Development Impact Fee Act of 1990. Though not explicit, the enabling statute frames this authorization within the context of municipal police powers (i.e., necessary to protect health, safety, and general welfare) (see O.C.G.A. 36-71-1). Moreover, the Development Impact Fee Act is linked to Georgia's Comprehensive Planning legislation (Georgia Department of Community Affairs, 1992a). Therefore, impact fees in Georgia are considered regulatory devices and not taxes. Indeed, most States have recognized impact fees as permissible exercises of the police power (Juergensmeyer and Roberts 1998, 395). Impact fees are imposed as a condition of development approval, thus they fall within the general

system of land development regulation as contrasted with revenue raising (taxation) programs. The primary objective of impact fees is not merely to raise money, but rather, to ensure adequate public facilities (Nicholas 1988).

The Georgia Development Impact Fee Act specifies certain principles that must be adhered to in determining methods for calculating proportionate share impact fees. These principles, as well as others that have been developed in the courts and literature, are summarized in Table 11.2.

Table 11.2
Summary of Legal Principles Applicable to Impact Fee Methods

Principle	Description	Source
Proportionate share	New growth and development is required to pay no more than its proportionate share (see def.) of the cost of public facilities needed to serve new growth and development. A development impact fee shall not exceed a proportionate share (see def.) of the cost of system improvements (see def.)..	O.C.G.A. 36-71-1; O.C.G.A. 36-71-4
Service areas	Development impact fees shall be calculated on the basis of service areas.	O.C.G.A. 36-71-4
Level of service standards	Development impact fees shall be calculated on the basis of levels of service [standards] for public facilities that are adopted in the municipal or County Comprehensive Plan that are applicable to existing development as well as the new growth and development.	O.C.G.A. 36-71-4
System costs	Development impact fees shall be based on actual system improvement costs or reasonable estimates of such costs.	O.C.G.A. 36-71-4
Credits	Development impact fees shall be calculated on a basis which is net of credits for the present value of revenues that will be generated by new growth and development based on historical funding patterns and that are anticipated to be available to pay for system improvements, including taxes, assessments, user fees, and intergovernmental transfers.	O.C.G.A. 36-71-4

Rational Nexus

Of the different “tests” used in judicial reviews of development impact fee systems, the “rational nexus” test is the mainstream judicial review for development impact fees. The crux of the rational nexus test is that development must pay only (i.e., fees must not exceed) its proportionate share of the costs of new facilities needed to serve the development. The test also includes the principles that development must create a need for new capital facilities, and that the development must benefit to some extent (not exclusively) from the fee collected (Nicholas 1988; Nicholas and Nelson 1988a; Stroud 1988; Ross and Thorpe 1992; Juergensmeyer and Roberts 1998, 398). As noted above, the proportionate share concept (i.e., rational nexus test) is specifically referenced in Georgia’s impact fee enabling statute and generally considered to be the preferred judicial test in Georgia (Georgia Department of Community Affairs 1992a, 17).

This Comprehensive Plan, which includes projections of future population, housing units, and employment, satisfies part of the rational nexus test—it shows that new development requires additional facilities. The impact fee methodologies in this chapter complete the rational nexus requirement by calculating the costs to provide service to new development, based on consistent LOS standards applied to existing and new development.

Beneficiaries of System Improvements

The types of development occupants that benefit from various facility system improvements are not always clearly evident. In the case of police and fire facilities, both individuals (households) and businesses (firms) require and benefit from them (Nicholas and Nelson 1988a). Thus, both residential and nonresidential developments receive benefits from public safety facilities, and they both need to pay development impact fees. Similarly, road impact fees can be assessed on all types of development because all of them use the road system.

On the other hand, impact fee systems typically charge park and recreation fees on residential development only (Auerhahn 1988). One notable exception is an impact fee system developed for Fulton County, Georgia in the late 1980s. Nelson, Poirier-Elliott, and Debo (1989) found that employees of commercial developments who commute into Fulton County use parks and recreational facilities during lunch hours and breaks, and that they may enjoy visual amenities of parks during travel to and from work. A survey in Fulton County revealed that two percent of all users of parks were nonresidents working in nearby buildings (Nelson, Poirier-Elliott, and Debo 1989). Although workers may receive some marginal benefits, and it is impossible to exclude their use of City parks, the impact is believed to be too small to serve as a substantial basis to charge recreation and parks impact fees on nonresidential developments.

Another important consideration with regard to benefits is the timing of improvements. If improvements are made in the distant future, the benefit accrued by the fee payer may be considered insufficient. The benefit from improvements declines exponentially with respect to time (Nicholas 1988). Georgia's impact fee enabling legislation addresses this issue by requiring that impact fee proceeds be "encumbered"—that is, committed to a specific project—within six years of the date they are collected.

Degrees of Benefits and Costs

The amount of development impact fees must vary according to how the impacts (and hence, the costs) differ among different types of development. For example, it would not be legitimate to charge a single-family residence and a 200-seat movie theatre the same impact fee for roads, as their impacts on the road system will be remarkably different. Roswell's impact fee system provides a rational nexus between the fee charged and actual system impacts by varying the fees according to different types of land uses and their differing demands for service.

Under most development impact fee systems, the same impact fee is assessed against all detached residential units, regardless of size. A case has been made that residential development types should be further differentiated on the basis of the size of the unit (or number of bedrooms or rooms) as opposed to making broad assumptions about household size. Many impact fee programs establish impact fee schedules that vary based on the number of bedrooms and on unit type (Nicholas and Nelson 1988b). Nelson (1995) finds that the "next generation" of impact fee programs will be more precise in relating proportionality to house size and, by implication, income. For example, Palm Beach County, Florida, has a fee that proportionally increases as the size (square footage) of the residential unit increases. Such a system, if implemented, works to reduce the regressive nature of impact fees (Nelson 1995). Additionally, Martin County, Florida's revised development impact fee system also varies fees based on the size of the dwelling unit (Growth Management Analysts 1998). In the City of Roswell, however, the detailed data required for this type of calculation are not readily available.

Instead, the 2000 impact fee program captures the largest range of possible dwelling unit impact, based on average household size per unit.

For nonresidential uses, the development impact fee methods rely on empirical data on the number of employees per 1,000 square feet, or other standardized measure, for individual land uses.

System Costs

Local governments that charge development impact fees must be able to back up the fees they set with realistic cost figures, formulas, and numbers (Georgia Department of Community Affairs 1992a). The actual expenditure history of the community is a viable basis on which to project system costs (Nicholas 1988). The development impact fee calculation methods used in this report are based on what is called the “capital projects” (i.e., system costs) methodology. System costs are based on data from the City’s past expenditures and on judgments of professionals in the areas of public safety, recreation and parks, and transportation. For instance, through several acquisitions and improvements, the City has sound estimates of the cost per acre of purchasing and improving parkland, as well as the cost of fire station construction.

Service Area Issues

Service areas for certain facilities may be drawn to include the entire jurisdiction (i.e., Citywide), or different sub areas of the City can be established as separate service areas. There is local discretion in establishing service areas; however, they must be based on appropriate legal, planning, and engineering principles. Moreover, the choice regarding whether to use a single service area or more than one service area depends to a large extent on the type of facility.

Libraries, police facilities, fire facilities, and water systems are often designed to serve large areas. A library system may include a main building and several branches but residents may check out and use any item available anywhere in the system. Fire facilities are often managed by one large department serving a County or large City. The jurisdiction is given one “fire insurance rating” based on its entire fire protection system. When one fire company responds to a call, other fire companies provide backup. Police facilities and services are used in the same manner (Nelson 1992).

Single service areas pose certain advantages. One particular advantage of having only one service area (the City limits) for each facility is that the City has flexibility in spending collected impact fees on projects anywhere in the City since expenditures on the City wide system of facilities affect all users. Another advantage of using a single service area is that it allows the City to avoid complex issues and planning work associated with considering, drawing, reconsidering, and justifying different service areas. For instance, separate population, employment, and facility needs projections are needed for every service area that is established by the development impact fee program (Georgia Department of Community Affairs 1992b).

In the case of Roswell, the City limits are small enough that they can serve as an equitable and legitimate service area for the facilities included in this report. For instance, all residents have equal access to all of the City’s parks and recreation facilities. Nevertheless, it is worthy to mention the advantages of drawing more than one service area for a given facility. Within a given service area, the same level of service must apply. Having more than one service area for a particular type of system improvement, however, provides the advantage of being able to

establish different service levels for the service areas. For instance, by utilizing more than one service area (i.e., one for the existing built up area and one for the new growth area), a local government could achieve higher levels of service for new development than currently exist in developed areas. Establishing different service areas also enables local governments to influence the location of growth and therefore better manage urban development patterns (Georgia Department of Community Affairs 1992a).

Funding Deficiencies Based on Higher Level of Service Standards

An equally important consideration is that, to the extent that impact fees fund only a portion of the cost of new facilities, the funding shortfall must be made up from other revenue sources—most commonly, property taxes. The same conditions that suggest the creation of service areas apply equally to the generation of additional revenue—those benefiting must contribute to paying the costs. Thus, each service area would have to be established as a special tax district in order to associate the revenue needed for a specific facility with those being served.

Optional Provision for Recoupment

Local governments that have developed excess infrastructure capacity in anticipation of new growth may add an optional clause to their ordinances allowing them to recoup the cost of certain completed public works projects through impact fees. However, new development may only be charged a proportionate share of the system improvement costs related to excess capacity built in the past, based on the amount of excess capacity each project will use up or absorb. Recoupment will necessitate careful analysis of the project's financing structure to avoid double charging development for system improvement costs collected prior to adoption of an impact fee ordinance through means such as land dedications, exactions, user fees or property taxes (Nelson 1992).

Social Policy Implications of Impact Fees

The literature generally shows that impact fees raise the cost of housing. Impact fee systems are usually not designed to be responsive to the “ability to pay” principle, and waivers of impact fees for low- and moderate-income dwelling units have been advocated (Beatley 1988). Indeed, Georgia's statute allows for exemptions of low and moderate-income housing from the payment of impact fees, provided the money lost through such a waiver is made up through some other funding source. The City's Comprehensive Plan was amended to establish policy for waivers of impact fees for low and moderate-income households.

THE 2000 IMPACT FEE PROGRAM

This section presents the methodologies used to determine new development's fair share of the investment in public safety facilities, parks and recreation facilities, and transportation facilities. The library and water system facilities are discussed, but are not included in the City's impact fee program. For each service facility the 1992 adopted level of service standard is stated, and any current deficiency is determined. The service area is described. The future facility needs, based on the new (2000) adopted level of service standards, are determined. The cost to provide service in order to meet the forecasted facility needs is given. The impact cost is calculated for each service category. Finally, the impact fee is calculated, based on the impact cost and adjusted to reflect any relevant credit, or other refinements as specifically identified.

In calculating an impact fee, the cost may be increased to include financing costs of the facility and an administrative fee (not to exceed 3 percent). Conversely, the impact cost must be reduced to the extent that the new growth and development will pay future sales or property taxes toward financing the facility, to avoid double taxation.

The following table is a summary of the City's facilities that are eligible for impact fee financing under Georgia law and that are discussed in this chapter.² The service area for each facility—that is, the geographical area served by the facility—is also shown, along with the LOS unit of measure adopted for each facility category.

Table 11.3
Summary of Impact Fee Facilities, City of Roswell

	Public Safety		Transportation	Parks
	Police Services*	Fire Protection Services		
Eligible Facilities	Precincts, training facilities, and jail	Stations, training facilities, fire engines, rescue units, and other trucks	Right-of-way, roads and intersections, bridges, sidewalks, and bike lanes	Park land, structures, and buildings, pedestrian and bike trails
Service Area	City limits	City limits	City limits	City limits
1992 Level of Service Standards	Based on square footage of facilities	Based on station bays	Based on vehicles per lane mile capacity	Based on acreage and facilities
2000 Level of Service Standards	Based on square footage of facilities and heavy vehicles		Based on road network volume to capacity ratio	Based on acreage and facilities

Source: 1992 LOS standards are drawn from the 1992 and 1994 impact fee program methodology reports; 2000 LOS standards are drawn from calculations in this chapter.

Terms used in Table 11.3:

Eligible Facilities under the State Act are limited to capital items having a life expectancy of at least ten years, such as land and buildings. Impact fees cannot be used for the maintenance, supplies, personnel salaries, or other operational costs, or for short-term capital items such as computers, furniture or automobiles. None of these costs are included in the impact fee system.

Service Areas are the geographic areas that the facilities serve, and the areas within which the impact fee can be collected. Monies collected in a service area for a particular type of facility may only be spent for that purpose, and only within that service area.

² In the absence of an agreement between the City and County, library facilities are not eligible for impact fee collection by the City.

Level of Service Standards are critical to determining new development's fair share of the costs. The same standards must be applied to existing development as well as new to assure that each is paying only for the facilities that serve it. New development cannot be required to pay for facilities at a higher standard than that available to existing residents and businesses, nor to subsidize existing facility deficiencies.

To a large extent, the level of service standards adopted in the 1992 report were based upon the then current level of service. This was done to avoid creating existing deficiencies and is true for most, but not all, categories. Table 11.4 presents a comparison between the 1992 adopted LOS standards and the year 2000 LOS for four of the service facilities included in this chapter. It is readily apparent that the existing LOS is very close to the desired LOS, as adopted in 1992. This indicates that Roswell has been able to maintain its adopted LOS standards in these categories between 1992 and 2000.

Table 11.4
Comparison of Adopted LOS Standard and Year 2000 LOS

Service Area	1992 LOS Standard	Year 2000 LOS	Difference
Transportation	LOS "D"	LOS "D"	none
Fire	1 bay/3,400 residents	1 bay/4,166 residents	766 residents per bay
Police	0.69 SF/resident	0.68 SF/resident	0.01 SF/resident

Source: 1992 LOS Standard is drawn from 1992 and 1994 impact fee methodology reports; existing LOS is calculated using the same methodology as the 1992 LOS, but with figures current for the year 2000.

In the individual service categories that follow, the LOS standard was updated in 2000 to reflect changes in the provision of those services. For parks and recreation facilities, impact costs and fees are calculated based on residential population, expressed in dwelling units. For public safety facilities the impact costs and fees are based on functional population (see discussion below). For transportation facilities, the impact cost and fee are calculated based on trip generation, derived from functional population.

Impact Costs and Impact Fees

This chapter distinguishes between impact costs and impact fees. An impact cost is the amount of money that must be expended, in terms of capital projects, to serve new development in the City, regardless of the source of the funding. It is the amount that it costs the City to provide the specific service facilities, at the adopted LOS standard, to keep up with the demands of new growth.

An impact fee, as calculated in this chapter, is the impact cost minus a credit for future tax payments toward bond issue debt service. The resulting figure is the amount of money that can be charged to new growth as a result of the services demanded by that growth. Credit is given for anticipated payments made by new growth toward the projects necessary to serve that new growth. Under the City of Roswell impact fee program, the amount of the impact cost not paid through property tax collected from new development is the impact fee.

Functional Population

The 2000 impact fee program uses two different population figures for impact fee calculations: residential population and functional population. As noted earlier, for certain services, such as libraries and parks, it is difficult to show a rational nexus between local employment and the services provided. For example, library resources are not regularly used by out-of-City employees. In these cases, it is proper to calculate and charge impact fees based upon residential population. Often, the residential population will be stated in terms of the number of dwelling units occupied by that population. Other services, however, are demanded by residents and non-residents alike. Fire protection is an example of a service that is demanded by both residents and employees. Further, this service must be provided regardless of whether or not the resident is at home or the employee is at work, since the protection of property is a major function of police and fire service. To determine the number of people making demands upon fire protection services, the residential and employment populations are combined; this is the functional population.³ Functional population is used in the impact fee calculations for public safety and transportation facilities. Table 11.5 presents the functional population forecast for Roswell over the next 20 years, based upon the employment and residential population forecasts made for the City.

Table 11.5
Functional Population, 2000-2020

Year	Residential Population	Employment	Functional Population
2000	75,000	34,398	109,398
2001	75,905	35,400	111,305
2002	76,811	36,402	113,213
2003	77,717	37,404	115,121
2004	78,623	38,406	117,029
2005	79,529	39,408	118,937
2006	79,988	40,228	120,216
2007	80,447	41,048	121,495
2008	80,907	41,868	122,775
2009	81,366	42,688	124,054
2010	81,825	43,508	125,333
2011	82,312	44,120	126,432
2012	82,798	44,733	127,531
2013	83,285	45,345	128,630
2014	83,771	45,958	129,729
2015	84,258	46,570	130,828
2016	84,710	47,072	131,782
2017	85,162	47,574	132,736
2018	85,615	48,075	133,690
2019	86,067	48,577	134,644
2020	86,519	49,079	135,598

Source: City of Roswell, Comprehensive Plan 2020.

³ The 2025 Comprehensive Plan, population element, defines functional population slightly differently.

Credits and Exemptions

Credit must be given to impact fee payers in anticipation of future tax collections earmarked for capital improvements that will serve new growth. This is important in that it is an assurance that the local government does not create a situation of 'double taxation', and also to avoid total fee collections from exceeding proportional-share costs. Impact fees must be adjusted to reflect the expected financial contribution, through local tax collection, that new growth and development will make toward capital projects paid for (at least partially) by local tax revenues which are built to serve new growth. Three general obligation bonds have been issued by the City that have debt service periods between 2000 and 2020: a 1988 issue, a 1995 issue, and a 2000 issue. The specific amounts due for debt service, by relevant category, are shown in Tables 11.6 and 11.7.

Table 11.6
Semi-Annual Debt Service, 1995 Issue, 2001-2015
Roswell General Obligation Bonds – Facilities for which Impact Fees are Charged

Due Date	Total Debt Service	Transportation	Public Safety	Recreation
2/1/01	\$642,028.75	\$367,193.75	\$96,985.00	\$177,850.00
8/1/01	\$503,856.25	\$305,783.75	\$66,280.00	\$131,792.50
2/1/02	\$678,856.25	\$385,783.75	\$106,280.00	\$186,792.50
8/1/02	\$499,612.50	\$303,843.75	\$65,310.00	\$130,458.75
2/1/03	\$769,612.50	\$438,843.75	\$115,310.00	\$215,458.75
8/1/03	\$492,930.00	\$300,502.50	\$64,072.50	\$128,355.00
2/1/04	\$857,930.00	\$500,502.50	\$129,072.50	\$228,355.00
8/1/04	\$483,713.75	\$295,452.50	\$82,431.25	\$125,830.00
2/1/05	\$958,713.75	\$570,452.50	\$137,431.25	\$250,830.00
8/1/05	\$471,482.50	\$288,371.25	\$60,500.00	\$122,611.25
2/1/06	\$1,061,482.50	\$638,371.25	\$150,500.00	\$272,611.25
8/1/06	\$456,142.50	\$279,271.25	\$58,160.00	\$118,711.25
2/1/07	\$1,166,142.50	\$704,271.25	\$183,160.00	\$278,711.25
8/1/07	\$437,327.50	\$268,008.75	\$54,847.50	\$114,471.25
2/1/08	\$3,152,327.50	\$1,268,008.75	\$804,847.50	\$1,079,471.25
8/1/08	\$363,343.75	\$240,758.75	\$34,410.00	\$88,175.00
2/1/09	\$4,323,343.75	\$1,740,758.75	\$1,274,410.00	\$1,308,175.00
8/1/09	\$253,453.75	\$199,133.75		\$54,320.00
2/1/10	\$4,568,453.75	\$2,574,133.75		\$1,994,320.00
8/1/10	\$132,633.75	\$132,633.75		
2/1/11	\$4,827,633.75	\$4,827,633.75		
Totals	\$27,101,021.25	\$16,629,713.75	\$3,484,007.50	\$7,007,300.00

Source: City of Roswell, Finance Department.

Table 11.7
Semi-Annual Debt Service, 2000 Issue, 2001-2015
Roswell General Obligation Bonds –
Facilities for which Impact Fees are Charged

Due Date	Total Debt Service	Transportation	Public Safety	Recreation
2/1/01	\$1,501,580.63	\$61,238.75	\$110,461.25	\$1,329,880.63
8/1/01	\$886,580.63	\$30,488.75	\$64,336.25	\$791,755.63
2/1/02	\$1,511,580.63	\$60,488.75	\$109,336.25	\$1,341,755.63
8/1/02	\$872,361.88	\$29,806.25	\$63,312.50	\$779,243.13
2/1/03	\$1,522,361.88	\$84,806.25	\$113,312.50	\$1,344,243.13
8/1/03	\$857,249.38	\$28,992.50	\$62,350.00	\$766,106.88
2/1/04	\$1,537,249.38	\$73,992.50	\$117,350.00	\$1,346,106.88
8/1/04	\$841,269.38	\$27,935.00	\$60,857.50	\$752,476.88
2/1/05	\$1,546,269.38	\$72,935.00	\$120,857.50	\$1,352,476.88
8/1/05	\$824,525.63	\$26,866.25	\$59,432.50	\$138,226.88
2/1/06	\$1,554,525.63	\$76,866.25	\$124,432.50	\$1,353,226.88
8/1/06	\$807,005.63	\$25,666.25	\$57,872.50	\$723,466.88
2/1/07	\$1,542,005.63	\$80,666.25	\$127,872.50	\$1,333,466.88
8/1/07	\$789,181.88	\$24,332.50	\$56,175.00	\$708,674.38
2/1/08	\$1,724,181.88	\$84,332.50	\$156,175.00	\$1,473,674.38
8/1/08	\$765,806.88	\$22,832.50	\$53,675.00	\$689,299.38
2/1/09	\$1,775,806.88	\$87,832.50	\$153,675.00	\$1,534,299.38
8/1/09	\$740,556.88	\$21,207.50	\$51,175.00	\$668,174.38
2/1/10	\$1,675,556.88	\$91,207.50	\$151,175.00	\$1,433,174.38
8/1/10	\$717,415.63	\$19,475.00	\$48,700.00	\$649,240.63
2/1/11	\$1,577,415.63	\$94,475.00	\$148,700.00	\$1,334,240.63
8/1/11	\$695,915.63	\$17,600.00	\$48,200.00	\$632,115.63
2/1/12	\$6,565,915.63	\$332,600.00	\$878,200.00	\$5,357,115.63
8/1/12	\$534,490.63	\$8,937.50	\$23,375.00	\$502,178.13
2/1/13	\$6,734,490.63	\$333,937.50	\$873,375.00	\$5,527,178.13
8/1/13	\$363,990.63			\$363,990.63
2/1/14	\$6,923,990.63			\$6,923,990.63
8/1/14	\$183,590.63			\$183,590.63
2/1/15	\$7,128,590.63			\$7,128,590.63
Totals	\$54,701,463.27	\$1,819,518.75	\$3,834,383.75	\$48,461,960.77

Source: City of Roswell, Finance Department

Table 11.8 presents a breakdown of the debt service due, between February 2001 and February 2015⁴, for three categories that apply to the updated impact fee program. The service category debt service totals are taken from the preceding two tables. The final row of Table 11.8—the percent of total debt service—is the percentage of the tax funds raised to service this debt that goes toward projects in the specific categories listed.

⁴ Currently, no debt service payments are scheduled after February 2015.

Table 11.8
Debt Service, 2001-2015

		Service Category Debt Service, 2001-2015		
Issue	Total Debt Service, 2001-2015	Public Safety	Recreation	Transportation
1995	\$27,101,021.25	\$3,484,007.50	\$7,007,300.00	\$16,629,713.75
2000	\$54,701,463.27	\$3,834,383.75	\$48,461,960.77	\$1,819,518.75
Totals	\$81,802,484.52	\$7,318,391.25	\$55,469,260.77	\$18,449,232.50
% of Total Debt Service:		8.95%	67.81%	22.55%

Source: Derived from Tables 11.6 and 11.7.

Giving new development a credit based upon its portion of debt service for all projects in these three categories, regardless of whether or not the projects are eligible for impact fee collection, would result in an over-estimation of the credit. Instead, the percentage of debt service payments going toward impact fee eligible projects is based on the cost of those projects, as shown in Table 11.9. Finally, the portion of property tax payments that goes toward debt service payments is calculated from historic data, and is shown in Table 11.10. In that the debt service portion of the millage rate is set each year, depending upon the amount to be raised, the City has determined that the rate of 2.50 mills will be used in the next set of calculations, rather than the ten-year average of 2.94 mills shown in the table⁵.

Table 11.9
Portion of Debt Service Attributable to Impact Fee Eligible Projects

Service Category	Total Category Debt Service	Cost of Impact Fee Eligible Projects	Impact Fee Projects as a Percentage of Category Debt Service
Public Safety	\$7,318,391.25	\$ 0	0.00%
Recreation	\$55,469,260.77	\$15,381,568.00	33.26%
Transportation	\$18,449,232.50	\$1,937,250.00	10.50%

Source: City of Roswell Finance Department.

⁵ Millage rate calculations are shown based on all outstanding bond issues for the period.

Table 11.10
Debt Service and Property Tax Rates, 1990-1999

FY	Real Property Assessed Value*	Series 1988 Bond Debt Service	Series 1995 Bond Debt Service	Total Bond Debt Service	Debt Service Millage Rate**	Mills per \$1,000 valuation
1990	\$816,545,000	\$2,637,325	-	\$2,637,325	0.00323	3.23
1991	\$968,458,000	\$2,713,532	-	\$2,713,532	0.00280	2.80
1992	\$972,722,000	\$2,843,038	-	\$2,843,038	0.00292	2.92
1993	\$988,521,000	\$2,891,063	-	\$2,891,063	0.00292	2.92
1994	\$1,169,453,000	\$2,921,400	-	\$2,921,400	0.00250	2.50
1995	\$1,230,445,000	\$2,919,410	\$854,410	\$3,773,820	0.00307	3.07
1996	\$1,284,815,000	\$2,927,050	\$1,055,293	\$3,982,343	0.00310	3.10
1997	\$1,382,393,000	\$2,928,170	\$1,074,003	\$4,002,173	0.00290	2.90
1998	\$1,448,196,000	\$3,017,610	\$1,096,803	\$4,114,413	0.00284	2.84
1999	\$1,414,855,000	\$3,293,560	\$1,113,428	\$4,406,988	0.00311	3.11
				Ten-year Average		2.94

Source: Fulton County Tax Assessor's Office and City of Roswell Finance Department.

*Property value data is from the Fulton County Tax Assessor's Office.

**"Real property assessed value" divided by "Total bond debt service".

Table 11.11
Future Property Tax Generation

Year	Cumulative Population Increase	Cumulative Increase in Dwelling Units*	Cumulative Employee Increase	2001-2015 Cumulative Non-Residential Square Feet**
2001	905	307	1,002	501,000
2002	1,811	614	2,004	1,002,000
2003	2,717	921	3,006	1,503,000
2004	3,623	1,228	4,008	2,004,000
2005	4,529	1,535	5,010	2,505,000
2006	4,988	1,691	5,830	2,915,000
2007	5,447	1,847	6,650	3,325,000
2008	5,907	2,002	7,470	3,735,000
2009	6,366	2,158	8,290	4,145,000
2010	6,825	2,314	9,110	4,555,000
2011	7,312	2,479	9,722	4,861,200
2012	7,798	2,643	10,335	5,167,400
2013	8,285	2,808	10,947	5,473,600
2014	8,771	2,973	11,560	5,779,800
2015	9,258	3,138	12,172	6,086,000

Source: Table is derived from Table 11.5.

*Based on average of 2.95 persons per dwelling unit.

**Based on average of 500 SF per employee.

The next step is to calculate the funds expected to be raised through property taxes to service these debts over the next fifteen years. Averages are used for some of the following figures; it is permissible to overestimate the credit to be applied. Between 2000 and 2015, 9,258 new residents and 12,172 new employees are expected in the City. At an average of 2.95 residents per dwelling unit⁶ and 500 square feet per employee, this yields a figure of 3,138 new dwelling units and 6,086,000 square feet in non-residential space. The annual totals for dwelling units and non-residential square feet are shown in Table 11.11.

The annual dwelling unit and square footage figures from Table 11.11 are used in Table 11.12 to calculate future property tax contributions from new development. An average appraised value of \$140,000 is used per new dwelling unit, and \$166.67 per square foot of new non-residential space. (The value of non-residential square footage is calculated at an average construction value of \$125 per square foot, with an additional 1/3 for equipment and fixed assets). Assessed value is calculated as 40 percent of the appraised value of property.

Table 11.12
Future Property Tax Contributions

Year	Residential		Non-Residential	
	Dwelling Units	Total Assessed Value*	Square Feet	Total Assessed Value*
2001	307	\$17,179,661	501,000	\$33,400,668
2002	614	\$34,378,305	1,002,000	\$66,801,336
2003	921	\$51,576,949	1,503,000	\$100,202,004
2004	1,228	\$68,775,593	2,004,000	\$133,602,672
2005	1,535	\$85,974,237	2,505,000	\$167,003,340
2006	1,691	\$94,691,254	2,915,000	\$194,337,220
2007	1,847	\$103,408,271	3,325,000	\$221,671,100
2008	2,002	\$112,125,288	3,735,000	\$249,004,980
2009	2,158	\$120,842,305	4,145,000	\$276,338,860
2010	2,314	\$129,559,322	4,555,000	\$303,672,740
2011	2,479	\$138,796,475	4,861,200	\$324,086,482
2012	2,643	\$148,033,627	5,167,400	\$344,500,223
2013	2,808	\$157,270,780	5,473,600	\$364,913,965
2014	2,973	\$166,507,932	5,779,800	\$385,327,706
2015	3,138	\$175,745,085	6,086,000	\$405,741,448
	Totals	\$1,604,865,085		\$3,570,604,744

Source: Table is derived from Table 11.11.

*Total assessed value is based on the number of units or square feet times 40 percent of the average appraised value, per unit or square foot.

Based upon the estimate of an average debt service tax rate of 2.50 mills, \$12,938,675 will be raised toward debt service repayment through property tax levied on new growth. (This is calculated by multiplying the totals from Table 16.12 by the millage rate of 0.00250). This amount is applicable to all three outstanding bond issues (1988, 1995, 2000); debt service for the 1995 and 2000 bond issues represents 77.46% of the total debt service to be collected.

⁶ Average number of persons per dwelling unit is intentionally overestimated, and produces an overestimate of the applicable credit.

Therefore, 77.46% of \$12,938,675, or \$10,022,693, will be raised from future growth toward retirement of the 1995 and 2000 bonds. By applying the percentages calculated in Tables 11.8 and 11.9, a credit figure is produced for each of the three service categories. Table 11.13 shows the final credit figures for public safety, transportation, and parks and recreation facilities.

Table 11.13
Final Credit by Service Category

	Future Debt Service Contribution from New Development	Category as % of Total Debt Service	Debt Service Contribution by Category*	Category % of Impact Fee Eligible Projects	Service Category Credit**
Public Safety	\$10,022,693	8.95%	\$897,031	0.00%	\$0
Transportation	\$10,022,693	22.55%	\$2,260,117	33.26%	\$751,715
Parks and Recreation	\$10,022,693	67.81%	\$6,796,388	10.50%	\$713,621

Source: Derived from Previous Tables.

*(Future Debt Service Contribution from New Development) X (Category as % of Total Debt Service)

** (Debt Service Contribution by Category) X (Category % of Impact Fee Eligible Projects)

The service category credit is the funding expected from new development, paid through property taxes, which will be used to provide for capital improvements that serve the new development. As can be seen in Table 11.13, the applicable credit for transportation facilities is \$751,715; for parks and recreation facilities the credit is \$713,621. There is no applicable credit for public safety facilities, as no impact fee eligible projects in that category have been paid for with funds from either the 1995 or 2000 bond issues.

The 1992 impact fee program also calculated credits based upon the previous property tax contributions, paid on vacant land, toward impact fee eligible projects. Under that program, the total credit given to single-family dwellings was 74 cents, out of an impact fee charge of \$1,965.49. This figure represents 0.04 percent of the total impact fee charge. For multi-family dwellings, the percentage of the credit was also 0.04 percent; for non-residential land use categories this particular credit was never more than 0.00001 percent of the total impact fee charge. The administrative costs of collecting annual property tax data, calculating the tax contribution of vacant land toward specific capital projects, verifying the percentage of vacant parcels during the period in question, modifying the data to reflect changes in annual vacancy rates, and calculating the impact fee credit would seem to go well beyond any measure of fairness in the impact fee program, and is highly questionable. For this reason, it is not a part of the 2000 impact fee program and is easily covered by the forgoing overestimation in property tax credits.

Finally, the Georgia Development Impact Fee Act provides jurisdictions with the ability to exempt certain types of development projects at its discretion under O.C.G.A. 36-71-4(1). Two general types of exemptions are allowed:

1. Projects that are determined to create “extraordinary economic development and employment growth”, or,
2. Projects that create affordable housing.

The City of Roswell has not adopted any specific policy statements for exemptions in the 2000 impact fee program, but it has and will continue to consider exemptions on a case-by-case basis.

Impact Fee Schedule Categories

The 1992 impact fee program charged fees in six land use categories: single family, multi-family, hotel/motel, office, retail, and industry. Since this was a fairly general list, it did not capture the subtleties of development in the City. As the fee schedule list is expanded to include more land use categories, the differences between the impact, and thus the fee due, from specific types of development is more apparent. Utilizing a fee schedule with more specific land use categories goes toward establishing a stronger relationship between fees paid and services demanded, thus more firmly establishing the rational nexus between fee assessment and services provided. The 2000 impact fee program utilizes an expanded set of land use categories that further refine the categories offered in the 1994 Road Facilities Impact Fee Study.

Annual Review

The impact fee program is reviewed annually, and if changes are needed, they are made. A number of the factors that form the base-line assumptions in this report's impact cost calculations may change over time.

Some specific areas to consider in annual reviews are as follows:

- The 2000 impact fee program uses the existing City limits as the service area for public safety, parks and recreation, and transportation. The program should be updated to reflect changes in the service area and changes in service demands, based upon any changes to the geographic size of the City.
- Averages are used for construction costs for the calculations in this chapter. The calculations should be updated to reflect actual costs, when known.
- Costs should be maintained in present value terms. The land costs for public safety and parks and recreation facilities, as well as the square footage construction costs, should be updated annually. In addition, the cost of fire engines, ladder trucks, air and light trucks, and rescue units should also be updated to reflect current dollars.
- Projections in property tax base growth should be updated each year to reflect actual growth, and to update the average new dwelling unit values and value per non-residential square foot then current in future years.
- Any changes in the debt service schedule should be reflected in the impact fee program methodology. The refinancing of an existing bond, or issuance of a new bond, should be reflected in the impact fee credit calculations.
- Any source of funding used to build facilities that in whole or in part provide service to new development, other than the general obligation bonds already included in this

chapter, and that include contributions from new development, should be added to the impact fee credit calculations.

- The schedules of improvement are updated on an annual basis. Following a review, if necessary, the City should adopt a new LOS Standard, based on the information presented in this chapter, as well as any additional necessary refinements. In particular, the average trips per functional population figure should be examined.

Changes in the pace of development will affect the timing of service delivery but not, per se, the methodology used to calculate the impact costs. If more residential and business development is built than was projected, facilities will be needed sooner to meet the level of service standard. Property tax revenues will increase faster than projected as growth accelerates and more impact fees will be collected. In this way, more funds are produced to provide the services demanded. If growth slows, the opposite occurs: reduced revenue and lowered demand for services.

PUBLIC SAFETY

The Public Safety Element of the Roswell impact fee program is made up of two components: police facilities and fire protection facilities. Based upon the expertise and experience of those two departments, the desired LOS for fire protection is calculated on a 'build out' scenario, while the desired LOS for police services is based on a future level of service derived from the current facility inventory. The quantity of facilities needed to serve the City to the year 2020, under the current geographic size of the City, is established for each category. The resulting LOS—calculated for the year 2020—is adopted as the LOS standard for the City in 2000.

Table 11.14
Year 2000 Inventory, Public Safety Buildings

Station/Facility	Bays	Square Footage	
		Fire Protection	Police Facilities
Station 1	6	12,000	
Station 2	2	3,000	
Station 3	2	3,000	
Station 4	3	4,295	
Station 5	3	7,257	
Station 6	3	8,000	
Burn Building		3,000	
Station 7	3	6,500	1,500
Law Enforcement Center			48,000
City Hall (Police Admin)			3,150
City Hall (Fire Admin)		5,100	
Totals	22	52,152	52,650

Source: City of Roswell Fire and Police Departments.

Impact fees may only be charged for capital expenditures that have a useful life of at least ten years; buildings and heavy vehicles can fall into this category. The buildings include fire stations, police precincts, and departmental administrative space in other public buildings.

'Heavy vehicles' includes fire engine pumpers, ladder trucks, oxygen trucks, and rescue units. Table 11.14 presents the year 2000 inventory of public safety building space, while Table 11.15 presents the year 2000 inventory of heavy vehicles. The year 2000 inventory totals 104,802 square feet and 25 heavy vehicles.

Table 11.15
Year 2000 Inventory, Heavy Vehicles

Vehicle Type	Quantity
Engine Pumpers	9
Ladder Truck	4
Rescue Truck	6
1,000 Gallon Tankers	4
Air and Light truck	1
Haz Mat truck	1
Total	25

Source: City of Roswell Fire Department.

Service Area

The City of Roswell is served by seven fire stations roughly evenly distributed throughout the City. The City presently has an insurance rating for fire of "4," which it has determined as its minimum. There is no distinction in Roswell between stations designed to serve residents or commercial land uses. For example, a ladder company responds to all structural fires whether commercial or residential. Stations physically located in residential areas may respond to commercial calls and vice versa. Since the fire insurance rating is applied to the entire City and not just particular parts that may have better or worse fire protection, future system improvements are geared toward assuring that the entire City maintains its fire insurance rating. Based on these considerations and the further consideration that all fire stations operate as a system, the City itself is the service area (Nelson 1992). Likewise, police units respond as back-up to calls outside of their established beats. The provision of public safety service in the City, then, is on a Citywide basis. Thus the service area for public safety facilities is the City limits of the Roswell.

LOS and Future Demand

The 1992 adopted level of service for police facilities in Roswell was 0.6889 square feet per resident. This was based upon the assumption that facilities existing in 1992 would serve the population until the year 2010. A total of 61,600 square feet, including 49,500 square feet of finished, heated space is available as of 2004. In order to more accurately characterize the future service demands made by new growth, the 2000 impact fee program shifted from a LOS based on residential population to one based upon functional population.⁷ The LOS in the year 2000 was the current square footage of facilities, based on existing facility inventory, divided by the 2000 functional population.⁸ ($52,650 / 109,398 = 0.4813$ square feet per functional population). This LOS was used to calculate the square footage needed to maintain this LOS

⁷ See the section below entitled "Funding", and accompanying Table 11.22, for more on the rationale for using *functional*, rather than *residential*, population in these calculations.

⁸ The functional population figures are shown in Table 11.5.

standard in the year 2020. The functional population in 2020 was forecasted as 135,598. ($135,598 * 0.4813 \text{ SF} = 62,263$ square feet total for the year 2020 (an increase of 12,613 square feet over the current total for police facilities)). This was added to the calculations of fire protection LOS for the year 2020 to produce the total square footage of public safety facilities required to serve the City in that year.

The 1992 adopted LOS standard for fire protection facilities was one station bay per 3,400 residents; with a total of 22 bays in 2000 there was no current deficiency. However, a unit of measure based on station bays does not accurately capture the available fire-fighting and life-saving equipment. Situations exist in which one vehicle may be parked behind another in the same bay, whereas some stations may have an empty bay. Fire protection depends upon personnel and equipment, more than parking capacity. The new LOS unit of measure and standard are based on a combination of current square footage and heavy vehicle inventory.

Level of Service and Facility Needs

The projected requirement for additional space to be acquired through 2020 includes a secured command and communications center and expansion of area available for storing and handling property and evidence related to criminal investigations.

Table 11.16 presents a breakdown of the total square footage of public safety facilities for the year 2020 (anticipated in 2000); Table 11.17 is a listing of the heavy vehicle inventory anticipated in 2000 to be needed for 2020.

Table 11.16
Public Safety Facility Needs, 2020

Station/Facility	Bays	Total Square Footage	Existing Facility
Station 1	6	12,000	Yes
Station 2	3	4,250	Yes
Station 3	3	4,250	Yes
Station 4	3	4,295	Yes
Station 5	3	7,257	Yes
Station 6	3	8,000	Yes
Station 7*	3	8,000	Yes
Station 8	3	8,000	
Training Facility	1	10,002	
Burn Building	0	3,000	Yes
Law Enforcement Center	0	48,000	Yes
City Hall (Police Admin.)	0	3,150	Yes
City Hall (Fire Admin.)	0	5,100	Yes
<i>E911 Call Center</i>	<i>0</i>	<i>2,000</i>	Proposed in 2000
<i>Precinct Expansion(s)</i>	<i>0</i>	<i>8,000</i>	Proposed in 2000
<i>Law Enforcement Center Expansion</i>	<i>0</i>	<i>2,613</i>	Proposed in 2000
Totals	26	137,917	

Source: Existing facilities from Table 11.14, facility needs from City of Roswell Fire and Police Departments.
*Considered a completion of the 1992 impact fee program.

Table 11.17
Heavy Vehicle Inventory and Needs

Vehicle Type	Existing 2000 Inventory	New Vehicles Needed	2020 Inventory
Engine Pumpers	9	4	13
Ladder Trucks	4	1	5
Rescue Trucks	6	1	7
1,000 Gallon Tankers	4	0	4
Air and Light Truck	1	0	1
Haz Mat Truck	1	0	1
Mobile Command	0	1	1
Total	25	7	32

Source: Existing inventory is from Table 11.15, new vehicles needed is based on recommendations of the City of Roswell Fire and Police Departments.

The totals from Tables 11.16 and 11.17 are used to calculate the LOS standard. The total square footage is divided by the year 2020 functional population to yield the square footage per unit. In order to produce a number that can be easily used in calculations, this is calculated on the basis of 1,000 persons. ($137,917/135.598 = 1,017.10$ SF per 1,000 functional population). In terms of heavy vehicles, the number of trucks is divided by the year 2020 functional population to produce a per unit figure; again, this is expressed in terms of units per 1,000 persons. ($32/135.598 = 0.236$ heavy vehicles per 1,000 functional population). The LOS standards are summarized in Table 11.18; Table 11.19 applies these LOS standards to future growth projections to determine the future demand in square feet and heavy vehicles.

Table 11.18
Adopted LOS Standards, Public Safety

	Unit of Measure	2000 LOS Standard
Facility Space	Square feet per 1,000 functional population	1,017.10 square feet per 1,000 functional population
Heavy Vehicles	Number of heavy vehicles per 1,000 functional population	0.236 heavy vehicles per 1,000 functional population

Source: Derived from Tables 11.16 and 11.17.

Table 11.19
Future Demand for Public Safety Facilities

Year	Functional Population	Square Feet Demanded	Future Demand in SF*	Heavy Vehicles Demanded	Future Demand in Vehicles**
2000	109,398	111,269	6,467	26	1
2005	118,937	120,971	16,169	28	3
2010	125,333	127,476	22,674	30	5
2015	130,828	133,065	28,263	31	6
2020	135,598	137,917	33,115	32	7

Source: Functional population is from Table 16.5, calculations are based on LOS standards from Table 16.18.

*Based on an existing inventory of 104,802 square feet.

**Based on an existing inventory of 25 heavy vehicles.

As shown in Table 11.19, 33,115 square feet and seven heavy vehicles will be demanded by new growth. No excess capacity currently exists.

Table 11.20
Cost of Public Safety Capital Facilities Proposed in 2000

Facility/Vehicle	Square Feet	Quantity	Cost per Unit*	Total Cost
Training Facility	10,002		n/a***	\$450,000
Station 8	8,000		\$225	\$1,800,000
Bay Addition, Station 2	1,250		\$225	\$281,250
Bay Addition, Station 3	1,250		\$225	\$281,250
E911 Call Center	2000		\$200	\$400,000
Precinct Expansion(s)**	8,000		\$225	\$1,125,000
Law Enforcement Center Expansion**	2,613		\$200	\$522,600
Engine Pumper		1	\$270,000	\$270,000
Engine Pumper		1	\$270,000	\$270,000
Ladder Truck		1	\$650,000	\$650,000
Rescue Truck		1	\$270,000	\$270,000
Engine Pumper		1	\$270,000	\$270,000
Engine Pumper		1	\$270,000	\$270,000
Mobile Command		1	\$150,000	\$150,000
Totals	33,115	7		\$7,010,100

Source: Future projects are from City of Roswell Fire and Police Departments. Construction costs are derived from known current costs in Roswell and other metropolitan area jurisdictions.

*Average cost per square foot includes land acquisition costs.

**Depending on future growth and annexation patterns, this could be an expansion of existing facilities or new construction.

***The total cost of the Training Facility is not known, and not estimated.

Table 11.20 presents a schedule of projects that would meet the future demands, including the cost of reimbursement for two heavy vehicles. The cost per square foot includes land acquisition costs. Station construction costs are based on the costs to construct Station 7, expected to be \$300,000 in land acquisition costs, and \$1.5 million in construction costs.

Impact Fee Calculation

Table 11.19 shows a current deficiency of 6,467 square feet in facility space for the year 2000. The first 6,467 square feet of the next facility construction project, therefore, is not eligible for funding through impact fees. At an average construction cost of \$225 per square foot, this represents \$1,455,075 in project costs. This amount must be subtracted from the total project costs shown in Table 11.20 to produce the total project costs eligible for impact fee collection. (\$7,010,100 - \$1,455,075 = \$5,555,025). The impact cost for public safety facilities is calculated as the total project cost attributable to new growth, divided by the increase in functional population between the years 2000 and 2020. (\$5,555,025/26,200 = \$212.02). This is the cost, per resident or employee, to provide public safety services to new development in Roswell.

The 1992 impact fee program assigned future project costs to general land use categories based upon the number of alarm and emergency calls received from each type of land use. This methodology is not applied in the 2000 program in that alarm calls are difficult to translate into public safety demand. Socio-economic conditions play a role in a person's propensity to make a call for emergency assistance. Also, the nature of a particular land use, including location and operating hours of business, will affect the number of calls made.

From Table 11.13, there is no debt service credit to be applied toward public safety facilities. However, the fire facility impact fee fund has a balance of \$506,032. The total cost of projects, minus the fund balance amount, is the net amount of funds that can be raised through impact fees. (\$5,555,025 - \$506,032 = \$5,048,993). This figure, divided by the increase in functional population between the years 2000 and 2020, yields the impact fee charge. (\$5,048,993/26,200 = \$192.71). This fee is a 'per functional population' figure; it is used to produce the final impact fee charges shown in Table 11.21.

Table 11.21
Public Safety Impact Fee Schedule (2000)

Land Use Classification	Unit of Measure	Employees/Residents per Unit of Measure	Public Safety Impact Fee
Residential Detached	dwelling	2.87	Note, see later table for updated fees
Residential Attached	dwelling	1.95	
Apparel Store	1000 sq. ft.	1.67	
Auto Parts Store	1000 sq. ft.	0.96	
Building Materials and Lumber Store	1000 sq. ft.	1.47	
Church	1000 sq. ft.	0.52	
Convenience Market (Open 15-16 Hours)	1000 sq. ft.	1.75	
Convenience Market (Open 24 Hours)	1000 sq. ft.	1.80	
Convenience Market with Gasoline Pumps	1000 sq. ft.	1.80	
Day Care Center	1000 sq. ft.	2.54	

Land Use Classification	Unit of Measure	Employees/ Residents per Unit of Measure	Public Safety Impact Fee
Discount Club	1000 sq. ft.	1.30	
Drive-in Bank	1000 sq. ft.	3.64	
Electronics Superstore	1000 sq. ft.	0.96	
Factory Outlet Center	1000 sq. ft.	1.67	
Fast-Food Restaurant	1000 sq. ft.	10.90	
Free-Standing Discount Store	1000 sq. ft.	1.96	
Free-Standing Discount Superstore	1000 sq. ft.	0.96	
Furniture Store	1000 sq. ft.	0.42	
General Office Building	1000 sq. ft.	3.32	
Hardware/Paint Store	1000 sq. ft.	0.96	
High Turnover Restaurant	1000 sq. ft.	7.46	
High-Turnover (Sit-Down) Restaurant	1000 sq. ft.	7.46	
Home Improvement Superstore	1000 sq. ft.	0.96	
Hospital	1000 sq. ft.	3.25	
Hotel/Motel	room	0.62	
Industrial	1000 sq. ft.	2.31	
Lodge/Fraternal Organization	employee	1.00	
Medical Office	1000 sq. ft.	4.05	Note, see later table for updated fees
Mini-Warehouse	1000 sq. ft.	0.04	
Movie Theater	1000 sq. ft.	1.50	
New Car Sales	1000 sq. ft.	1.77	
Nursery (Garden Center)	1000 sq. ft.	1.63	
Nursery (Wholesale)	1000 sq. ft.	1.67	
Nursing Home	bed	0.65	
Pharmacy/Drugstore	1000 sq. ft.	1.67	
Private School (K-12)	1000 sq. ft.	8.09	
Quality Restaurant	1000 sq. ft.	7.46	
Quick Lubrication Vehicle Shop	service bay	2.10	
Recreational Community Center	1000 sq. ft.	0.84	
Self-Service Car Wash	stall	0.20	
Shopping Center	1000 sq. ft.	1.67	
Specialty Retail Center	1000 sq. ft.	1.82	
Supermarket	1000 sq. ft.	1.27	
Tire Store	1000 sq. ft.	1.28	
Warehouse	1000 sq. ft.	1.28	
Wholesale Market	1000 sq. ft.	0.82	
Wholesale Tire Store	1000 sq. ft.	1.28	

Source: Residential figures are from Table 3.8, employment figures are derived from ITE Trip Generation Manual, 5th edition. Note: See Table 11.36 of this Chapter for current (updated) fees.

Funding

In the 1992 impact fee program the LOS for police and fire protection facilities was based upon the residential population of the City; no employment figures were used. This presents a problem in that any forecast of the future demand for services would be based solely upon the residential population growth rate, while increases in employment also make demands upon City services. Table 11.22 calculates the percentage of population and employment growth in the City over the past eight years.

Table 11.22
Population and Employment Growth, 1992-2000

	Population	Employment	Population & Employment Combined
1992	64,337	21,640	85,977
2000	75,000	34,398	109,398
Change	16.57%	58.96%	27.24%

Source: 1992 figures are drawn from the 1992 Development Impact Fee Report; 2000 figures from Table 11.5.

As Table 11.22 shows, the employment in Roswell increased at a much faster rate than the residential population. By basing the 1992 impact fee for fire protection on the increase in residential population, rather than on a combination of population and employment, the program did not capture the true increase in persons demanding public safety services in the City. The total cost of projects needed to serve the increase in residential population was assigned to both residential and non-residential land uses, resulting in an underestimation of the impact fee charge. Consequently, the impact fee for fire protection, as calculated in the 1992 report, was insufficient to raise the funds necessary for certain capital improvements demanded by new growth.

Through December 31, 1999, the City had collected \$920,434.11 in fire facility impact fees. Of this amount, \$414,401.60 has been expended to construct Station Six, leaving \$506,032.51 in the City's fire facility impact fee trust fund. Revenues from fire impact fees have ranged from \$117,000 to \$156,000 annually, averaging \$136,000 per year. At this rate of collection, the City did not generate the funds needed this year for the construction of Station Seven. Therefore, the City has decided to fund this new station through a general obligation bond. Any bonds or other financial obligations that are pledged toward the construction of projects that serve new growth must be considered in a credit calculation. However, the construction of Station Seven is being undertaken to address an existing deficiency (under the 1992 program), and would not be calculated as a credit against future impact fee charges.

By the year 2005, the City of Roswell will have a functional population of approximately 118,937, an increase of 9,539 residents and employees. Based on the adopted LOS standard, 16,169 SF will be required by the year 2005. The construction of the training facility will meet all but 6,167 square feet of this demand. Station Eight, as well as the training facility, will be added to the Capital Improvement Element. Based on the adopted LOS standard, three new heavy vehicles will be required between 2000-2005, and will also be added to the CIE.

PARKS AND RECREATION

In a continuing effort to produce the finest parks and recreation system for the citizens of Roswell, the Parks and Recreation Department has produced the 2005 Parks and Recreation Master Plan. This plan significantly increases the adopted level of service standards in the City. The LOS standards have been increased for many facility types on the facilities category list, and new facility categories have been added. Table 11.23 is a comparison between the LOS standards as adopted from the 1992 Development Impact Fees report, and the LOS standards as presented in the 2005 Parks and Recreation Master Plan.

Using the updated LOS standards for parks facilities shown in Table 11.23, the current deficiency in parks and recreation facilities is calculated. The deficiency is calculated by applying each LOS standard to the current residential population. Table 11.24 presents the current parks and recreation system supply and deficiencies. Table 11.25 presents the cost of projects required to remedy the existing deficiency in parks and recreation facilities.

Table 11.23
Adopted LOS Standards for Recreation and Parks: 1992 & 2000

	1992 Adopted LOS Standard	2000 Updated LOS Standard
Land Area		
Parks—Acreage	6.3 acres per 1,000 residents	9.0 acres per 1,000 residents
Facilities		
Ball Fields	1 each per 2,000 residents	1 each per 2,000 residents
Football Fields	1 each per 30,000 residents	1 each per 20,000 residents
Soccer Fields	1 each per 6,000 residents	1 each per 5,000 residents
Tennis Courts	1 each per 2,000 residents	1 each per 2,000 residents
Multi-Purpose Courts	1 each per 8,000 residents	1 each per 6,000 residents
Running Tracks	- each per – residents	1 each per 20,000 residents
50m Swimming Pools	- each per - residents	1 each per 50,000 residents
Play Fields	1 each per 8,000 residents	1 each per 8,000 residents
Playgrounds	1 each per 4,000 residents	1 each per 6,000 residents
Horseshoe Courts	- each per – residents	1 each per 15,000 residents
Shuffleboard Courts	- each per - residents	1 each per 15,000 residents
Picnic Areas/ Pavilions	1 each per 5,000 residents	1 each per 5,000 residents
Rec. Centers/ Indoor Facility	2,000 sq. ft. per 1,000 residents	2,500 sq. ft. per 1,000 residents
Concessions/ RR Buildings	1 per 6,000 residents	1 per 2.4 Athletic Fields
Maintenance Facilities	- per – District Park	1 per 1 District Park

Sources: Nelson 1992; Betz 2000.

Table 11.24
Current Deficiencies, Parks and Recreation Facilities
Based on Year 2000 LOS Standards in the Year 2000

	LOS Standard	Year 2000 Supply	Year 2000 Deficiency
Land Area			
Parks--Acreage	9.0 acres per 1,000 residents	411.5	254.5
Facilities			
Ball Fields*	1 each per 2,000 residents	26	11
Football Fields*	1 each per 20,000 residents	1	3
Soccer Fields*	1 each per 5,000 residents	11	4
Tennis Courts**	1 each per 2,000 residents	28	9
Multi-Purpose Courts	1 each per 6,000 residents	14	(2)
Running Tracks	1 each per 20,000 residents	2	2
50m Swimming Pools	1 each per 50,000 residents	1	0
Play Fields	1 each per 8,000 residents	5	4
Playgrounds	1 each per 6,000 residents	8	4
Horseshoe Courts	1 each per 15,000 residents	-	5
Shuffleboard Courts	1 each per 15,000 residents	-	5
Picnic Areas/Pavilions***	1 each per 5,000 residents	12	3
Rec. Centers/ Indoor Facility****	2,500 sq. ft. per 1,000 residents	146,600	38,400
Concessions/ RR Buildings	1 per 2.4 Athletic Fields	15	9
Maintenance Facilities	1 per District Park	4	3

Source: Table is derived from the 2005 Parks and Recreation Master Plan.

*Each athletic field includes 65 parking spaces.

**Each court includes 5 parking spaces.

***Each facility includes 1 pavilion and 8 picnic tables/grills.

****Includes 1 parking space per 250 sf of floor area. Note: category also includes activity/arts buildings.

Table 11.25
Cost of Projects to Remedy Year 2000 Deficiency
Parks and Recreation Facilities

	Current Supply	Year 2000 Deficiency	Cost per Unit*	Cost to Remedy Deficiency**
Land Area				
Parks--Acreage	411.5	254.5	\$176,837	\$45,005,032
Facilities				
Ball Fields	26	11	\$341,000	\$3,751,000
Football Fields	1	3	\$462,000	\$1,247,400
Soccer Fields	11	4	\$455,000	\$1,729,000
Tennis Courts	28	9	\$55,000	\$495,000
Multi-Purpose Courts	14	(2)	\$42,000	\$0
Running Tracks	2	2	\$230,000	\$391,000
50m Swimming Pools	1	0	\$5,000,000	\$2,400,000
Play Fields	5	4	\$91,000	\$386,750
Playgrounds	8	4	\$160,000	\$693,333
Horseshoe Courts	-	5	\$2,200	\$10,853
Shuffleboard Courts	-	5	\$2,500	\$12,333
Picnic Areas/Pavilions	12	3	\$41,200	\$115,360
Rec. Centers/ Indoor Facility	146,600	38,400	\$109.24	\$4,194,816
Concessions/ RR Buildings	15	9	\$283,000	\$2,547,000
Maintenance Facilities	4	3	\$130,000	\$390,000
Total 'Remediation' Project Costs				\$63,368,878

Source: Derived from Table 11.24

*Costs are taken from the 2005 Parks and Recreation Master Plan.

**Development impact fees cannot be used to remedy existing deficiencies.

Service Area

The service area for parks and recreation service is the City limits of Roswell. This is based in part on the relatively compact nature of the City's geographic extent, and on the internal linkages proposed between park facilities. Pedestrian and bike trails will increase the connectivity of the park system, and cannot be realistically divided into service sub-areas. Further, the park system provides a variety of facility types throughout the City, rather than concentrating certain services in certain areas. Also, organized recreation activities, such as softball leagues, use various facilities in the City, based on each team's schedule.

Future Demand

Future demand is calculated by applying the LOS standards from Table 11.23 to the new growth forecast for the City. Between the years 2000-2020, 11,519 new residents will be added to the

City. Table 11.26 is a summary of the cost of projects required to serve the demands of new growth to the year 2020.

Table 11.26
Cost of Capital Improvements to Serve New Growth, 2000-2020
Parks and Recreation Facilities

	Net New Growth Demand 2000- 2020	Cost per Unit*	Cost for New Facilities to Meet LOS Standard in 2020
Land Area			
Parks--Acreage	112.7	\$176,837	\$19,924,408
Facilities			
Ball Fields	6	\$341,000	\$2,046,000
Football Fields	0	\$462,000	\$0
Soccer Fields	2	\$455,000	\$910,000
Tennis Courts	6	\$55,000	\$330,000
Multi-Purpose Courts	0	\$42,000	\$0
Running Tracks	0	\$230,000	\$0
50m Swimming Pools	0	\$5,000,000	\$0
Play Fields	2	\$91,000	\$182,000
Playgrounds	2	\$160,000	\$320,000
Horseshoe Courts	1	\$2,200	\$2,200
Shuffleboard Courts	1	\$2,500	\$2,500
Picnic Areas/Pavilions	2	\$41,200	\$82,400
Rec. Centers/ Indoor Facility	31,298	\$109.24	\$3,418,994
Concessions/RR Buildings	3	\$283,000	\$849,000
Maintenance Facilities	1	\$130,000	\$130,000
Total 'New Growth' Project Costs			\$28,197,502

Source: New growth demand is derived from Tables 16.5 and 16.24; costs are taken from the 2005 Parks and Recreation Master Plan.

Impact Fee Calculation

Under the updated LOS standards, the City has excess capacity in one facility category: multi-purpose courts. This excess capacity is not required by the demands of new growth over the next 20 years. As such, the construction costs of these courts can not be recouped from new development. The total impact cost that is recoverable from new growth is the sum of the projects from Table 11.26. The calculation of total impact cost per unit is the product of the total costs attributable to new growth, divided by the number of new dwelling units expected between 2000 and 2020. ($\$28,197,502/3,138 = \$8,985.82$ per dwelling). This is the cost per dwelling unit to provide parks and recreation services to new development in the City.

From Table 11.13, the credit applicable to parks and recreation facilities is \$713,621. In addition, the current balance of the parks impact fee fund is \$1,085,387. The total project costs,

from Table 11.26, minus the credit and fund balance amounts, yields the amount that can be raised through impact fees. ($\$28,197,502 - \$1,799,008 = \$26,398,494$). This figure, divided by the net increase in dwelling units between 2000 and 2020, produces the impact fee charge. ($\$26,398,494/3,138 = \$8,412.52$ per dwelling). This is the maximum allowable impact fee charge.

The City has determined that the future impact fee charges should be based upon the anticipated impact fee revenue projection under the 1992 program. Based on historic trends, the expectation is that the parks and recreation impact fees will provide \$2 million in funding over the next 5 years. The number of new housing units expected in the City over the next 5 years is 1,535. ($\$2,000,000/1,535 = \$1,302.93$ per dwelling). This modified impact fee is used to produce the final impact fee charges shown in Table 11.27.

Table 11.27
Parks and Recreation Service Impact Fee Schedule

Land Use Classification	Unit of Measure	Parks and Recreation Service Impact Fee
Residential Detached	dwelling	\$1,302.93
Residential Attached	dwelling	\$1,302.93

Funding

Through December 31, 1999, the City had collected \$3,956,777.94 in parks and recreation facility impact fees. Of this amount, \$2,871,390.60 has been expended on projects, leaving \$1,085,387.34 in the City's parks and recreation facility impact fee trust fund. Revenues from these impact fees have ranged from \$400,000 to \$800,000 annually, with an average of \$500,000 per year. The City has determined that the historic annual average impact fee collection shall be the basis for expected impact fee revenues, anticipating a total of \$2 million to be collected over the next 5 years.

TRANSPORTATION

Roadway LOS is expressed in a series of letter grades, "A" through "F", that denote the congestion and speed of a given roadway segment⁹. The previous LOS standard for Roswell transportation facilities was based on vehicles per lane mile per peak hour demand, converted to an average daily demand, and was intended to maintain a system-wide roadway LOS of "D", dependent upon an average of the LOS "letter grade" of the various road segments that make up the City's road network. A list of projects was proposed that would maintain this LOS standard for the entire road network. Based on calculations carried out by the City's transportation consultant, the road network LOS in 2000 is "D"; no current deficiency exists. In a pure sense, many factors in combination determine the level-of-service at highway intersections and on segments. These factors include mobility attributes like: amount of delay, average speed, fluctuation of speed, safety, convenience, and freedom to maneuver. In practice, however, transportation planners and engineers evaluating system performance over a large area typically compare the number of vehicles using a particular facility for a given time

⁹ The figure of 1,535 dwelling units is drawn from Table 11.11.

¹⁰ These letter grades are described in more detail in the 1995 *Florida Department of Transportation Level of Service Manual*, as well as the *Highway Capacity Manual*.

period with the design capacity of that facility. This statistic is referred to as the volume-to-capacity ratio. As such, the key determinants in computing level-of-service are volume and capacity.

In order to continue to use a system-wide LOS standard, the new level of service is based upon a ratio of volume to capacity (v/c). In 1994, the v/c ratio was 0.67 for the entire street network; in 2000, the v/c ratio is 0.77.¹¹ The calculations involved in computing lane capacity are described below; the generation of future traffic volume was made through a modeling process, while the current volume figures were derived from traffic counts.

Lane Capacity Calculations

The City of Roswell's thoroughfare network is comprised of three different street types, which are distinguished from each other according to function. There are controlled access Freeway facilities, like Georgia 400. There are arterial streets, which provide a means to get from one section of the City to another, like Woodstock/Crossville/Holcomb Bridge Road. Then there are Collector roads, like Crabapple/Canton or Houze Way that bridge local subdivision streets and arterial streets.

The 1997 Highway Capacity Manual (NCHRP Special Report 209), published by the Transportation Research Board in 1998, provides standards for traffic engineering and transportation planning. Guidelines for capacity calculations on urban collector and arterial streets are found in Section 9, "Signalized Intersections - Urban Streets". In planning studies such as this, the following formula for estimating lane capacity on collector and arterial streets is:

$$c = 1,800 \times N \times (g/C)$$

Where, c = Lane Capacity

N = Number of Lanes

g/C = Green Time to Cycle Length Ratio

Directional, per lane, per hour capacities for collectors and arterials are shown in the table below. The g/C ratio is a generalized average representing the percentage of green time allocated to through movements at intersections on each of the City's major thoroughfares. Collector street g/C percentages are usually lower, in comparison with arterials. In this study, Collector streets are assumed to get 45 percent of the green time while arterials are given 55 percent.

Table 11.28
Collector and Arterial Capacity

Capacity Variables	Collector	Arterial
Saturation flow rate	1,800 passenger cars per hour per lane	1,800 passenger cars per hour per lane
Number of Lanes	1	1
g/C ratio	0.45	0.55
Capacity	810 vehicles per hour (vph)*	990 vehicles per hour(vph)*

¹¹ Both of which fall into the range of LOD "D".

* These values represent maximum saturation flow rate capacities, not LOS “D”.

Since the level-of-service standards were set at LOS D in the 1994 Road Impact Fees Report, the capacity calculation shown in the preceding table needs to be adjusted to represent the maximum service volume at LOS D. The capacity (or maximum service volume) of one lane of an arterial at LOS D is estimated to be 891 vehicles per hour (vph). This is based on the guideline that the LOS D capacity is approximately 90 percent of the maximum saturation flow rate. Using the same logic, the per-lane LOS D capacity for a collector street is computed to be 729 vph.

One more adjustment to the hourly, per lane capacities is needed to compute levels-of-service on the City’s roadway network. Traffic volumes on the roads are calculated in terms of daily traffic. Therefore, hourly capacities are expanded by a peak hour volume to daily traffic volume factor that converts them to their equivalent daily per lane capacities. This is accomplished by dividing the hourly capacities by 0.09 or 9.0 percent. This factor is representative of peaking conditions on typical urban roadways in outlying areas (such as Roswell) of a major City similar in size to Atlanta.

Applying the peak-to-daily traffic conversion factor to each per hour LOS “D” capacity, results in the following equivalent daily capacities: 8,100 vehicles per day (vpd) for collectors; and 9,900 vpd for arterials. These capacity figures were subsequently used in the transportation model used to calculate the current and future road network v/c ratios.

Changes from the 1992/1994 Methodology

The system-wide average daily level of service standard was set at the existing (1992) service level because it obviated the need for the City to address any existing system deficiencies. As noted in the 1994 report, a “system-average” standard is based on the overall operating condition of the entire roadway system, while a “link-specific” standard requires all roadway links to function at a minimum operational level (Growth Management Analysts, Inc. 1994). The major weaknesses inherent in using a link-specific standard is that many individual road segments are already operating at undesirable levels and any deficiencies must be remedied within a reasonable period of time using non-impact fee revenues. It was problematic then, and it still is now, to establish a link-based system that obligates the City to pay for existing deficiencies. Furthermore, existing deficiencies might not be able to be remedied, (e.g., the road is already six lanes with no additional widening possible). Yet another problem with the link-based system is that revenues received from the link-specific approach would be insufficient to maintain levels of service.

The 1994 report justifies the “average daily travel” level of service standard, as opposed to use of a “peak hour” standard, because of the following: An increasing number of land uses are operating on extended hours, with a growing number of 24-hour operations; employers are engaging in transportation demand strategies to shift traffic away from peak periods; and the peak period is becoming more attenuated over time (Growth Management Analysts, Inc. 1994).

The 1992 impact fee program calculations for road impact fees were based upon a dollar value per ‘trip mile’. The total cost of new projects was divided by the total number of lane-miles of new capacity being added to the road network system to produce a ‘cost per lane-mile’ figure. Data were gathered as to the number of miles traveled, based on trip purpose, for various land use categories. (This is the product of the average miles traveled per trip, and the average

number of trips generated, by land use). For each land use category the impact fee was calculated by multiplying the average number of miles traveled by the average cost per lane-mile for new construction.

The specific calculation of trip miles in the 1992 program is, however, also problematic. The average trip miles, by trip purpose, were derived from data on the trips internal to Roswell only. Data were drawn from 656 responses to a survey. (Of the 2,440 total survey responses, 1,854 persons provided information on their trips, but only 656 of these persons lived and worked in the City). This number of responses represents about 1.32 percent of the population at that time, and should not necessarily be taken as representative of the entire population. Trips originating in the City but ending elsewhere, or trips that enter and terminate in the City, were not a part of the calculations. Further, the trip miles were generated based upon the central point of each traffic analysis zone (TAZ). Actual trip distances could therefore vary by the width of an individual TAZ. With trip mile generation rates as low as 3.061 miles (retail land uses), this is an unacceptably large margin of error.

Trip mile calculations are, in the end, less reliable than trip generation calculations. Where the number of miles traveled will vary with changes in the location of destinations (work, school, store), the number of trips generated by specific land use categories will remain fairly constant. When a person changes jobs, for instance, the miles traveled to work may change, but one trip to work will still be generated. Likewise, traffic congestion produces changes in travel patterns. A heavily congested street may be avoided, changing the miles traveled but still representing one trip generated. For this reason, the 2000 impact fee program uses calculations based upon trip generation, rather than miles traveled.

The 1992 impact fee program adjusted trip generation rates to reflect net leaseable, as opposed to gross leaseable, square footage for non-residential land uses. This was based upon an unexplained "concern about how individual analysts actually calculate trip generation rates" (Growth Management Analysts 1994, 17). The ITE Trip Generation Manual 5th Edition, long regarded as an industry standard, is used to make trip generation calculations in the 2000 impact fee program. These trip generation figures are based on average trips generated, by land use category, for a specific unit of measure. The unit of measure, square feet for example, is based upon typical building use for the specific land use category, and needs no further adjustment.

Level of Service Standard

Due to the complexity and changing nature of transportation facility planning, as well as to changes that may follow federal approval of a regional transportation plan, annual review of the LOS standard for transportation facilities is more critical than it may be for other service categories. With this in mind, Roswell has adopted an average daily system-wide v/c ratio of 0.77 as the LOS standard for 2001, which applies to both existing and new development, for the entire major street network. Table 11.29 presents the suggested LOS standards to be adopted over the next 20 years. These standards should be revisited annually, to reflect any new information or changes in transportation plans.

Table 11.29
Proposed Future Transportation LOS Standards,
2001-2020

Year	Total Trips	LOS Standard (v/c ratio)
2001	245,074	0.77
2002	249,899	0.78
2003	254,758	0.80
2004	259,653	0.81
2005	264,583	0.82
2006	268,537	0.84
2007	272,518	0.85
2008	276,524	0.86
2009	280,555	0.88
2010	284,612	0.89
2011	288,757	0.90
2012	292,929	0.91
2013	297,127	0.93
2014	301,351	0.94
2015	305,601	0.95
2016	309,796	0.97
2017	314,016	0.98
2018	318,262	0.99
2019	322,533	1.01
2020	326,829	1.02

Source: Total trips are drawn from Table 16.30; v/c ratio is a straight-line calculation based on the year 2000 and 2020 outputs of the transportation model run by the City's transportation consultant.

Service Area

Roswell's 1992 roads impact fee system (Growth Management Analysts, Inc. 1994) was based on a single service area based on the following rationale:

"The major roadway network functions as an integrated system designed to move traffic efficiently from one part of the community to another. In Roswell, most new development is occurring in the relatively undeveloped areas to the north, northwest, and east, while major travel destinations are still toward the south to downtown and North Perimeter areas. Thus, trips that originate in Roswell may have destinations a considerable distance away outside the City. However, the rise of Northpoint Mall and the edge City emerging in Alpharetta may alter trip behavior over time. In addition, there do not appear to be major differences in travel characteristics within the City. According to 1990 U.S. Census data, for example, workers living in northeast Roswell had an average travel time to work that was only slightly more than ten percent greater than that of workers residing in the more developed areas of the community (31 versus 28 minutes, respectively). For these reasons, the entire jurisdiction may

appropriately be designated as a single service area for the major roadway network” (Growth Management Analysts, Inc. 1994).

Drawing on this same rationale, the service area for the 2000 impact fee program is the City limits.

Future Demand

In order to determine the number of future trips attributable to new growth several calculations must be done. First, the average number of trips per person is calculated. This is based upon functional population. In Table 11.30, the average number of trips per person is calculated for the years 2000 to 2020. This figure is based on the number of trips forecast for each year, divided by the forecasted functional populations for that year.

The trip average is next applied to the current and projected populations to determine the number of new trips being served by the road network to the year 2020; this is shown in Table 11.31. By establishing the base-year functional population as 109,398 (year 2000 from Table 11.30), we can calculate the number of trips, per year, generated by existing development. The difference between the total trips generated and those generated by the base population, is the new trips generated. These are calculated on an annual basis since, as is shown in Table 11.30, the trip average figure changes over time.

Table 11.30
Average Trips per Functional Population, 2000-2020

Year	Population	Employment	Functional Population	Total Trips*	Average Trip per Functional Population**
2000	75,000	34,398	109,398	240,287	2.1964
2001	75,905	35,400	111,305	245,074	2.2071
2002	76,811	36,402	113,213	249,899	2.2178
2003	77,717	37,404	115,121	254,758	2.2285
2004	78,623	38,406	117,029	259,653	2.2392
2005	79,529	39,408	118,937	264,583	2.2499
2006	79,988	40,228	120,216	268,537	2.2606
2007	80,447	41,048	121,495	272,518	2.2713
2008	80,907	41,868	122,775	276,524	2.2820
2009	81,366	42,688	124,054	280,555	2.2927
2010	81,825	43,508	125,333	284,612	2.3034
2011	82,312	44,120	126,432	288,757	2.3141
2012	82,798	44,733	127,531	292,929	2.3247
2013	83,285	45,345	128,630	297,127	2.3354
2014	83,771	45,958	129,729	301,351	2.3461
2015	84,258	46,570	130,828	305,601	2.3568
2016	84,710	47,072	131,782	309,796	2.3675
2017	85,162	47,574	132,736	314,016	2.3782
2018	85,615	48,075	133,690	318,262	2.3889
2019	86,067	48,577	134,644	322,533	2.3996
2020	86,519	49,079	135,598	326,829	2.4103

Source: Functional population is from Table 16.5; trip figures are derived from the City's transportation consultant traffic model.

*Total trips include all trips that originate in Roswell, those that terminate in Roswell, and those that both originate and terminate in the City.

**Trip average is the number of trips forecast for the specific year divided by the functional population forecast for that year.

Table 11.31
Trip Generation Forecast, 2001-2020

Year	Trip Average	Base Functional Population	Base Trips Generation	New Functional Population	New Trips Generation
2000*	2.1964	109,398	240,287	-	-
2001	2.2071	109,398	241,457	1,639	3,618
2002	2.2178	109,398	242,626	1,640	7,255
2003	2.2285	109,398	243,796	1,640	10,910
2004	2.2392	109,398	244,966	1,640	14,582
2005	2.2499	109,398	246,135	1,640	18,272
2006	2.2606	109,398	247,305	1,193	20,970
2007	2.2713	109,398	248,474	1,193	23,680
2008	2.2820	109,398	249,644	1,193	26,403
2009	2.2927	109,398	250,814	1,193	29,139
2010	2.3034	109,398	251,983	1,193	31,887
2011	2.3141	109,398	253,153	1,221	34,712
2012	2.3247	109,398	254,323	1,221	37,549
2013	2.3354	109,398	255,492	1,221	40,400
2014	2.3461	109,398	256,662	1,221	43,264
2015	2.3568	109,398	257,832	1,221	46,141
2016	2.3675	109,398	259,001	1,186	48,949
2017	2.3782	109,398	260,171	1,186	51,770
2018	2.3889	109,398	261,340	1,186	54,604
2019	2.3996	109,398	262,510	1,186	57,451
2020	2.4103	109,398	263,680	1,186	60,310
TOTALS			5,051,363		661,866

Source: Functional population is from Table 16.5; trip generation is derived from the figures calculated in Table 16.30.

*2000 is the base year. Totals do not include trips generated in the year 2000.

Impact Fee Calculation

From the trip-year totals calculated in Table 16.31 we can determine that 13.10 percent of all trips generated between the years 2000 and 2020 will be attributable to new growth. ($661,866/5,051,363 = 0.1310$).

The costs of transportation projects on which the impact fee for transportation was originally based are summarized here in Table 11.32. These were drawn from the short, medium, and long-term work programs listed in the 2020 comprehensive plan and have been updated as necessary since the 2020 plan was adopted.

Table 11.32
Transportation Project Costs

Time Period	Type of Projects	Local Cost of Projects*
Short-Term (FY 2001-2005)	Signalization/ATMS	\$900,000
	Intersections	\$14,387,235
	Road Addition/Widening	\$3,930,000
	Subtotal:	\$19,217,235
Mid-Range (FY 2006-2010)	Signalization/ATMS	\$275,000
	Intersections	\$1,080,000
	Road Addition/Widening	\$10,800,000
	Subtotal:	\$12,155,000
Long-Range (FY 2011-2020)	Signalization/ATMS	\$550,000
	Road Addition/Widening	\$6,000,000
	Subtotal:	\$6,550,000
	Total	\$37,922,235

Source: Projects and costs are derived from Tables 18.1, 18.2, and 18.3. Only projects that are impact fee eligible are included.

*Excludes grant funds and GA DOT participation.

This figure is then multiplied by the percent of trips between 2000 and 2020 that are generated by new growth—and therefore the percentage of total project costs that provide new capacity—as derived from Table 11.30. ($\$37,922,235 \times 13.10$ percent = $\$4,967,813$). From Table 11.13, the credit to be applied to transportation facilities is $\$751,715$. (Credit for gasoline tax contribution is already given in that non-local funding—State and Federal funds—is not included in the project cost calculations). In addition, the road impact fee fund has a current balance of $\$3,577,988$. The credit and fund balance are subtracted from the total cost of projects shown in Table 16.31 to calculate the amount to be funded through impact fee collection. ($\$4,967,813 - \$4,329,703 = \$638,110$). This figure is then divided by the number of trips attributable to new growth forecast to be generated in the year 2020, to produce an average cost per trip. By 2020, 60,310 trips will be generated by new development (Table 11.31, last row). Thus, the net impact fee cost of $\$638,110/60,310 = \10.58 per trip.

Based upon an assessment made by the City's transportation consultant, the future trips attributable to residential land uses make up 40 percent of the total future trips, with non-residential land uses generating 60 percent of the total future trips. This allocation could be calculated for project costs or, as is done here, it can be calculated based on the per trip cost, itself calculated from project costs. The allocation is based upon the consultant's calculation of trip purpose, derived from the transportation model used to create the transportation improvements listed in Chapter 18. Using this information, the average per trip cost is refined to reflect an allocation based on general land use categories.¹² The resulting figures are $\$8.46$ per trip for residential land use, and $\$12.70$ per trip for non-residential land use. In Table 11.33, the

¹² The equation used for this calculation is: $1.5x + x = \$21.16$. Solving for x : $1.5x + x = \$21.16$
 $2.5x = \$21.16$ $x = \$8.46$ $1.5x = \$12.70$.

allocated cost per trip is applied to the average trip generation by general land use classification, as derived from the ITE's Trip Generation, 5th Edition, to produce an impact fee schedule for transportation facilities.

Table 11.33
Transportation Services Impact Fee Schedule (2000)

Land Use Classification	Trips Generated	Unit of Measure	Cost per Trip	Impact Fee per Unit of Measure
Residential Detached	9.55	Dwelling	\$8.46	Note: see later table for updated fees
Residential Attached	6.47	Dwelling	\$8.46	
Apparel Store	66.40	1000 sq. ft.	\$12.70	
Auto Parts Store	61.91	1000 sq. ft.	\$12.70	
Building Materials and Lumber Store	39.71	1000 sq. ft.	\$12.70	
Church	9.11	1000 sq. ft.	\$12.70	
Convenience Market (Open 15-16 Hours)	634.20	1000 sq. ft.	\$12.70	
Convenience Market (Open 24 Hours)	737.99	1000 sq. ft.	\$12.70	
Convenience Market with Gasoline Pumps	845.60	1000 sq. ft.	\$12.70	
Day Care Center	79.26	1000 sq. ft.	\$12.70	
Discount Club	41.80	1000 sq. ft.	\$12.70	
Drive-in Bank	265.21	1000 sq. ft.	\$12.70	
Electronics Superstore	45.04	1000 sq. ft.	\$12.70	
Factory Outlet Center	26.59	1000 sq. ft.	\$12.70	
Fast-Food Restaurant	496.12	1000 sq. ft.	\$12.70	
Free-Standing Discount Store	56.63	1000 sq. ft.	\$12.70	
Free-Standing Discount Superstore	46.96	1000 sq. ft.	\$12.70	
Furniture Store	5.06	1000 sq. ft.	\$12.70	
General Office Building	11.01	1000 sq. ft.	\$12.70	
Hardware/Paint Store	51.29	1000 sq. ft.	\$12.70	
High Turnover Restaurant	130.34	1000 sq. ft.	\$12.70	
High-Turnover (Sit-Down) Restaurant	130.34	1000 sq. ft.	\$12.70	
Home Improvement Superstore	35.05	1000 sq. ft.	\$12.70	
Hospital	16.78	1000 sq. ft.	\$12.70	
Hotel/Motel	8.92	room	\$12.70	
Industrial	6.97	1000 sq. ft.	\$12.70	
Lodge/Fraternal Organization	46.90	employee	\$12.70	
Medical Office	36.13	1000 sq. ft.	\$12.70	

Table 11.33. Transportation Services Impact Fee Schedule (cont.)

Land Use Classification	Trips Generated	Unit of Measure	Cost per Trip	Impact Fee per Unit of Measure
Mini-Warehouse	2.50	1000 sq. ft.	\$12.70	Note: see later table for updated fees
Movie Theater	78.06	1000 sq. ft.	\$12.70	
New Car Sales	37.50	1000 sq. ft.	\$12.70	
Nursery (Garden Center)	36.08	1000 sq. ft.	\$12.70	
Nursery (Wholesale)	39.00	1000 sq. ft.	\$12.70	
Nursing Home	2.61	bed	\$12.70	
Pharmacy/Drugstore	88.16	1000 sq. ft.	\$12.70	
Private School (K-12)	5.50	1000 sq. ft.	\$12.70	
Quality Restaurant	89.95	1000 sq. ft.	\$12.70	
Quick Lubrication Vehicle Shop	40.00	service bay	\$12.70	
Recreational Community Center	22.88	1000 sq. ft.	\$12.70	
Self-Service Car Wash	108.00	stall	\$12.70	
Shopping Center	16.76	1000 sq. ft.	\$12.70	
Specialty Retail Center	40.67	1000 sq. ft.	\$12.70	
Supermarket	111.51	1000 sq. ft.	\$12.70	
Tire Store	24.87	1000 sq. ft.	\$12.70	
Warehouse	4.96	1000 sq. ft.	\$12.70	
Wholesale Market	6.73	1000 sq. ft.	\$12.70	
Wholesale Tire Store	20.36	1000 sq. ft.	\$12.70	

Source: Residential figures are from Table 3.8, employment figures are derived from ITE Trip Generation Manual, 5th edition; trip generation is based on weekday trip ends, as derived from ITE's Trip Generation Manual, 5th Edition.

Funding

When the 1992 impact fee program was adopted, future transportation projects were to be funded through general fund expenditures. This was done in order to begin construction without waiting for impact fee revenues to build up. With this in mind, the 1992 program applied a credit based upon future property tax contributions to the general fund that would be used to fund impact fee eligible projects. This was unnecessary in that the general fund expenditures should have been reimbursed by impact fees for any transportation projects that provided new system capacity for new development. The list of transportation projects in the 1992 program were characterized as providing new capacity, not as addressing an existing deficiency, and were therefore 100 percent impact fee eligible. The credit was further adjusted to reflect the make-up of the tax digest. Residential property, representing a larger portion of the tax digest than non-residential property, was given a larger credit. This assumed that the proportionate mix of residential and non-residential development would remain constant over time. Instead, a future tax contribution figure should have been calculated based on tax base value added by new growth, and a credit should have been applied based upon that future contribution. As a result of the adjusted credit, the impact fee calculations in the 1992 report produced an impact fee too low to pay for the improvements demanded by new growth.

Additionally, the conversion of gross leaseable space into net leaseable space for non-residential land uses in the 1992 program underestimated the real impact of these land uses on the transportation network as established by the Institute of Transportation Engineers. This resulted in a reduction of the calculated trip generation for these land uses, and consequently an underestimation of the impact fee for non-residential land uses. Again, the resulting impact fee was too low to generate the total funds necessary to provide service to meet new growth demands.

Through December 31, 1999, the City had collected \$6,474,331.52 in transportation impact fee revenues. Of the fees collected, approximately \$2,896,343.12 has been expended, leaving a balance of \$3,577,988.40. Transportation impact fee revenues have ranged from \$500,000 to more than \$1,000,000 annually, with an average of about \$700,000 per year.

OTHER SERVICE CATEGORIES

Two additional service categories were included in the 1992 Development Impact Fee Program Report and are re-evaluated below. Neither category is currently included in the impact fee program, for reasons discussed in each section below.

Libraries

The 1992 adopted level of service for library facilities in Roswell was 0.30 square feet per resident. This was based on the State of Georgia minimum standard. Table 11.34 shows the present and future demand for library facility space, based upon the adopted 1992 LOS.

Table 11.34
Library Facility Space Demand, 2000-2020

Year	Residential Population	Square Feet Demanded	Future Demand In SF*
2000	75,000	22,500	800
2005	79,529	23,859	2,159
2010	81,825	24,548	2,848
2015	84,258	25,277	3,577
2020	86,519	25,956	4,256

*Based on an LOS of 0.30 SF per resident and a current inventory of 21,700 SF.

Under the adopted 1992 LOS, the deficiency in the year 2000 is 800 square feet. The library building was built and is maintained by Fulton County on approximately 1.5 acres of land provided by the City of Roswell. The future demand for facility square footage could be met by an expansion of the current facility, or through the construction of a new facility elsewhere in the City. There is sufficient room on the existing site to accommodate an expansion of the library. However, Roswell does not own or operate any library facilities. Impact fees are not being charged by the City for library services. To do so would require an intergovernmental agreement between the City and the Atlanta-Fulton County Library System.

Because all of Roswell is served by one branch library building, it is appropriate that a single library service area be drawn Citywide. Typically, library impact fees are charged only to residential developments. In the case of the Atlanta Fulton County library system, only

residents are permitted to check out books. However, nonresidents employed in the City are admitted to library facilities, and it is reasonable to assume that such nonresidents will occasionally use the public library. Under the principle that development should be charged for the demands it creates, Beatley (1988) argues that “in most cases, in the absence of compelling arguments to the contrary, impact fees [including libraries] should be assessed broadly to all such [including commercial and industrial] uses.” As with other service categories, such as parks, the non-residential demand is too small to warrant inclusion in impact fee calculations.

Water

Since the 1992 report, water consumption in Roswell has risen from an average of 1.2 million gallons per day (MGD) in 1990 to an average of 7.8 MGD in 2000. 1.95 MGD of the current demand is supplied through the Cecil Wood treatment facility; the remaining water comes from Fulton County. The Cecil Wood facility needs to be upgraded in order to continue operation under the Safe Drinking Act. In this case, the upgrading of an existing facility addresses a current deficiency and cannot be charged to new growth. However, any excess capacity that exists now, or that is created through the upgrade construction, is chargeable to new growth. Also, improvements in the water system infrastructure to serve new growth are eligible for impact fee inclusion.

SUMMARY IMPACT FEE SCHEDULE

Table 11.35 is a summary of the new level of service standards, as adopted in 2000. Table 11.36 presents a summary of the impact fee charges, based on land use classification. The impact fee charge for each land use category is the total of the service category charges, plus a 3 percent charge for the administration of the program.

Table 11.35
Level of Service Standards, 2000 Impact Fee Program

	Public Safety Facilities	Transportation Facilities	Parks and Recreation Facilities
Level of Service Standard	1,017.10 SF and 0.236 heavy vehicles per 1,000 functional population	Year 2001: Volume/capacity ratio of 0.77	Various, based on acreage and facilities (see Table 11.23)

Table 11.36
City of Roswell
Development Impact Fee Schedule, Revised 2003

Land Use Classification	Public Safety	Parks and Recreation	Transportation	Admin Fee*	Impact Fee
Residential Detached	\$533.02	\$1,302.93	\$161.68	\$59.93	\$2,057.56 per dwelling
Residential Attached	\$362.15	\$1,302.93	\$109.54	\$53.24	\$1,827.86 per dwelling
Apparel Store	\$310.15	-	\$1,685.90	\$59.88	\$2,055.93 per 1000 sq. ft.
Auto Parts Store	\$178.29	-	\$1,571.89	\$52.51	\$1,802.69 per 1000 sq. ft.
Building Materials and Lumber Store	\$273.01	-	\$1008.24	\$38.44	\$1,319.69 per 1000 sq. ft.
Church	\$96.57	-	\$231.30	\$9.84	\$337.71 per 1000 sq. ft.
Convenience Market\ (Open 15-16 Hours)	\$325.01	-	\$16,102.34	\$492.82	\$16,920.17 per 1000 sq. ft.
Convenience Market\ (Open 24 Hours)	\$334.30	-	\$18,737.57	\$572.16	\$19,644.03 per 1000 sq. ft.
Convenience Market with Gasoline Pumps	\$334.30	-	\$21,469.78	\$654.12	\$22,458.20 per 1000 sq. ft.
Day Care Center	\$471.73	-	\$2,012.41	\$74.52	\$2,558.66 per 1000 sq. ft.
Discount Club	\$241.44	-	\$1,061.30	\$39.08	\$1,341.82 per 1000 sq. ft.
Drive-in Bank	\$676.02	-	\$6,733.68	\$222.29	\$7,631.99 per 1000 sq. ft.
Electronics Superstore	\$178.29	-	\$1,143.57	\$39.66	\$1,361.52 per 1000 sq. ft.
Factory Outlet Center	\$310.15	-	\$675.12	\$29.56	\$1,014.83 per 1000 sq. ft.
Fast-Food Restaurant	\$2,204.35	-	\$12,596.49	\$438.63	\$15,059.47 per 1000 sq. ft.
Free-Standing Discount Store	\$364.01	-	\$1,437.84	\$54.06	\$1,855.91 per 1000 sq. ft.
Free-Standing Discount Superstore	\$178.29	-	\$1,192.31	\$41.12	\$1,411.72 per 1000 sq. ft.
Furniture Store	\$78.00	-	\$128.47	\$6.19	\$212.66 per 1000 sq. ft.
General Office Building	\$616.59	-	\$279.54	\$26.88	\$923.01 per 1000 sq. ft.

Land Use Classification	Public Safety	Parks and Recreation	Transportation	Admin Fee*	Impact Fee
Hardware/Paint Store	\$178.28	-	\$1,302.25	\$44.42	\$1,524.96 per 1000 sq. ft.
High Turnover Restaurant	\$1,385.47	-	\$3,309.33	\$140.84	\$4,835.64 per 1000 sq. ft.
High-Turnover (Sit-Down) Restaurant	\$1,385.47	-	\$3,309.33	\$140.84	\$4,835.64 per 1000 sq. ft.
Home Improvement Superstore	\$178.29	-	\$889.92	\$32.05	\$1,100.26 per 1000 sq. ft.
Hospital	\$603.59	-	\$426.04	\$30.89	\$1,060.52 per 1000 sq. ft.
Hotel/Motel	\$115.05	-	\$226.48	\$10.25	\$351.88 per Room
Industrial	\$429.01	-	\$176.97	\$18.18	\$624.16 per 1000 sq. ft.
Lodge/Fraternal Organization	\$185.72	-	\$1,190.79	\$41.30	\$1,417.81 per employee
Medical Office	\$752.17	-	\$917.34	\$50.09	\$1,719.60 per 1000 sq. ft.
Mini-Warehouse	\$7.43	-	\$63.48	\$2.13	\$73.04 per 1000 sq. ft.
Movie Theater	\$278.58	-	\$1,981.94	\$67.82	\$2,328.34 per 1000 sq. ft.
New Car Sales	\$328.72	-	\$952.13	\$38.43	\$1,319.28 per 1000 sq. ft.
Nursery (Garden Center)	\$302.72	-	\$916.07	\$36.56	\$1,255.35 per 1000 sq. ft.
Nursery (Wholesale)	\$310.15	-	\$990.21	\$39.01	\$1,339.37 per 1000 sq. ft.
Nursing Home	\$120.72	-	\$66.27	\$5.61	\$192.60 per bed
Pharmacy/Drugstore	\$310.15	-	\$2,238.38	76.46	\$2,624.99 per 1000 sq. ft.
Private School (K-12)	\$1,502.47	-	\$139.65	\$49.26	\$1,691.38 per 1000 sq. ft.
Quality Restaurant	\$1,385.47	-	\$2,283.83	\$110.08	\$3,779.38 per 1000 sq. ft.
Quick Lubrication Vehicle Shop	\$390.01	-	\$1,015.60	\$42.17	\$1,447.78 per service bay
Recreational Community Center	\$156.00	-	\$580.92	\$22.11	\$759.03 per 1000 sq. ft.
Self-Service Car Wash	\$37.14	-	\$2,742.12	\$83.38	\$2,862.64 per stall

Land Use Classification	Public Safety	Parks and Recreation	Transportation	Admin Fee*	Impact Fee
Shopping Center	\$310.15	-	\$425.54	\$22.07	\$757.76 per 1000 sq. ft.
Specialty Retail Center	\$338.01	-	\$1,032.61	\$41.12	\$1,411.74 per 1000 sq. ft.
Supermarket	\$235.86	-	\$2,831.24	\$92.01	\$3,159.11 per 1000 sq. ft.
Tire Store	\$237.72	-	\$631.45	\$26.08	\$895.25 per 1000 sq. ft.
Warehouse	\$237.72	-	\$125.93	\$10.91	\$374.56 per 1000 sq. ft.
Wholesale Market	\$152.29	-	\$170.87	\$9.69	\$332.85 per 1000 sq. ft.
Wholesale Tire Store	\$237.72	-	\$516.94	\$22.64	\$777.30 per 1000 sq. ft.

*The impact fee includes a charge of 3% added to the sub-total of the individual service categories for impact fee program administration.

AMENDED CAPITAL IMPROVEMENT ELEMENT

Since this Chapter was originally written and adopted in 2000, the City has annually updated the list of capital projects eligible for impact fee funding, in whole or in part. Those amendments have been done as “stand alone” additions to the Comprehensive Plan. For the amended Capital Improvement Element, See Chapter 14, Table 14.2 of this Comprehensive Plan.

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