
City of Woodstock, GA

Capital Improvements Element

An Amendment to the
City of Woodstock Comprehensive Plan



DRAFT – August 13, 2006

ROSS+associates

urban planning & plan implementation

Table of Contents

City of Woodstock Capital Improvements Element.....	1
Introduction.....	1
Parks and Recreation Facilities.....	3
Road Improvements	7
Exemption Policy	11
Short Term Work Program	12

City of Woodstock Capital Improvements Element

An Amendment to the City of Woodstock Comprehensive Plan

Introduction

The purpose of a Capital Improvements Element (CIE) is to establish where and when certain new capital facilities will be provided within a jurisdiction and how they may be financed through an impact fee program. As required by the Development Impact Fee Act, and defined by the Department of Community Affairs in its *Development Impact Fee Compliance Requirements*, the CIE must include the following for each category of capital facility for which an impact fee will be charged:

- the designation of **service areas** - the geographic area in which a defined set of public facilities provide service to development within the area;
- a **projection of needs** for the planning period of the adopted Comprehensive Plan;
- the designation of **levels of service** (LOS) - the service level that will be provided;
- a **schedule of improvements** listing impact fee related projects and costs for the first five years after plan adoption; and
- a description of **funding sources** proposed for each project during the first five years of scheduled system improvements.

System improvements expected to commence or be completed over the coming five years are also shown in the attached Short-Term Work Program (STWP) amendment. The STWP amendment affects new and previously planned capital projects for the upcoming five-year period, beginning with the current year.

Categories for Assessment of Impact Fees

To assist in paying for the high costs of expanding public facilities and services to meet the needs of projected growth and to ensure that new development pays a reasonable share of the costs of public facilities, Woodstock has developed this CIE for the categories of parks and roads.

Components of the Impact Fee System

The Woodstock Impact Fee System consists of several components:

- The currently adopted Comprehensive Plan, including future land use assumptions and projected future demands;
- Service area population forecasts, based on population, households, dwelling unit and employment forecasts of the Comprehensive Plan update, currently underway;
- Service area definition and designation;
- Appropriate level of service standards for each impact fee eligible facility category;
- A methodology report, which establishes the impact cost of new growth and development and thus the maximum impact fees that can be assessed;
- This Capital Improvements Element to implement the City's proposed improvements; and
- A Development Impact Fee Ordinance, including an impact fee schedule by land use category.

Forecasts

Population, dwelling unit, and employment forecasts are presented in the following table. These forecasts, based on the planning horizon of the current *Comprehensive Plan* update, form the basis of any service area population forecasts. The key forecast here is the dwelling unit forecast; this is the only service area population relevant to the City's current impact fee calculations. Parks & recreation facilities use the dwelling unit forecast for future demand predictions, while road impact fees are based on trip capacity added by improvements, rather than residential and/or employment forecasts. The full set of forecasts appears here for reference.

Table P-1
Forecasts
City of Woodstock

	Population	Dwelling Units	Employment
2006	18,992	7,938	11,233
2007	19,949	8,365	11,811
2008	20,954	8,813	12,402
2009	22,010	9,283	13,004
2010	23,119	9,776	13,616
2011	24,284	10,293	14,237
2012	25,507	10,833	14,865
2013	26,792	11,401	15,499
2014	28,142	11,994	16,138
2015	29,560	12,617	16,780
2016	31,049	13,267	17,425
2017	32,613	13,947	18,070
2018	34,256	14,660	18,715
2019	35,982	15,405	19,358
2020	37,795	16,183	19,998
2021	39,699	16,997	20,633
2022	41,699	17,848	21,263
2023	43,800	18,735	21,885
2024	46,006	19,663	22,499
2025	48,324	20,631	23,103
2026	50,758	21,640	23,696
2027	53,315	22,694	24,277
2028	56,001	23,794	24,844
2029	58,822	24,939	25,396
2030	61,785	26,133	25,935

Source: *Woodstock Comprehensive Plan*, 2007.

Parks and Recreation Facilities

Service Area

Park and recreation facilities are equally available to all residents of the city, and so for city parks and recreation services a single service area is established city-wide.

Projection of Needs

Demand and planning for recreational facilities is almost exclusively related to the city's resident population. Businesses make some use of public parks for office events, company softball leagues, etc., but the use is minimal and considered incidental compared to that of the families and individuals who live in the city. In addition, the recommended planning guidelines for parks facilities are based on residential population. Thus, a parks and recreation impact fee is limited to future residential growth. Between 2006 and 2030, the number of dwelling units in the park facilities service area will grow from 7,938 to 26,133, an increase of 18,195 dwelling units.

Table PR-1
Future Demand Calculation

AC/1,000 Dwelling Units	Number of New Dwelling Units (2006-30)	Acres Demanded
8.82	18,195	160

Square Feet/1,000 Dwelling Units	Number of New Dwelling Units (2006-30)	Square Feet Demanded
2,487.28	18,195	45,256

Existing Deficiency 19,744

Total SF Demanded **65,000**

Adopted LOS per 1,000 Dwelling Units	New Components Demanded (2006-2030)	
0.252	4.6	Ball Fields
0.504	9.2	Track/Trail*
0.378	6.9	Playgrounds
0.630	11.5	Pavilion/Shelters
0.038	0.7	Pools

*Includes jogging or running track, and walking trails.

Level of Service

The City has adopted a parks & recreation level of service standard based the current LOS for city-owned parks acreage, the current LOS for some park components, an increased LOS for recreation facility square footage, and an increased LOS for pools. The City intends to add 65,000 square feet of recreation facility space, in either a single facility or in multiple facilities. Plans have not been finalized, but this recreation center space could provide multi-use meeting and classroom space, physical activity areas (such as a gym), and possibly provide facility space for a pool. In addition to increasing the number of current components (i.e. ball fields, playgrounds, etc.) at the current level of service, the City plans to build its first pool, possibly in combination with a new recreation facility.

Table PR-1 shows the adopted LOS standards, as well as the calculation of future demand for park land, facility space and the selected components. The adopted LOS for facility space results in an existing deficiency of 19,744 square feet. Thus, of the 65,000 square feet of facility space planned by the City, 45,256 square feet will serve new growth while the remainder (19,744) is required to serve the existing residents. Likewise, while the City plans to add a pool to the inventory of park components, only 70% of the pool will serve new growth, with 30% of the pool necessary to meet the needs of the current population. (This percentage—30%—is the existing deficiency in pools.)

The remaining component categories—ball fields,

track/trails, playgrounds, and pavilion/shelters—are adopted at the current level of service. There is no existing deficiency in these component categories.

Capacity to Serve New Growth

Future land acquisition demand is presented in table **PR-2**. The final version of these projects could be reconfigured; ultimately 160 acres are impact fee eligible.

Table PR-2
Future Park Land Acquisition

Year	New Dwelling Units	AC Demanded (annual)	Running Total: AC Demanded	Project	New Acres
2006	0	0			
2007	427	3.8	4		
2008	448	4.0	8		
2009	470	4.1	12		
2010	493	4.3	16		
2011	517	4.6	21		
2012	540	4.8	26	Future Park A	40
2013	568	5.0	31		
2014	593	5.2	36		
2015	623	5.5	41		
2016	650	5.7	47	Future Park B	40
2017	680	6.0	53		
2018	713	6.3	59		
2019	745	6.6	66		
2020	778	6.9	73		
2021	814	7.2	80		
2022	851	7.5	87		
2023	887	7.8	95	Future Park C	40
2024	928	8.2	103		
2025	968	8.5	112		
2026	1,009	8.9	121		
2027	1,054	9.3	130		
2028	1,100	9.7	140	Future Park D	40
2029	1,145	10.1	150		
2030	1,194	10.5	160		
				Net New Growth Total:	160

Future parks will be built at locations to be determined in the future with regard to NRPA standards and local standards in order to adequately serve the demands created by new growth and development.

Capital Project Costs

The cost of future land acquisition, based on the future park land acquisitions from Table PR-2, are shown in **Table PR-3**. The portion of each project that is impact fee eligible is also shown. Costs are in current (2007) dollars.

Table PR-3
Land Acquisition Costs

Year	Project	Acres	Cost*	% for New Growth	New Growth Cost
2012	Future Park A	40	\$10,000,000	100.00%	\$10,000,000
2016	Future Park B	40	\$10,000,000	100.00%	\$10,000,000
2023	Future Park C	40	\$10,000,000	100.00%	\$10,000,000
2028	Future Park D	40	\$10,000,000	100.00%	\$10,000,000
		160	\$40,000,000		\$40,000,000

*Estimated acquisition costs based on an average of \$250,000 per acre.

Future developed component demand and the costs associated with those improvements, are shown in **Table PR-4**. In addition to cost estimates, this table identifies the portion of capital project costs that are impact fee eligible. Note also that some categories (ball fields, for example) have portions of their project costs that are not impact fee eligible. Because these projects provide capacity beyond the current forecasted demand they are not entirely impact fee eligible at this time, but in fact provide capacity for new growth beyond the current planning horizon. For example, new growth to 2030 will demand 4.6 ball fields. Only entire ball fields will be built, not just a portion of one. While 4.6 are demanded, 5 will be built. Thus the four-tenths of a ball field not demanded by forecasted new growth to 2030 will be available to serve growth beyond that horizon. The situation is reversed for pools and facility space, since there is an existing deficiency in each category. For these two component types, the '% for new growth' figure represents the proportion of the project that will serve new growth; the remainder is not impact fee eligible now or in the future since it is required in order to serve existing residents at the same level of service as that provided to new growth.

No additional developed components are anticipated within the next five years; these facilities will be scheduled as appropriate to serve new growth as it occurs. Costs are in current (2007) dollars.

Table PR-4
Future Park Facility Costs

Facility Type	Units to be Added (2006- 2030)	Cost per Unit*	Gross Cost	% for New Growth	Net Cost to New Growth
Ball Fields	5	\$265,500	\$1,327,500	92.00%	\$1,221,300
Track/Trail	10	\$230,000	\$2,300,000	92.00%	\$2,116,000
Playgrounds	7	\$50,000	\$350,000	98.57%	\$345,000
Pavilion/Shelters	12	\$160,000	\$1,920,000	95.83%	\$1,840,000
Swimming Pools	1	\$2,000,000	\$2,000,000	70.00%	\$1,400,000
Rec Facility (sf)	65,000	\$154	\$10,000,000	69.62%	\$6,962,461
			\$17,897,500	\$0	\$13,884,761

*Where available County cost estimates are shown; otherwise costs estimates are based on comparable facility costs.

Road Improvements

Service Area

The road network of Woodstock is considered in its entirety by the transportation model used to generate capacity data.¹ Improvements in any part of the network improve capacity, to some measurable extent, throughout the network. For this reason, the entire city is considered a single service area for the purposes of impact fee calculations.

Projection of Needs

As the city continues to develop—converting vacant land into new development and redeveloping existing land uses—there will be a continuing need to maintain and upgrade the transportation network within the city. As part of this effort, projects will be undertaken that provide new trip capacity on the road network that is intended to serve new growth. Future added capacity and determination of need is based on the City's road improvement plans.

Level of Service

Level of service for roadways and intersections is measured on a 'letter grade' system that rates a road within a range of service from A to F. Level of service A is the best rating, representing unencumbered travel; level of service F is the worst rating, representing heavy congestion and long delays. This system is a means of relating the connection between speed and travel time, freedom to maneuver, traffic interruption, comfort, convenience and safety to the capacity that exists in a roadway. This refers to both a quantitative measure expressed as a service flow rate and an assigned qualitative measure describing parameters. *The Highway Capacity Manual, Special Report 209*, Transportation Research Board (1985), defines level of service A through F as having the following characteristics:

1. LOS A: free flow, excellent level of freedom and comfort;
2. LOS B: stable flow, decline in freedom to maneuver, desired speed is relatively unaffected;
3. LOS C: stable flow, but marks the beginning of users becoming affected by others, selection of speed and maneuvering becomes difficult, comfort declines at this level;
4. LOS D: high density, but stable flow, speed and freedom to maneuver are severely restricted, poor level of comfort, small increases in traffic flow will cause operational problems;
5. LOS E: at or near capacity level, speeds reduced to low but uniform level, maneuvering is extremely difficult, comfort level poor, frustration high, level unstable; and
6. LOS F: forced/breakdown of flow. The amount of traffic approaching a point exceeds the amount that can transverse the point. Queues form, stop & go. Arrival flow exceeds discharge flow.

The traffic volume that produces different level of service grades differs according to road type, size, signalization, topography, condition and access. Post-improvement LOS conditions are based on the City's transportation consultant's computer modeling process.

The City's adopted level of service is based on Level of Service "D" for arterials and major collector roads.

¹ All road capacity data in this section is based on calculations made for the 2007 City of Woodstock *Comprehensive Plan* update.

Capacity to Serve New Growth

Projects that provide road capacity intended to attain or maintain LOS "D" as part of the road network to the year 2030 by road widening, new road construction or other capacity improvements have been identified by the City. These projects, including details on their type and cost, are shown in **Table R-1**. All costs are in current (2007) dollars.

Table R-1
Future Road Projects and Estimated Costs

Project	Description	Project Type	Total Cost	Local Cost
Trickum	3.2 lane miles - Arnold Mill to County Line	Road Widening	\$15,100,000	\$7,550,000
Main Street			n/a*	
Rope Mill	3.4 lane miles - Hwy 5 to Ridgewalk Pkwy	Road Widening	\$16,000,000	\$16,000,000
Arnold Mill Extension	5.5 lane miles from north end of Neese to Main St	New Location	\$25,800,000	\$25,800,000
Ridgewalk Parkway	1.6 lane miles	Road Widening	\$7,000,000	\$7,000,000
Ridgewalk Interchange		New Interchange	\$16,000,000	\$16,000,000
Neese Rd	2.2 lane miles of existing Neese Rd	Road Widening	\$10,400,000	\$5,200,000
Towne Lake Parkway	2.1 lane miles between I-575 and Neese Rd	Road Widening	\$10,000,000	\$10,000,000
Woodstock Parkway	1 lane mile	Road Widening	\$4,700,000	\$4,700,000
Dupree Road	3.2 lane miles from Bascomb-Carmel to Main	Road Widening	\$15,100,000	\$6,040,000
Downtown Grid**	Creation of Downtown Grid	New Road Segments; Extensions & Connections	\$5,000,000	\$5,000,000
			\$125,100,000	\$103,290,000

Source: *Joint Comprehensive Plan* ; additional refinement by the City.

*Operational improvements only.

**Downtown grid includes rail crossing at Haney Road.

In **Table R-2**, the current excess capacity, existing deficiency, and post-improvement added capacity is shown for each of the projects from Table R-1. There is an existing deficiency of 3,880 trips on Towne Lake Parkway; this is the only project with an existing deficiency.

Table R-2
Road Capacity and Deficiencies

Project Name	Current Capacity	Current Volume	Existing Deficiency	Current Excess Capacity
Trickum	18,000	13,820	0	4,180
Rope Mill	11,000	1,100	0	9,900
Arnold Mill Extension	n/a	n/a	n/a	n/a
Ridgewalk Parkway	11,000	1,100	0	9,900
Ridgewalk Interchange	n/a	n/a	n/a	n/a
Neese Rd	11,000	4,170	0	6,830
Towne Lake Parkway	18,000	21,880	3,880	0
Woodstock Parkway	16,600	11,090	0	5,510
Dupree Road	11,000	2,910	0	8,090
Downtown Grid	1,000	500	0	500

Table R-3 presents the calculation of the total new trip capacity added by these projects (145,670 trips), as well as an identification of the percentage of added capacity represented by the net new capacity.

Table R-3
Post-Improvement Statistics

Project Name	Capacity to be Added	Existing Deficiency	Net Added Capacity	Net Added Capacity as % of Total Capacity Added
Trickum	18,000	0	18,000	100%
Rope Mill	11,000	0	11,000	100%
Arnold Mill Extension	22,000	0	22,000	100%
Ridgewalk Parkway	22,000	0	22,000	100%
Ridgewalk Interchange	15,650	0	15,650	100%
Neese Rd	11,000	0	11,000	100%
Towne Lake Parkway	18,000	3,880	14,120	78%
Woodstock Parkway	18,400	0	18,400	100%
Dupree Road	11,000	0	11,000	100%
Downtown Grid	2,500	0	2,500	100%

New Trip Capacity Added to Road Network: **145,670**

Capital Project Costs

In **Table R-4** the project costs assignable to new growth are identified. The local cost figures are drawn from Table R-1, and the '% impact fee eligible' figures are based on the added capacity percentage figures from Table R-3 (with the exception of the Main Street project which has no estimated cost, no added capacity, and is not impact fee eligible). Note that the Towne Lake Parkway project cost is not entirely impact fee eligible, due to the existing deficiency on that road.

Table R-4
New Growth Share of Project Costs

Project Name	Local Cost	% Impact Fee Eligible	Impact Fee Eligible Project Costs	Non-eligible Project Costs
Trickum	\$7,550,000	100%	\$7,550,000	\$0
Main Street	\$0	0%	\$0	\$0
Rope Mill	\$16,000,000	100%	\$16,000,000	\$0
Arnold Mill Extension	\$25,800,000	100%	\$25,800,000	\$0
Ridgewalk Parkway	\$7,000,000	100%	\$7,000,000	\$0
Ridgewalk Interchange	\$16,000,000	100%	\$16,000,000	\$0
Neese Rd	\$5,200,000	100%	\$5,200,000	\$0
Towne Lake Parkway	\$10,000,000	78%	\$7,844,444	\$2,155,556
Woodstock Parkway	\$4,700,000	100%	\$4,700,000	\$0
Dupree Road	\$6,040,000	100%	\$6,040,000	\$0
Downtown Grid	\$5,000,000	100%	\$5,000,000	\$0
	\$103,290,000		\$101,134,444	\$2,155,556

Exemption Policy

The City of Woodstock finds that certain office, retail trade or industrial uses that create unusually high investment, economic or job creation benefits represent extraordinary economic development and employment growth of public benefit to Woodstock in proportion to the creation of such benefits. To encourage such development projects, the City Council may consider granting a reduction in the impact fee for such a development project upon the determination and relative to the extent that the business or project represents extraordinary economic development and employment growth of public benefit to Woodstock, in accordance with adopted exemption criteria. It is also recognized that the cost of system improvements otherwise foregone through exemption of any impact fee must be funded through revenue sources other than impact fees.

CITY OF WOODSTOCK, GA

Short Term Work Program

(2007–2011) AMENDMENT

Capital Project	Start Year	Responsible Party	Cost Estimate	Anticipated Funding Source(s)
Main Street (operational improvements)	2007	City	Unknown	General Fund
Downtown Grid (new roads, extensions and connections)	2008	City, GaDOT	\$5,000,000	100% Impact Fees
Ridgewalk Interchange (new interchange)	2009	City, GaDOT	\$16,000,000	100% Impact Fees
Arnold Mill Extension (new location - north end of Neese to Main St)	2010	City, GaDOT	\$25,800,000	100% Impact Fees
Ridgewalk Parkway (road widening)	2010	City, GaDOT	\$7,000,000	100% Impact Fees
Towne Lake Parkway (road widening - I-575 to Neese Rd)	2010	City, GaDOT	\$10,000,000	78% Impact Fees, General Fund
Running Track & Walking Trail (1 each)	2008	City	\$460,000	92% Impact Fees, General Fund
Recreation Facility	2009	City	\$10,000,000	69.6% Impact Fees, General Fund
4 Playgrounds	2010	City	\$200,000	98.5% Impact Fees, General Fund
6 Pavilion/Shelters	2010	City	\$960,000	95.8% Impact Fees, General Fund