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# Impact Fee Methodology Report

**City of Woodstock Impact Fee Program**  
Including the following public facility category:

**Parks and Recreation  
Road Improvements**

**SEVENTH DRAFT REPORT – May 9, 2007**

**ROSS+associates**

urban planning & plan implementation

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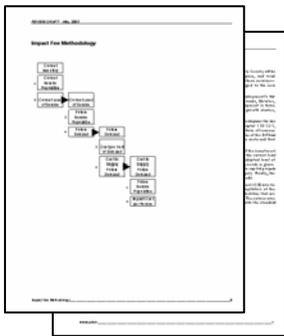
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■ Organization of the Report

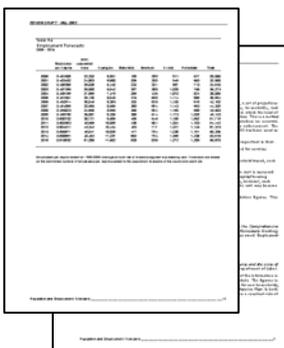
The *Impact Fee Methodology Report* is organized in such a way that the calculation of impact fees (discussed in detail in the next section) proceeds through the document in the same order that the calculations are undertaken. The illustration below describes the sections that make up the report.



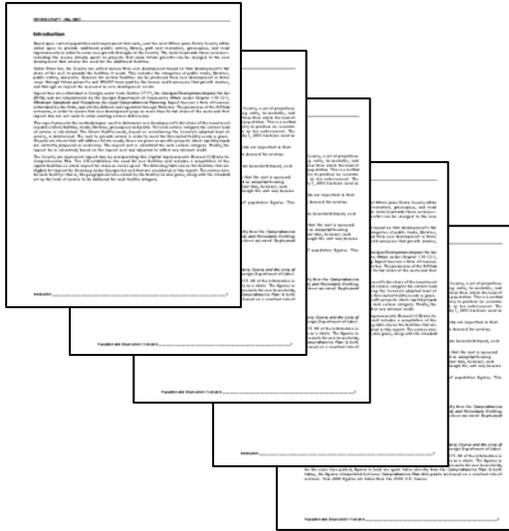
**Introduction** – this section introduces and summarizes the calculation of impact fees, as well as the requirements for adoption and maintenance of the impact fee program. It includes an **Overview of the Impact Fee Program**, and concludes with the schedule of **Maximum Impact Fees**.



**Methodology** – this section outlines the calculations and data required for impact fee calculation, including information on level of service and service area considerations.



**Forecasts** – this section presents the population, dwelling unit, and employment forecasts for the county and the specific service areas. A forecast of the tax digest value is also presented.



**Parks & Recreation and Road Improvements Chapters** – these sections walk through the calculation of level of service, existing deficiency, future demand, and assignment of project costs. The sections end with the calculation of an impact cost, the relevant credit against future taxes, and the resulting net impact fee that could be adopted.



**Other Fees and Charges** – this section presents information about fees for program administration, and the recoupment of the cost to prepare the CIE.



**Appendix** – the appendix presents a **glossary** of terms used in the report.

## ■ Executive Summary

Impact fees present a potential revenue source in the on-going search for public facilities funding. Decisions have been reached regarding the level of service to be provided in the city—decisions based on current plans or based on desired level of service standards—in order for facility planning to take place. Based on that planning, calculations have been carried out in order to identify what portion of future capital facilities could be funded through impact fee collections.

In this report capital costs have been examined for two public facility categories: parks & recreation and road improvements. Based on plans of the City the portion of future capital costs that could be met through impact fees has been calculated. In short, impact fees could be used to fund 92% of the capital costs in this public facility category, and at the desired level of service standards, over the next twenty-four years. Of the \$161.3 million in capital costs to be met, \$153.5 million could come through impact fee collection (and \$1.6 million through taxes paid by new growth).

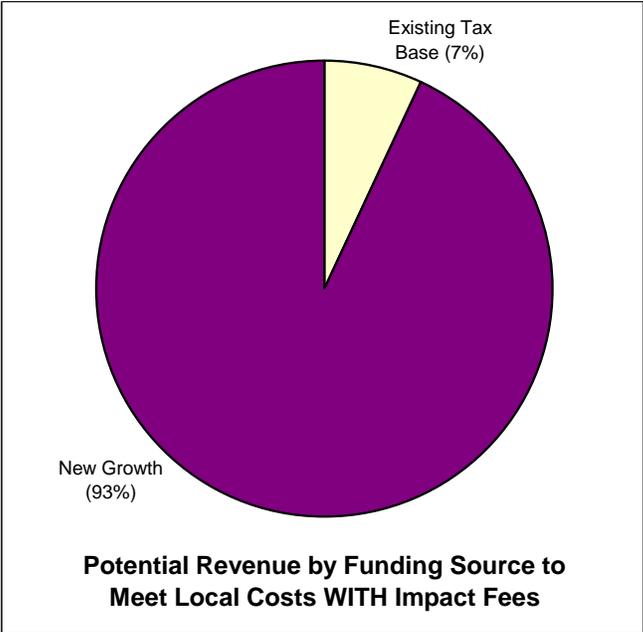
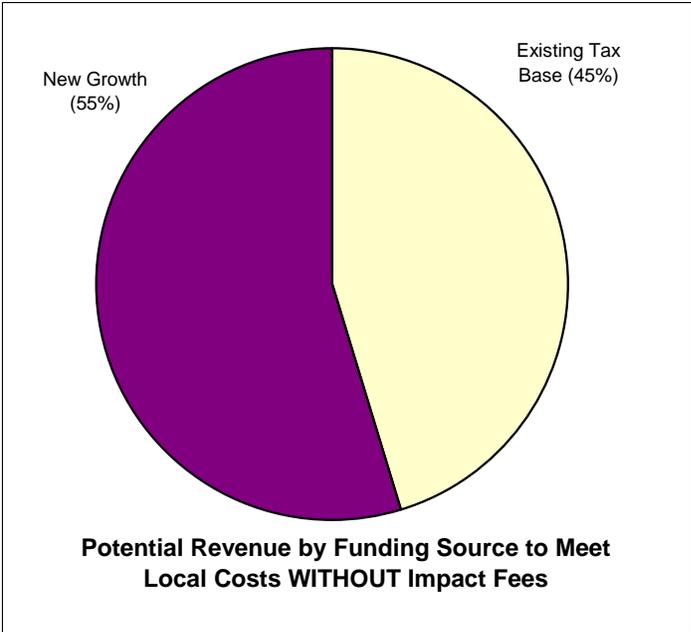
Impact fees can play an important role in any funding strategy. If general funds alone were used to meet the \$161.3 million in local capital costs, Woodstock would need to charge an average of about additional 3.82 mils in property tax—for each of the next twenty-four years—in order to fund the capital projects examined in this report. Impact fees do not remain fixed in place; as a component of a funding strategy they are just one part of the potential scenario, and can be refined as necessary over time. For instance, the future addition of a new SPLOST program can affect the funding strategy, as can the issuance of general obligation bonds or other loan instruments.

In the end, impact fees represent a potential funding source that must be balanced against other needs of the City. In this report the **maximum allowable impact fee** has been calculated; this is the most that could be charged. If impact fees are adopted, the impact fee amount ultimately charged would represent a shifting of the burden to fund these capital projects from the tax base as a whole, to the new developments actually demanding the services being added through these projects.

In short:

- Total \$161.3 million planned for capital improvements.
- Total to support new growth: \$155.1 million.
- WITH impact fee program in place:
  - Tax rate to fund ineligible portion of projects: about 0.0001 mils per year for the next twenty-four years.
  - Taxes generated by current tax base: \$6.2 million.
  - Taxes generated by new growth: \$1.6 million.
  - Impact fees from new growth: \$153.5 million.
- WITHOUT an impact fee program:
  - Tax rate to fund all improvements: about 3.82 mils per year for the next twenty-four years.
  - Taxes generated by current tax base: \$73.2 million.

- o Taxes generated by new growth: \$88.1 million.



- Sample Maximum allowable impact fees:

**Sample Maximum Impact Fees**  
City of Woodstock, GA

<b>Land Use</b>	<b>Maximum Allowable Impact Fee</b>
Single-Family Detached Housing	\$6,117.12 per dwelling
Apartment	\$5,188.14 per dwelling
General Light Industrial	\$2.10 per square foot
General Heavy Industrial	\$0.45 per square foot
General Office Building	\$3.31 per square foot
Drive-in Bank	\$52.92 per square foot
Free-Standing Discount Superstore	\$11.52 per square foot
Shopping Center	\$4.44 per square foot
Quality Restaurant	\$24.13 per square foot
Fast-Food Restaurant	\$87.63 per square foot
Pharmacy/Drugstore	\$14.13 per square foot

- For a single-family home selling for \$250,000, the impact fee would represent a 2.4% cost, ultimately to the new homeowner.
- Nonresidential costs vary considerably. For a fast food restaurant with a total development cost pro forma of \$1,000,000, the impact fee cost would be about 26.3% of the project cost. For a shopping center, assuming a per-square-foot construction (including land acquisition costs) of \$120, the impact fee cost would be about 3.7% of the per-square-foot cost. In general, nonresidential land uses would see impact fees around or below 10% of their total construction costs.

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## Introduction

Based upon the latest population and employment forecasts, by the year 2030 Woodstock will be called upon to provide about \$161.3 million in capital improvements for parks facilities and road improvements. This includes about \$155.1 million in City dollars in order to serve new growth alone. The costs to provide these capital improvement projects—including the money already spent on projects that serve future growth—can be charged to the new development that creates the need for the additional facilities.

This Methodology Report presents the methodologies used to determine new development's fair share of the investment in parks facilities and road improvements. This report establishes clear public policies regarding infrastructure development and ensures sound fiscal planning for capital improvements. The report identifies the need for new facilities and includes a compilation of the capital facilities on which impact fee revenue can be spent. One document required for the collection of impact fees is called the Capital Improvements Element (CIE), and is adopted as a chapter, or "element", in the City's Comprehensive Plan. As defined by DIFA, the CIE must include certain calculations and information, and those are also included in this report. The calculations and information, repeated (as applicable) for each category of public facility for which an impact fee will be charged, are:

- a **projection of needs** for the planning period of the adopted Comprehensive Plan;
- the designation of **service areas** - the geographic area in which a defined set of public facilities provide service to development within the area;
- 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 planning period of the adopted Comprehensive Plan;
- a description of **funding sources** for the planning period of the adopted Comprehensive Plan;
- The calculation of the gross impact of new development, credits, and net impact cost; and
- A schedule of maximum impact fees that could be adopted, by land use category.

### ■ Impact Fees Authorized

Under State law, the City can collect money from new development based on that development's proportionate share—the "fair share"—of the cost to provide the facilities it needs. This includes parks & recreation. Revenue for service facilities can be produced from new development in two ways: through future taxes paid by the homes and businesses that growth creates, and through an impact fee assessed as new development occurs.

Impact fees are authorized in Georgia under Code Section 37-71, the *Georgia Development Impact Fee Act* (DIFA), and are administered by the Georgia Department of Community Affairs under Chapter 110-12-2, *Development Impact Fee Compliance Requirements*. Impact fees are a form of revenue authorized by the State, and strictly defined and regulated through State law. The provisions of the DIFA are extensive, in order to assure that new development pays no more than its fair share of the costs and that impact fees are not used to solve existing service deficiencies.

### ■ Investment Recovery

The Georgia Development Impact Fee Act permits recovery by a local government of the cost of providing an improvement that serves new growth and development, even though that cost was incurred prior to the adoption of an impact fee ordinance. As with all impact fees, the cost of the portion of the facility meeting current needs must be borne by the locality (i.e., existing taxpayers), with future development being assessed only for the excess capacity that has been made available to serve that

future growth in accordance with level of service standards that apply to both existing and future development.

Because the amount of dollars eligible to be recovered through an impact fee is based on the capacity available to support future growth and development within the whole system, a value for the existing system must be determined if excess capacity exists.

## ■ 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 is studying the enactment of impact fees for parks & recreation land and facilities, and road improvements. The sections in this Methodology Report provide population and employment forecasts and detailed information regarding the inventory of current facilities, the level of service, and detailed calculations of the impact cost for the specific public facilities.

## ■ Eligible Facilities

The following table shows the facility categories that are eligible for impact fee funding under Georgia law and that are considered in this report. The service area for each public facility category—that is, the geographical area served by the facility category—is also given, along with the standard adopted as the level of service to be delivered for each facility category. Whether or not an existing deficiency exists is also shown for each category. This table is a summary of information contained in the specific public facility category chapter in this report.

**Table Summary-1**  
**Overview of Impact Fee Program - Facilities**  
**City of Woodstock**

	<b>Parks and Recreation</b>	<b>Roads</b>
<b>Eligible Facilities</b>	Acres & Developed components (ballfields, football fields, etc.)	Road projects providing new trip capacity
<b>Service Area(s)</b>	City-wide	City-wide
<b>Level of Service Standard</b>	Number of acres & developed components per dwelling unit	LOS "D" for entire road network
<b>Existing Deficiency?</b>	Yes (facility space and swimming pool)	Yes (Towne Lake Pkwy)
<b>Historic Funding Source(s)</b>	General Fund	General Fund, GDOT

Terms used in **Table Summary-1**:

**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 for projects that serve that service area.

**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.

**Table Summary-2** presents a summary of the anticipated funding sources for capital improvement projects in the parks & recreation and road improvements facility categories. The shortfall is the net amount that could be collected from new growth in the form of impact fees.

<b>FUNDING</b>	<b>Parks &amp; Rec</b>	<b>Roads</b>	<b>SUMMARY</b>
CIE Preparation	\$ 40,002	\$ 40,002	\$ 80,003
New Capital Investment	\$ 57,897,500	\$ 125,100,000	\$ 182,997,500
<b>Total Capital Investment</b>	<b>\$ 57,937,502</b>	<b>\$ 125,140,002</b>	<b>\$ 183,077,503</b>
Outside Funding Sources	\$ -	\$ 21,810,000	\$ 21,810,000
<b>Net Capital Investment</b>	<b>\$ 57,937,502</b>	<b>\$ 103,330,002</b>	<b>\$ 161,267,503</b>
<b>Funding</b>			
Existing Tax Base	\$ 4,012,739	\$ 2,155,556	\$ 6,168,294
New Growth	\$ 53,924,763	\$ 101,174,446	\$ 155,099,209
<b>New Growth</b>			
Taxes	\$ 586,232	\$ 1,059,815	\$ 1,646,046
Shortfall	<b>\$ (53,338,531)</b>	<b>\$ (100,114,631)</b>	<b>\$ (153,453,162)</b>

## ■ Review Requirement

A number of the factors that form the base-line assumptions in this report's impact cost calculations may change over time. The impact fee methodologies for the service areas should be reviewed annually, and should reflect changes in the growth and development of the city. Also, the fiscal elements of the impact fee system should be brought up to current dollars each year.

- The "planning horizon" of this methodology report is 2030; this matches the "horizon" of the City's *Comprehensive Plan* Update. When the *Comprehensive Plan* is again updated, the methodology report (and impact fee methodologies) should be reviewed and updated as needed to meet any new "horizon".
- The amount of future tax revenue generated by future growth is directly related to the City's population and employment projections. These projections should be reviewed every year against other data, such as building permits and utility hook-ups, to confirm continuing validity or to modify the methodologies.
- Employment and population forecasts in this report are drawn from the figures used in the City's *Comprehensive Plan*; any changes to those figures should be reflected in the impact cost calculations.
- Costs should be maintained in present value terms. The land costs parks, as well as the various facility construction costs, should be updated annually.
- Projections in tax base growth should be updated each year to reflect actual growth, and to update the average new house values and value/employee then current in future years.
- Any changes in funding strategy for the facilities included in the impact fee program should be reflected in the impact fee calculation.
- New revenue sources, such as implementation of a new SPLOST program, should be reviewed for potential tax credits against impact fees.

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 development is built than was projected, facilities will be needed sooner to meet the level of service standard. 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.

## ■ Maximum Impact Fee Schedule

The fee schedule presented here show the maximum impact fee for the parks & recreation and road improvements public facility categories that could be charged in Woodstock for each of the land use categories shown, based on the calculations carried out in this report. The net impact fee shown for each public facility category is drawn from that public facility category's chapter and reflects the reductions for the credit based upon anticipated general fund contributions from new development, where applicable. The **total impact fee** shown in the last column includes a 3% fee for administration of the Impact Fee Program.

To read the table, first find the land use you want to investigate. Land uses are listed on the left side of the table. Next, find the Total Impact Fee figure on the right of the row. This is the total impact fee per unit of measure. Finally, find the unit of measure—it is the last column of the land use category. The information can be read as follows: *this land use has an impact fee of \$X per unit of measure.*

## ■ Individual Fee Assessment

A landowner or developer may request an individual assessment when the average figures used in this methodology do not apply to the specific project being proposed. This individual assessment determination will be made preferentially on alternate data available regarding the number of dwelling units or employment characteristics of the specific project, as applicable. Under the appeal procedures of the Development Impact Fee Ordinance, special circumstances can be considered and approved in modifying the fee for a particular project demonstrably differing from the average values used in this methodology.

## ■ Interpretation

Listed in the following fee schedules are the most common residential land uses as identified in the *Trip Generation Manual, Sixth Edition, 1997*, Institute of Transportation Engineers (ITE). Any residential and use not listed here is assessed the same 'per dwelling unit' fee as seen in the fee schedule.

### Adoption of Impact Fee

As noted, the fee schedule shows the **maximum** impact fee that could be adopted under State law. The City may adopt the maximum fee for any given public facility category, or could adopt a lower fee, as part of the Impact Fee Ordinance. In order to fulfill DIFA's requirement that new growth pay its fair, proportionate share, all fees in a particular public facility category could be reduced proportionally (that is, by the same percentage), but individual land use categories within the particular public facility category can not be individually reduced or deleted.

It must be remembered that any across-the-board reduction in the maximum allowable impact fee must be funded with other revenue—general fund or SPLOST, for instance. Such funding from general sales or property taxes will increase credit calculations for taxes generated by new development, further reducing the "net impact fee" calculated for the public facility category.

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**CITY OF WOODSTOCK MAXIMUM ALLOWABLE IMPACT FEE SCHEDULE**


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Land Use Category	<i>Net Impact Fee</i>			Adminis- tration (3%)	TOTAL IMPACT FEE	Unit of Measure*
	Parks & Recreation	Roads	Subtotal			
<i>Residential</i>						
Single-Family Detached Housing	\$2,931.4939	\$3,007.4605	\$5,938.9544	\$178.1686	\$6,117.12	per dwelling
Apartment	\$2,931.4939	\$2,105.5399	\$5,037.0338	\$151.1110	\$5,188.14	per dwelling
Residential Condominium/Townhouse	\$2,931.4939	\$1,861.0051	\$4,792.4990	\$143.7750	\$4,936.27	per dwelling
<i>Port and Terminal</i>						
Truck Terminal	-	\$23,928.8422	\$23,928.8422	\$717.8653	\$24,646.71	per acre
<i>Industrial</i>						
General Light Industrial	-	\$2.0364	\$2.0364	\$0.0611	\$2.10	per square foot
General Heavy Industrial	-	\$0.4383	\$0.4383	\$0.0131	\$0.45	per square foot
Manufacturing	-	\$1.1161	\$1.1161	\$0.0335	\$1.15	per square foot
Warehousing	-	\$1.4492	\$1.4492	\$0.0435	\$1.49	per square foot
Mini-Warehouse	-	\$0.7304	\$0.7304	\$0.0219	\$0.75	per square foot
High-Cube Warehouse	-	\$0.0351	\$0.0351	\$0.0011	\$0.04	per square foot
<i>Lodging</i>						
Hotel	-	\$1,671.3478	\$1,671.3478	\$50.1404	\$1,721.49	per room
All Suites Hotel	-	\$1,169.1939	\$1,169.1939	\$35.0758	\$1,204.27	per room
Business Hotel	-	\$1,362.1859	\$1,362.1859	\$40.8656	\$1,403.05	per room
Motel	-	\$1,706.9482	\$1,706.9482	\$51.2084	\$1,758.16	per room
<i>Recreational</i>						
Campground/Recreational Vehicle Park	-	\$20,078.2130	\$20,078.2130	\$602.3464	\$20,680.56	per camp site
Golf Course	-	\$1,360.5027	\$1,360.5027	\$40.8151	\$1,401.32	per acre
Multipurpose Recreational Facility	-	\$24,397.2693	\$24,397.2693	\$731.9181	\$25,129.19	per acre
Movie Theater	-	\$21.0716	\$21.0716	\$0.6321	\$21.70	per square foot
Arena	-	\$8,997.1342	\$8,997.1342	\$269.9140	\$9,267.05	per acre
Amusement Park	-	\$20,450.7316	\$20,450.7316	\$613.5219	\$21,064.25	per acre
Tennis Courts	-	\$4,389.2410	\$4,389.2410	\$131.6772	\$4,520.92	per acre
Racquet Club	-	\$4.6268	\$4.6268	\$0.1388	\$4.77	per square foot
Bowling Alley	-	\$8.9971	\$8.9971	\$0.2699	\$9.27	per square foot
Recreational Community Center	-	\$6.1763	\$6.1763	\$0.1853	\$6.36	per square foot
<i>Institutional</i>						
Private School (K-12)	-	\$1.3973	\$1.3973	\$0.0419	\$1.44	per square foot
Church/Synagogue	-	\$2.6038	\$2.6038	\$0.0781	\$2.68	per square foot
Day Care Center	-	\$18.6267	\$18.6267	\$0.5588	\$19.19	per square foot
Cemetery	-	\$1,351.9281	\$1,351.9281	\$40.5578	\$1,392.49	per acre
Lodge/Fraternal Organization	-	\$13,404.9534	\$13,404.9534	\$402.1486	\$13,807.10	per employee

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## Maximum Allowable Fee Schedule continued

Land Use Category	Net Impact Fee			Adminis- tration (3%)	TOTAL IMPACT FEE	Unit of Measure*
	Parks & Recreation	Roads	Subtotal			
<i>Medical</i>						
Hospital	-	\$4.1033	\$4.1033	\$0.1231	\$4.23	per square foot
Nursing Home	-	\$621.6583	\$621.6583	\$18.6497	\$640.31	per bed
Clinic	-	\$1,895.1447	\$1,895.1447	\$56.8543	\$1,952.00	per employee
<i>Office</i>						
General Office Building	-	\$3.2168	\$3.2168	\$0.0965	\$3.31	per square foot
Corporate Headquarters Building	-	\$2.2556	\$2.2556	\$0.0677	\$2.32	per square foot
Single-Tenant Office Building	-	\$3.3804	\$3.3804	\$0.1014	\$3.48	per square foot
Medical-Dental Office Building	-	\$8.8350	\$8.8350	\$0.2651	\$9.10	per square foot
Research and Development Center	-	\$2.3695	\$2.3695	\$0.0711	\$2.44	per square foot
<i>Retail</i>						
Building Materials and Lumber Store	-	\$10.2149	\$10.2149	\$0.3064	\$10.52	per square foot
Free-Standing Discount Superstore	-	\$11.1851	\$11.1851	\$0.3356	\$11.52	per square foot
Specialty Retail Center	-	\$6.3288	\$6.3288	\$0.1899	\$6.52	per square foot
Free-Standing Discount Store	-	\$10.9705	\$10.9705	\$0.3291	\$11.30	per square foot
Hardware/Paint Store	-	\$6.5154	\$6.5154	\$0.1955	\$6.71	per square foot
Nursery (Garden Center)	-	\$9.2811	\$9.2811	\$0.2784	\$9.56	per square foot
Nursery (Wholesale)	-	\$10.0323	\$10.0323	\$0.3010	\$10.33	per square foot
Shopping Center	-	\$4.3113	\$4.3113	\$0.1293	\$4.44	per square foot
Factory Outlet Center	-	\$6.8400	\$6.8400	\$0.2052	\$7.05	per square foot
Quality Restaurant	-	\$23.4242	\$23.4242	\$0.7027	\$24.13	per square foot
High-Turnover (Sit-Down) Restaurant	-	\$32.7005	\$32.7005	\$0.9810	\$33.68	per square foot
Fast-Food Restaurant	-	\$85.0806	\$85.0806	\$2.5524	\$87.63	per square foot
Quick Lubrication Vehicle Shop	-	\$10,543.5786	\$10,543.5786	\$316.3074	\$10,859.89	per service bay
Auto-Care Center	-	\$0.6495	\$0.6495	\$0.0195	\$0.67	per square foot
New Car Sales	-	\$9.4082	\$9.4082	\$0.2822	\$9.69	per square foot
Auto Parts Store	-	\$16.3188	\$16.3188	\$0.4896	\$16.81	per square foot
Self-Service Car Wash	-	\$13,719.3553	\$13,719.3553	\$411.5807	\$14,130.94	per stall
Tire Store	-	\$6.5555	\$6.5555	\$0.1967	\$6.75	per square foot
Wholesale Tire Store	-	\$5.3667	\$5.3667	\$0.1610	\$5.53	per square foot
Supermarket	-	\$22.3102	\$22.3102	\$0.6693	\$22.98	per square foot
Convenience Market (Open 24 Hours)	-	\$93.7477	\$93.7477	\$2.8124	\$96.56	per square foot
Convenience Market (Open 15-16 Hours)	-	\$80.5631	\$80.5631	\$2.4169	\$82.98	per square foot
Convenience Market with Gasoline Pumps	-	\$107.4175	\$107.4175	\$3.2225	\$110.64	per square foot
Wholesale Market	-	\$1.3038	\$1.3038	\$0.0391	\$1.34	per square foot
Discount Club	-	\$8.0976	\$8.0976	\$0.2429	\$8.34	per square foot
Home Improvement Superstore	-	\$8.3483	\$8.3483	\$0.2504	\$8.60	per square foot
Electronics Superstore	-	\$11.5860	\$11.5860	\$0.3476	\$11.93	per square foot
Apparel Store	-	\$10.3327	\$10.3327	\$0.3100	\$10.64	per square foot
Pharmacy/Drugstore	-	\$13.7188	\$13.7188	\$0.4116	\$14.13	per square foot
Furniture Store	-	\$1.3016	\$1.3016	\$0.0390	\$1.34	per square foot
<i>Services</i>						
Drive-in Bank	-	\$51.3771	\$51.3771	\$1.5413	\$52.92	per square foot

Impact Fees reflect credit given for forecasted general fund contributions.

\*"square feet" means square feet of gross building floor area.

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# Impact Fee Methodology

## ■ Introduction

In this section, the methodology of impact fee calculation, as carried out in this report, is outlined. The maximum impact fee allowable is calculated. Without an understanding of the philosophy behind the work, the calculations can be somewhat confusing. The bottom line is that a **rational nexus**—a clear and fair relationship between the fee charged and the services provided—must exist for each public facility category. It is perhaps wise to keep in mind the basic tenet of impact fees:

*New development pays no more than its fair share of the costs to provide services to new development.*

The calculations carried out in this report are intended to meet two inter-related goals: calculating the “fair share” of project costs applicable to new development, and meeting the requirements of the *Development Impact Fee Act*. The DIFA provides a series of protections for development. In addition to providing the methodological basis for impact fee calculations, it protects new development against the possibility of double-taxation, and against being required to provide for a different level of service than that adopted for existing development.

The following outline of the impact fee methodology includes information for public facility categories other than parks & recreation; it provides a guide to the future addition of other categories, if desired.

## ■ Data Requirements

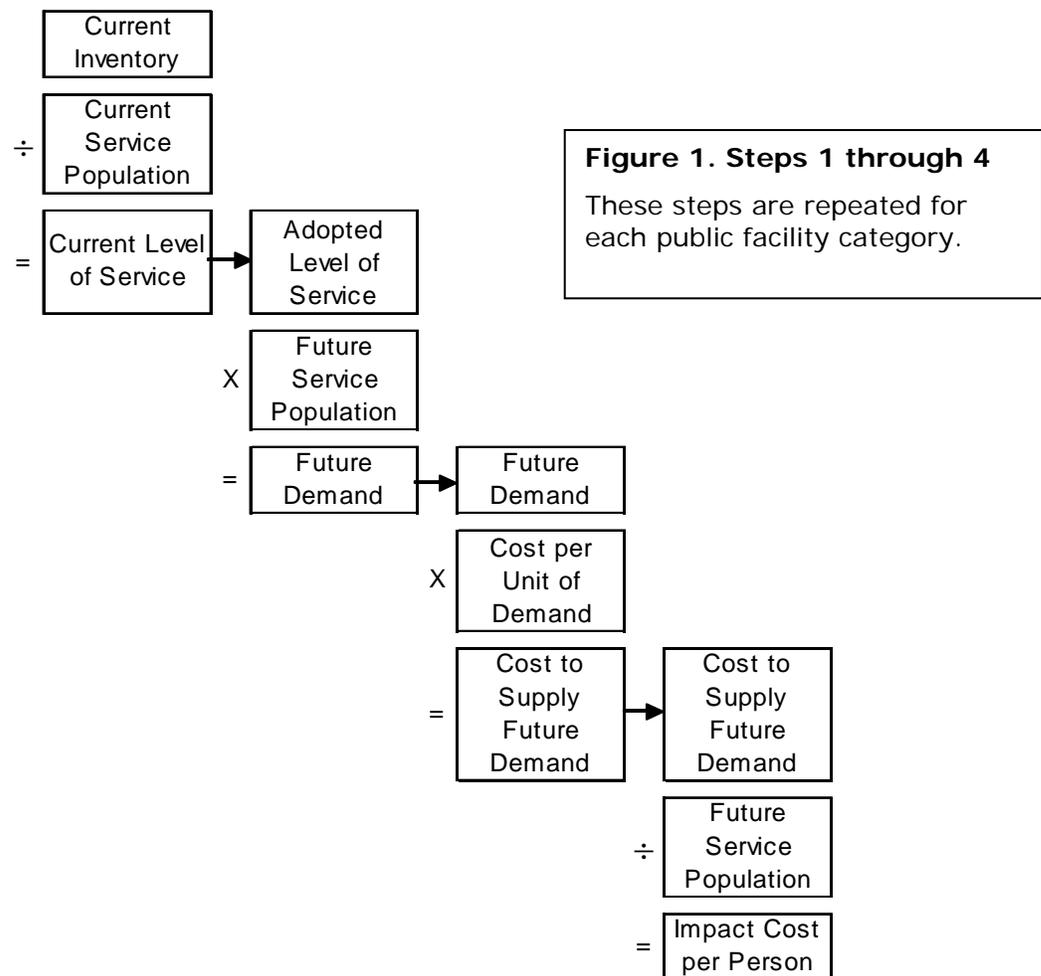
In order to calculate impact fees certain data is required. All of this data can be seen in the applicable sections of this report. Required for calculations are the following:

- Current population, dwelling unit, and employment figures (appears in the “Forecasts” section).
- Forecasts of population, dwelling units, and employment (appears in the “Forecasts” section).
- Current tax digest value (appears in the “Forecasts” section).
- Forecasts of tax base growth (appears in the “Forecasts” section).
- Forecasts of SPLOST collections (where applicable).
- Current inventories of capital facilities in each public facility category to be considered.
- Proposed capital improvement projects to meet future demand (appears in each public facility category section).

Given this data, calculations can be made to produce the gross impact cost in each public facility category, and the net impact fee after credits are applied. The actual calculations are presented in each public facility category chapter. Lastly, the addition of an administrative fee (discussed in the Other Fees and Charges chapter) results in the Maximum Allowable Impact Fee shown on the fee schedule in the Introduction to this report.

## ■ Impact Cost Calculation

The following illustration outlines the general steps undertaken for impact cost calculation. This is the series of calculations that appears in each public facility category chapter. Note that the “service population” depends upon the public facility category being examined. For example, fire protection services in some counties are provided to the population and employment of the unincorporated city, while library services are provided to the entire county (incorporated and unincorporated areas alike). Decisions must be made regarding certain parts of the calculation. In terms of level of service, the city must determine whether the current level of service is adequate to serve the current population or a different level of service should be adopted.



The following steps, outlined in the illustration above, are undertaken in order to calculate the impact cost for each public facility category:

1. The current inventory of eligible facilities providing service is divided by the current population served by those facilities to produce the current level of service. For example, the total square footage of the police station, divided by the population and employment served by that police station produces a square foot per person level of service.

The current level of service can be adopted by the city as the level of service standard. Alternately, the city may determine that the adopted level of service should be higher or lower

than the current level of service. Adopting a higher level of service creates an existing deficiency that must be made up by the existing service population; decreasing the level of service creates excess capacity in the system for new growth that can be recouped through impact fee collection.

2. The adopted level of service is then multiplied by the future population to be served in order to produce the future demand figure. Continuing the police station example, the square foot per person level of service is multiplied by the increase in population and employment in the area of the city served by the police station between 2006 and 2030 to produce a future demand figure in square feet.
3. The future demand figure is multiplied by the cost per unit for future facilities to calculate the cost to supply services that meet future demand. This is an incremental increase method; the average cost to supply one unit of capacity is multiplied by the number of units demanded. Staying with our example, the average cost to acquire land and construct a police station—converted into a cost per square foot figure—is multiplied by the increase in population and employment in the area served by the police station between 2006 and 2030, producing the cost to supply services to that increase in population and employment.

Alternately, a methodology based on known or estimated costs can be used instead of the incremental increase method. In this method, the step "*future demand X cost per unit of demand = cost to supply future demand*" is omitted. Instead, projects are selected that will meet the future demand. Where estimated costs for planned projects are available those figures are used in place of average cost per unit. Where debt service for financing the facility is known, or can be reasonably estimated, those costs can also be included. Finally, the value of excess capacity in the system can be recouped by also including it in the 'cost to supply future demand'.

Quite often, the impact cost calculation uses a combination of the incremental increase and known costs methodologies. For example, the *Comprehensive Plan* lists facilities to be built in the near term (known costs). But over the planning horizon (10-20 years) more facilities may be demanded than will be provided by the proposed facilities. Future projects, based on incremental increase project cost forecasting, would be proposed in order to serve future growth.

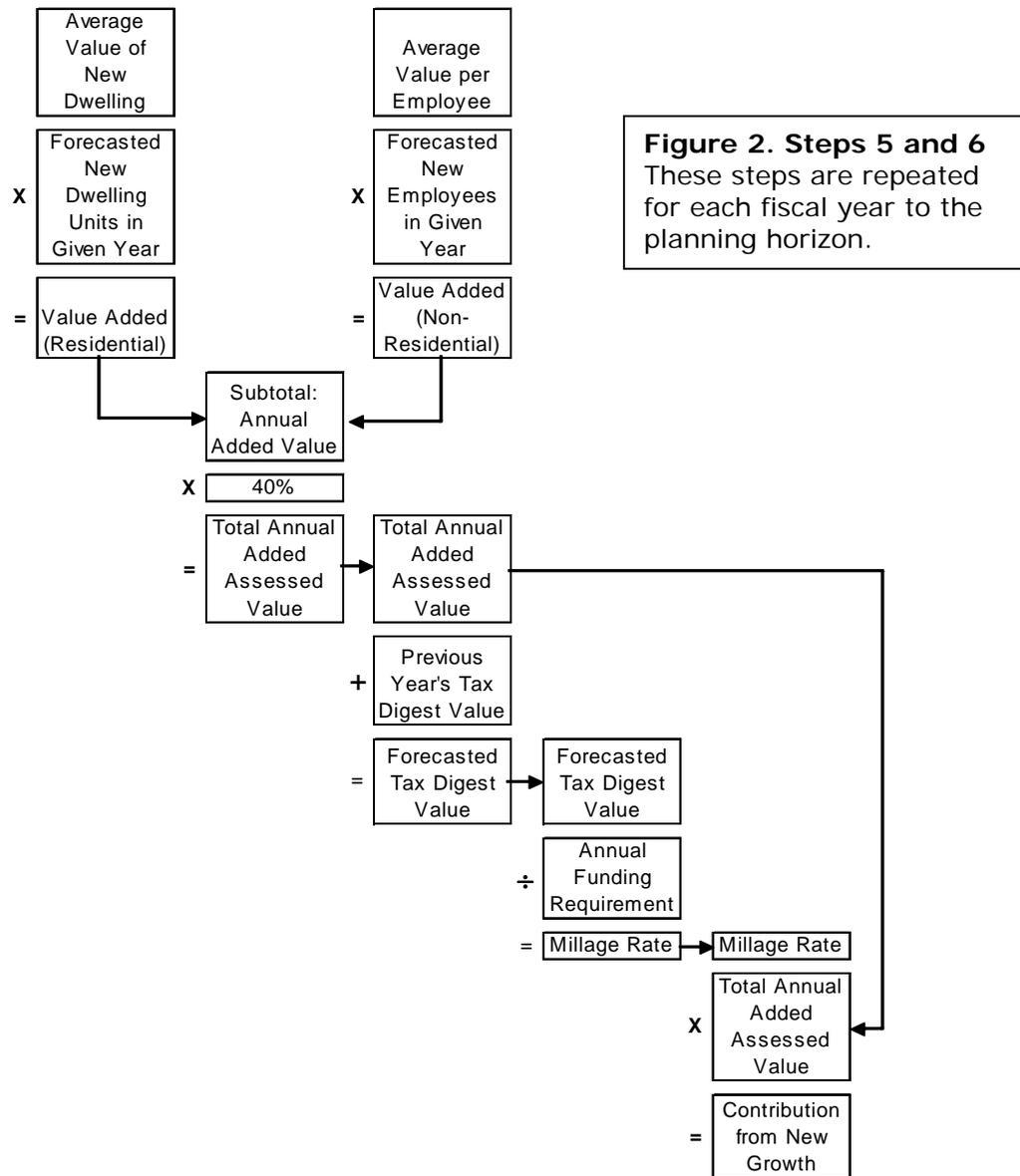
4. The cost to supply future demand is divided by the population to be served to produce an impact cost per person. To finish the example, the cost to construct demanded police station space is divided by the increase in population and employment in the area served by the police station between 2006 and 2030 to produce an impact cost per person.

## ■ Net Impact Cost Calculation

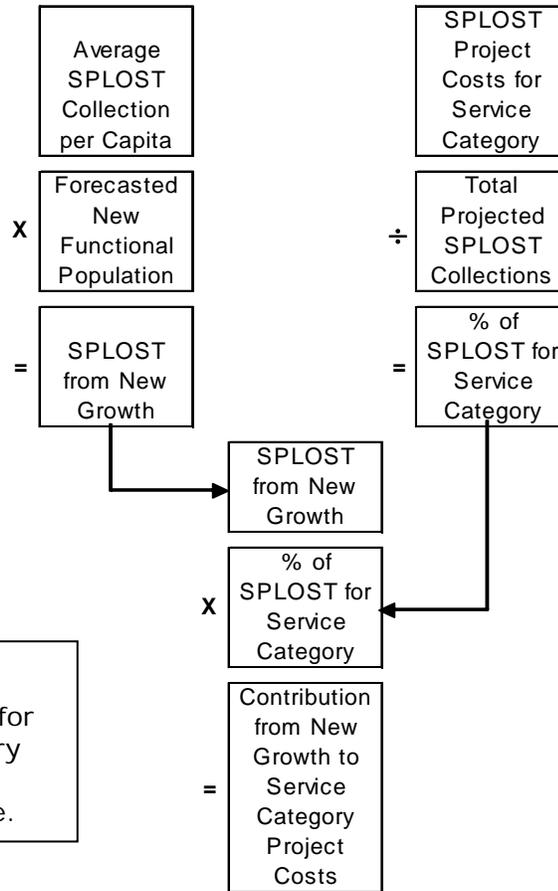
Each of the public facility category sections in this report presents detailed calculations of the impact cost for the specific services. The impact costs in this report are not "impact fees," which are calculated in Step 11. The impact cost and net impact fee cost are calculated for each public facility category in the appropriate sections of this report. In calculating the net impact cost, 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, in order to avoid double taxation. The steps for moving from an impact cost to a net impact cost, continuing from the impact cost calculation steps in the previous section, are as follows:

5. The estimated increase in added value to the tax base, based on forecasted population, dwelling unit and employment growth, is calculated. Added value is derived from the average new dwelling unit value and average value of new nonresidential floor space per employee.
6. Any impact fee eligible projects anticipated to be financed in whole or in part through debt financing are identified. The costs to service the debt are calculated on an annual basis against

the forecast tax base value, per year. The amount of taxes collected for debt service, per public facility category, is identified. In addition, any project costs expected to be met through a “pay as you go” strategy using general funds, are also included in the ‘annual funding requirement’.

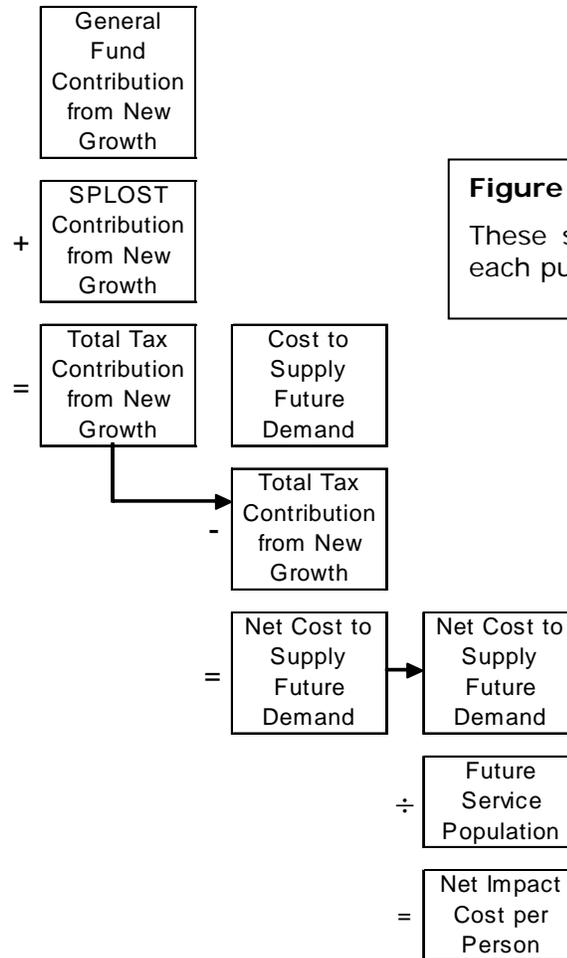


- Where applicable, estimated SPLOST collections are calculated, based on historic reported average per-capita basis, and against forecasted population and employment figures. Alternately, SPLOST collections can be forecast by dividing the expected total revenue by the total population paying into the program.
- Any impact fee eligible projects anticipated to be financed in whole or in part through SPLOST collections are identified. The funding contribution toward these projects attributable to new growth is calculated, based on the forecasted collections and the percentage of the SPLOST total that is ear-marked for the specific projects. These contributions are sub-totaled by public facility category. Where known, proposed future SPLOST programs are included.

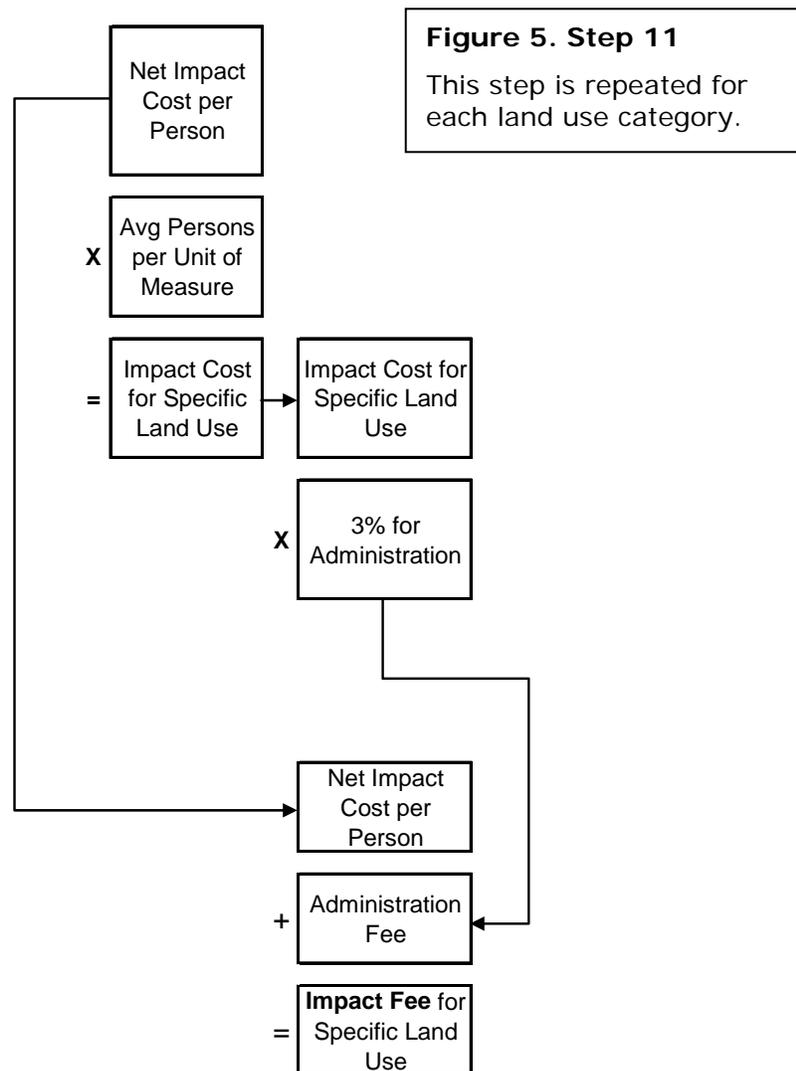


**Figure 3. Steps 7 and 8**  
 These steps are repeated for each public facility category included in the SPLOST program, where applicable.

9. The total of funds expected to be raised through property taxes (general fund financing and debt service repayment) and SPLOST collection (if applicable), totaled by public facility category, is subtracted from the cost to supply future demand (calculated in step 4) to produce a net projects cost for each public facility category.
10. The net projects cost for each public facility category is divided by the population to be served to produce a net impact cost. This is a reiteration of step 4, but with net rather than gross projects cost. (Compare Figure 4 with Figure 1.) The net impact cost is applied to the average number of persons by specific land use to produce a schedule of net impact costs for the public facility category.



**Figure 4. Steps 9 and 10**  
 These steps are repeated for each public facility category.



## ■ Impact Fee Calculation

11. In order to calculate the impact fee for a specific land use category, the net impact cost per person, by public facility category, is multiplied by the average number of persons per unit of measure for that land use to produce the net impact fee for that land use. Net impact fees are shown on the last table in each public facility chapter. Next, the net impact costs for all public facility categories are subtotaled by land use. This subtotal is multiplied by 3% (an administrative fee) and totaled, to produce the **maximum allowable impact fee** for each land use category.

In this report, the unit of measure for residential land uses is dwelling units. Population and dwelling unit forecasts provide the average number of residents per dwelling unit type (single family, multi-family). The nonresidential 'average number of persons per unit of measure' is calculated, under this methodology, from data presented in the Institute of Transportation Engineers' *Trip Generation, 6<sup>th</sup> ed.* For the majority of nonresidential land uses in the impact fee

schedule the average number of employees per 1,000 square feet of building floor area for specific land uses can be derived. Therefore, 1,000 square feet is commonly the unit of measure. Note that there are a few cases where an alternate unit of measure is used; hotels, for example, use guest rooms as a unit of measure.

The maximum allowable impact fees by land use category are shown in the **Introduction**.

## Forecasts

### ■ Population and Employment Forecasts

In order to accurately calculate the demand for expanded services for Woodstock, new growth and development must be quantified in future projections; this includes forecasts for population, dwelling units, and employment to the year 2030. These projections provided the base-line conditions from which the level of service calculations were produced. The projections used for the parks & recreation public facility category is based on the dwelling unit forecast. Population and employment forecasts are necessary, in order to forecast future tax digest growth. All of these forecasts are based on the current *Comprehensive Plan* figures.

Accurate projections of population, households, housing units, and employment are important in that:

- Dwelling unit data and forecasts relate to certain service demands that are household based, such as parks, and are used to calculate impact costs in that the cost is assessed when a building permit is issued. The number of households—defined as *occupied* housing units—is always smaller than the supply of available housing units. Over time, however, each housing unit is expected to become occupied by a household, even though the unit may become vacant during future re-sales or turnovers.
- Employment and population data is used to calculate the added value of future tax digest years, in order to estimate new growth's contribution towards non-eligible project costs through property tax payments.

## ■ Future Growth Projections

**Table P-1** presents the forecasts for population, dwelling units, and employment for each year from 2006 to 2030. The figures shown are, in essence, mid-year estimates reflecting Census Bureau practice. In other words, the increase in population between 2006 and 2007 would actually be from mid-2006 to mid-2007.

**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: *Joint Comprehensive Plan*, 2006.

In this table, the forecast figures are drawn directly from the *Comprehensive Plan Update*.

## ■ Service Area Projections

In **Table P-2** the service area forecast is presented for a single city-wide service area, measured in dwelling units. These are the figures that will be used in the subsequent parks & recreation chapter to calculate impact costs and fees.

**Table P-2**  
**Service Area Forecast**  
**2006 - 2030**

	City-wide Dwelling Units (Parks)
<b>2006</b>	<b>7,938</b>
2007	8,365
2008	8,813
2009	9,283
2010	9,776
2011	10,293
2012	10,833
2013	11,401
2014	11,994
2015	12,617
2016	13,267
2017	13,947
2018	14,660
2019	15,405
2020	16,183
2021	16,997
2022	17,848
2023	18,735
2024	19,663
2025	20,631
2026	21,640
2027	22,694
2028	23,794
2029	24,939
<b>2030</b>	<b>26,133</b>

**Net Increase, 2006-2030:**

**18,195**

## ■ Tax Digest Forecast

An important component of impact fee calculations is a forecast of the expected revenues from taxes. New development pays for the capital improvements needed to serve that development through impact fees, charged at the time that the building permit is issued, as well as through future taxes that are reasonably expected to be spent for those same capital improvements. Credit must be granted for those future taxes that will be paid by new development; failure to do so would be a form of double taxation.

Secondly, some capital improvement expenditures by the City may be made for improvements to address existing deficiencies. New development cannot be charged to eliminate existing deficiencies while at the same time being charged impact fees for its own facility needs. To the extent that new development generates taxes that are used to pay for existing deficiencies in the same public facility categories as impact fees are being assessed, a credit against impact fees must be provided.

For any public facility category where a credit is due, the credit is applied equally to all new development against their impact fees by deducting the amount that will be paid through taxes from the total public facility costs that are attributable to new development. The credit to be deducted from the impact fee is calculated as the present value of the future tax stream for the years the tax will be collected, to the extent that the taxes will be expended on impact fee eligible facilities (for which impact fees are being collected) and the non-impact fee eligible portion of capital improvements. In Woodstock, some future non-impact fee eligible capital improvements are expected to receive some portion of their funding from general fund expenditures. Credits based on future growth's contributions to this source are calculated in the appropriate public facility category chapters.

Property owners in Woodstock contribute to the general fund of the City through property tax payments. These payments are levied based on the budgetary demands to provide services and capital improvements throughout the city. After establishing the financial needs for the next fiscal year through a budget-setting process, the City then determines the millage<sup>1</sup> rate required to raise the necessary funds. The millage rate is applied against the assessed value of property (40% of the appraised value). General fund revenues can also be used to guarantee a variety of general obligation bonds, tax anticipation notes, or other types of loans; these financial instruments, in turn, may be used to undertake capital improvement projects.

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<sup>1</sup> A mil is one thousandth of a cent; the millage rate is stated in dollars per one thousand dollars of assessed value.

In **Table P-3**, the value added to the tax base by new growth is calculated. New dwelling units are added at the estimated average sales price of \$185,000 (\$74,000 assessed value) per unit. Nonresidential value added is calculated at an average of 500 sf per employee at an average \$145 development cost per square foot of floor area (plus one-third for equipment and fixed assets), for an estimate of \$38,546 in assessed value per employee. The value added is expressed in *assessed* value; this is 40% of the actual or appraised value. Millage rates are applied to assessed value, rather than appraised.

**Table P-3  
New Growth Added Value**

Year	Residential			Non-Residential			Total Annual Added Assessed Value
	Dwelling Units	New Dwelling Units	Added Assessed Value*	Employees	New Employees	Added Assessed Value**	
2006	7,938			11,233			
2007	8,365	427	\$31,598,000	11,811	578	\$22,279,588	\$53,877,588
2008	8,813	448	\$33,152,000	12,402	591	\$22,780,686	\$55,932,686
2009	9,283	470	\$34,780,000	13,004	602	\$23,204,692	\$57,984,692
2010	9,776	493	\$36,482,000	13,616	612	\$23,590,152	\$60,072,152
2011	10,293	517	\$38,258,000	14,237	621	\$23,937,066	\$62,195,066
2012	10,833	540	\$39,960,000	14,865	628	\$24,206,888	\$64,166,888
2013	11,401	568	\$42,032,000	15,499	634	\$24,438,164	\$66,470,164
2014	11,994	593	\$43,882,000	16,138	639	\$24,630,894	\$68,512,894
2015	12,617	623	\$46,102,000	16,780	642	\$24,746,532	\$70,848,532
2016	13,267	650	\$48,100,000	17,425	645	\$24,862,170	\$72,962,170
2017	13,947	680	\$50,320,000	18,070	645	\$24,862,170	\$75,182,170
2018	14,660	713	\$52,762,000	18,715	645	\$24,862,170	\$77,624,170
2019	15,405	745	\$55,130,000	19,358	643	\$24,785,078	\$79,915,078
2020	16,183	778	\$57,572,000	19,998	640	\$24,669,440	\$82,241,440
2021	16,997	814	\$60,236,000	20,633	635	\$24,476,710	\$84,712,710
2022	17,848	851	\$62,974,000	21,263	630	\$24,283,980	\$87,257,980
2023	18,735	887	\$65,638,000	21,885	622	\$23,975,612	\$89,613,612
2024	19,663	928	\$68,672,000	22,499	614	\$23,667,244	\$92,339,244
2025	20,631	968	\$71,632,000	23,103	604	\$23,281,784	\$94,913,784
2026	21,640	1,009	\$74,666,000	23,696	593	\$22,857,778	\$97,523,778
2027	22,694	1,054	\$77,996,000	24,277	581	\$22,395,226	\$100,391,226
2028	23,794	1,100	\$81,400,000	24,844	567	\$21,855,582	\$103,255,582
2029	24,939	1,145	\$84,730,000	25,396	552	\$21,277,392	\$106,007,392
2030	26,133	1,194	\$88,356,000	25,935	539	\$20,776,294	\$109,132,294

\*New dwelling unit value is estimated at an assessed value of \$74,000 per dwelling unit.

\*\*Non-residential value is estimated at an assessed value of \$38,546 per employee.

Table P-4 provides a summary of the 2006 tax digest.

**Table P-4**  
**Tax Digest - 2006**  
**City of Woodstock, GA**

<b>Category</b>	<b>Total Tax Digest (40% value)</b>
Residential	\$ 522,792,367
Commercial	310,392,652
Agricultural	5,768,160
Conservation	902,520
Industrial	40,389,216
Utility	6,034,080
Exemptions (M&O)	(7,733,166)
	\$878,545,829

Source: 2006 tax base information from the  
 City of Woodstock Tax Digest.

In **Table P-5**, the property tax base of the City is forecast to the year 2030. This is a combination of the tax digest base year (2006) from Table P-4 and the annual increase in assessed value from Table P-3.

**Table P-5**  
**Tax Base Growth**  
**2006 - 2030**

<b>Year</b>	<b>Tax Base (2006 Digest)</b>	<b>Total Annual Added Assessed Value</b>	<b>Total Tax Base Value</b>
2006	\$878,545,829		\$878,545,829
2007		\$53,877,588	\$932,423,417
2008		\$55,932,686	\$988,356,103
2009		\$57,984,692	\$1,046,340,795
2010		\$60,072,152	\$1,106,412,947
2011		\$62,195,066	\$1,168,608,013
2012		\$64,166,888	\$1,232,774,901
2013		\$66,470,164	\$1,299,245,065
2014		\$68,512,894	\$1,367,757,959
2015		\$70,848,532	\$1,438,606,491
2016		\$72,962,170	\$1,511,568,661
2017		\$75,182,170	\$1,586,750,831
2018		\$77,624,170	\$1,664,375,001
2019		\$79,915,078	\$1,744,290,079
2020		\$82,241,440	\$1,826,531,519
2021		\$84,712,710	\$1,911,244,229
2022		\$87,257,980	\$1,998,502,209
2023		\$89,613,612	\$2,088,115,821
2024		\$92,339,244	\$2,180,455,065
2025		\$94,913,784	\$2,275,368,849
2026		\$97,523,778	\$2,372,892,627
2027		\$100,391,226	\$2,473,283,853
2028		\$103,255,582	\$2,576,539,435
2029		\$106,007,392	\$2,682,546,827
2030		\$109,132,294	\$2,791,679,121

The information in these tables will be used in the public facility category chapters of this document, wherever a portion of the capital improvement costs is not impact fee eligible. Total tax base value in any given year, from Table P-5, is used to calculate the millage rate required to meet funding requirements. The credit for tax contributions from new growth is then based on this rate times the value added to the tax digest by new growth. The value added by new residential growth in any given year, shown in Table P-3, is used for credit calculations where residential growth alone is charged impact fees, such as in the parks & recreation category.

## ■ SPLOST Credit Calculations

To the extent that capital projects in a SPLOST program could be included in the impact fee program, or where a SPLOST program project is necessary to meet an existing deficiency in service, a credit must be applied against impact fees to the extent that new growth will contribute—through SPLOST collections—toward the costs of those capital projects. In Woodstock the current SPLOST program (SPLOST V) includes some impact fee eligible capital projects in the public facility categories included in this report. A SPLOST credit is calculated in this report where project costs that would otherwise be impact fee eligible are instead being funded through SPLOST collections. The overall credits are calculated here; an adjustment against overall project costs appears in the public facility section being affected.

The SPLOST V program began in 2006 and will continue for five years. A forecast must be made of anticipated contributions from new growth in order to calculate the appropriate credit against impact fee project costs. In **Table P-6** an average county-wide SPLOST collection amount per capita (day/night population) is calculated. This is based on historic collection data, and by utilizing a full year of data reflects seasonal fluctuations. The monthly functional population figures are based on a straight-line projection between known annual forecast data points.

**Table P-6**  
**SPLOST IV Collection History**  
**12-month History**

Month	Year	Total County Population & Employment	SPLOST Collection	Collection per day/night population
Sep	2005	249,532	\$2,364,179	\$9.47
Oct	2005	250,505	\$2,636,574	\$10.53
Nov	2005	251,479	\$2,320,356	\$9.23
Dec	2005	252,452	\$2,271,212	\$9.00
Jan	2006	253,426	\$2,223,651	\$8.77
Feb	2006	254,399	\$2,661,354	\$10.46
Mar	2006	255,373	\$2,430,349	\$9.52
Apr	2006	256,346	\$2,441,854	\$9.53
May	2006	257,320	\$2,496,720	\$9.70
Jun	2006	258,293	\$2,967,936	\$11.49
Jul	2006	259,291	\$2,581,604	\$9.96
Aug	2006	260,288	\$2,874,684	\$11.04
Average Collection per capita				<b>\$9.8913</b>

In **Table P-7** the average collection per capita (\$9.8913) is applied to the future forecast of new growth in the City of Woodstock. This is shown as a running total since as new growth comes to the city it will continue to pay into the SPLOST V fund over the life of the program. Monthly day/night population figures are based on straight-line projections between given annual forecast figures.

Table P-7  
**SPLOST V New Growth Collection Forecast**  
 2006 - 2011

Average SPLOST Generation per capita:

\$9.8913

Month	Year	Net New Population & Employment	Total New Pop & Emp per Month	SPLOST Collection	Annual \$
Sep	2006	128	128	\$ 1,265.26	
Oct	2006	128	256	2,530.52	
Nov	2006	128	384	3,795.77	
Dec	2006	128	512	5,061.03	\$12,653
Jan	2007	128	640	6,326.29	
Feb	2007	128	767	7,591.55	
Mar	2007	128	895	8,856.81	
Apr	2007	128	1,023	10,122.06	
May	2007	128	1,151	11,387.32	
Jun	2007	128	1,279	12,652.58	
Jul	2007	133	1,412	13,968.12	
Aug	2007	133	1,545	15,283.66	
Sep	2007	133	1,678	16,599.19	
Oct	2007	133	1,811	17,914.73	
Nov	2007	133	1,944	19,230.27	
Dec	2007	133	2,077	20,545.81	\$160,478
Jan	2008	133	2,210	21,861.35	
Feb	2008	133	2,343	23,176.89	
Mar	2008	133	2,476	24,492.43	
Apr	2008	133	2,609	25,807.96	
May	2008	133	2,742	27,123.50	
Jun	2008	133	2,875	28,439.04	
Jul	2008	138	3,013	29,805.69	
Aug	2008	138	3,152	31,172.33	
Sep	2008	138	3,290	32,538.97	
Oct	2008	138	3,428	33,905.62	
Nov	2008	138	3,566	35,272.26	
Dec	2008	138	3,704	36,638.90	\$350,235
Jan	2009	138	3,842	38,005.55	
Feb	2009	138	3,981	39,372.19	
Mar	2009	138	4,119	40,738.83	
Apr	2009	138	4,257	42,105.48	
May	2009	138	4,395	43,472.12	
Jun	2009	138	4,533	44,838.76	
Jul	2009	143	4,677	46,257.34	
Aug	2009	143	4,820	47,675.91	
Sep	2009	143	4,963	49,094.48	
Oct	2009	143	5,107	50,513.05	
Nov	2009	143	5,250	51,931.63	
Dec	2009	143	5,394	53,350.20	\$547,356
Jan	2010	143	5,537	54,768.77	
Feb	2010	143	5,681	56,187.34	
Mar	2010	143	5,824	57,605.92	
Apr	2010	143	5,967	59,024.49	
May	2010	143	6,111	60,443.06	
Jun	2010	143	6,254	61,861.63	

Continued on next page.

Table P-7 continued.

Jul	2010	149	6,403	63,333.78	
Aug	2010	149	6,552	64,805.93	
Sep	2010	149	6,701	66,278.08	
Oct	2010	149	6,850	67,750.24	
Nov	2010	149	6,998	69,222.39	
Dec	2010	149	7,147	70,694.54	\$751,976
Jan	2011	149	7,296	72,166.69	
Feb	2011	149	7,445	73,638.84	
Mar	2011	149	7,594	75,110.99	
Apr	2011	149	7,742	76,583.14	
May	2011	149	7,891	78,055.29	
Jun	2011	149	8,040	79,527.44	
Jul	2011	154	8,194	81,053.17	
Aug	2011	154	8,349	82,578.89	\$618,714
Total Collection from New Growth			\$ 2,441,412.04		

**Table P-8** utilizes the anticipated project funding from the SPLOSY V program to calculate the percentage of SPLOST total collections represented by the individual category. Not all of the categories from the SPLOST are shown here; the list is limited to categories that are also included in the current impact fee program. Note that this method of credit calculation may overestimate the applicable credit against capital costs.

**Table P-8**  
**Selected SPLOST Projects**  
**2006 SPLOST V Program**

Public Facility Category	Anticipated SPLOST Revenue	% of SPLOST Total
Road Improvements	\$7,500,000	3.75%
TOTAL SPLOST:		\$200,000,000

**Table P-9** presents a calculation of the applicable credit for the SPLOST V program, based on the forecasted collections from new growth in Table P-7 and the ‘% of SPLOST total’ figures from Table P-8. This is the credit amount that will be applied against capital costs in the road improvements public facility category chapter of this report.

**Table P-9**  
**SPLOST Credit Calculation**  
**Based on SPLOST V Forecasts**

<b>Road Improvements</b>	
Total SPLOST V Collection from New Growth	\$2,441,412
% of SPLOST V Total for Parks Projects	x <u>3.75%</u>
<b>Total Credit against ROAD project costs</b>	<b>= \$91,553</b>

# Parks and Recreation Services

## ■ Introduction

Public recreational opportunities are available in Woodstock through a number of parks facilities and programs operated by the City. Demand for recreational facilities is almost exclusively related to the city's resident population. Businesses make some incidental use of public parks for office events, company softball leagues, etc., but the use is minimal compared to that of the families and individuals who live in the city. Thus, the parks and recreation impact fee is limited to future residential growth.

## ■ Service Area

Parks and recreational facilities are made available to the city's population without regard to the political jurisdiction within which the resident lives. In addition, the facilities are provided equally to all residents, and often used on the basis of the programs available, as opposed to proximity of the facility. As a general rule, parks facilities that provide different types of recreational opportunities are located throughout the city, and future facilities will continue to be located in the city so that all residents will have recreational opportunities available on an equal basis. Thus, the entire city is considered a single service area for parks & recreation.

**Table PR-1  
Current Inventory of Park Facilities  
Developed Acres**

<b>Facility</b>	<b>Park Acreage*</b>
Dupree Park	24.5
Woodlands Park	30.0
City Park	2.0
Springfield Park	2.0
Senior Center	1.5
Corps Property	10.0
	70.0

\*Parks acreage inventory includes only developed acres; there is a total of 479.12 parks acres under the control of the City.

## ■ Level of Service

**Table PR-1** provides an inventory of the acreage of developed parks under the control of the department in 2006. The City controls a total of about 480 acres, of which 70 are developed. The City will calculate a level of service based on developed—rather than total—parks acres. This total acreage of developed parks is equivalent to 8.82 acres per 1,000 dwelling units. The calculation of current parks acreage level of service, as well as the calculation of certain developed components per 1,000 dwelling units, is shown in **Table PR-2**. Note that other categories of components not shown in this table may exist in the City inventory now or in the future.

**Table PR-2**  
**Current Level of Service Calculation**

Total Park Acreage	2006 Dwelling Units	AC/1,000 Dwelling Units
70.0	7,938	8.82

Component Type	Current Inventory (2006)	LOS per 1,000 Dwelling Units
Ball Fields	2	0.252
Track/Trail*	4	0.504
Playgrounds	3	0.378
Pavilion/Shelters	5	0.630

\*Includes jogging or running track, and walking trails.

■ Forecasts for Service Area

**FUTURE DEMAND**

The County has adopted the current level of service as its level of service standard for the developed components listed in Table PR-2, but will add two new projects to the level of service calculations. It is the intention of the City to add facility square footage and a swimming pool to the current parks & recreation inventory. These projects include a recreation facility and outdoor pool, with possible YMCA participation. Neither of these facility types exist today in the city. This is an increase over the current level of service (zero). **Table PR-3** provides the calculation for determining what level of service would result from adding the recreation facility (65,000 square feet) and swimming pool to the current inventory and measuring the resulting totals against the future service area population. This level of service is then applied to the current (2006) service area population, revealing a current deficiency of 19,744 square feet and 30% of a swimming pool. (The cost to remedy a current deficiency cannot be met through impact fees, but must come from some other source.)

**Table PR-3  
Future Level of Service Determination  
Recreation Facility and Swimming Pool**

Existing Facility Square Footage	0	Existing Pools	0
Square Footage to be Added (2006-2030)	65,000	Pools to be Added (2006-2030)	1
<b>Total Square Feet in 2030</b>	<b>65,000</b>	<b>Total Pools in 2030</b>	<b>1</b>
Total Square Feet in 2030	65,000	Total Pools in 2030	1
Dwelling Units in 2030	26,133	Dwelling Units in 2030	26,133
<b>Square Feet/1,000 Dwelling Units</b>	<b>2487.276623</b>	<b>Pools/1,000 Dwelling Units</b>	<b>0.038266</b>
Square Feet/1,000 Dwelling Units	2487.276623	Pools/1,000 Dwelling Units	0.038266
Dwelling Units in 2006	7,938	Dwelling Units in 2006	7,938
Current Demand for Square Feet	19,744	Current Demand for Pools	0.3
Current Demand for Square Feet	19,744	Current Demand for Pools	0.3
Existing Facility Square Footage	0	Existing Pools	0.0
Existing Deficiency (Square Feet)	(19,744)	Existing Deficiency (Pools)	(0.3)

At this point, the City has adopted a level of service standard for parks acreage and developed components based on the current LOS for parks acreage, ball fields, trails, playgrounds and picnic shelters (Table PR-2), and a level of service standard for facility space and swimming pools that is higher than the current LOS (Table PR-3). **Table PR-4** shows the future demand in parks acreage and components based on these adopted LOS standard for parks acreage, facility space and developed components. The increase in dwelling units between 2006 and 2030 is multiplied by the level of service standard to produce the future demand. The 'new dwelling units' figure is taken from Table P-2. Again, there is no existing deficiency in park acres; there is an existing deficiency of 19,744 square feet in facility space, and 30% of a swimming pool.

**Table PR-4  
Future Demand Calculation  
New Growth**

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

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

Existing Deficiency 19,744

Total SF Demanded **65,000**

<b>Adopted LOS per 1,000 Dwelling Units</b>	<b>New Components Demanded (2006-2022)</b>	
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.

**Table PR-5** presents a schedule of future park acreage demand, and projects to meet that demand, based on the adopted LOS. While the specific land acquisition projects may be re-configured over time, 160 new acres are ultimately impact fee eligible.

**Table PR-5  
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		
<b>Net New Growth Total:</b>					<b>160</b>

## FUTURE COSTS

**Table PR-6** is a listing of the future capital projects costs for the developed components required in order to maintain the adopted level of service standards. The 'units to be added' figures are drawn from Table PR-4.

Note that the demand figures are rounded in the 'units to be added' column. Since the City will not be building six-tenths of a ball field, two-tenths of a trail, or seven-tenths of a swimming pool, the future demand is expressed in whole projects. The result is that over time the City will construct two projects that will both serve new growth and meet the existing deficiency (the recreation facility, community center and swimming pool), and other projects that serve growth beyond the current planning horizon (and can recoup the impact fee eligible portions of those projects from the new growth after 2030).

Also in this table, the estimated project costs are calculated. 'Cost per unit' figures are based on City estimates or comparable projects in other jurisdictions. The '% for new growth' figures reflect the number of components to be added in a particular category, less any excess capacity created by 'rounding up' the demanded facility figures. For example, 5 ball fields will be built to serve new growth. But only 4.6 fields are actually demanded by new growth to the year 2030. The 'extra' 0.4 of a ball field will serve growth beyond that year. Thus, 92% of the ball fields are eligible for impact fee collection (4.6 divided by 5) in this impact fee program. The excess capacity could be recouped from impact fee collections after the current forecasted service area population has been reached. Existing deficiencies also affect the '% for new growth' figures for the recreation facility and swimming pool. For example, while a single swimming pool will be built, 30% of this project is required to serve existing development. Thus 70% of the project serves new growth and is impact fee eligible. All costs are shown in current (2007) dollars.

**Table PR-6  
Future Park Facility Costs**

<b>Facility Type</b>	<b>Units to be Added (2006-2030)</b>	<b>Cost per Unit*</b>	<b>Gross Cost</b>	<b>% for New Growth</b>	<b>Net Cost to New Growth</b>
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
			<b>\$17,897,500</b>		<b>\$13,884,761</b>

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

**Table PR-7** presents the estimated cost for the land acquisition projects. The cost estimate for land acquisition (\$250,000 per acre) is based on comparable land acquisition costs. All costs are in current (2007) dollars.

**Table PR-7  
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		<b>\$40,000,000</b>

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

**Table PR-8  
Total Costs to Serve New Growth**

Description	Total
Park Facilities	\$13,884,761
Park Acres	\$40,000,000
CIE Preparation*	\$40,002
Gross New Growth Cost	<b>\$53,924,763</b>

\*One-half the total cost to prepare the Capital Improvements Element.

**Table PR-8** summarizes the combined costs to provide the adopted level of service to the future population. In addition to the system improvement costs for land acquisition and park facilities, through impact fee collections the City will recoup the cost of preparing the Capital Improvements Element.<sup>2</sup> Half of the total cost to prepare the CIE (\$40,002 ) is added to the impact fee eligible project costs from Tables PR-6 and PR-7, to produce a gross new growth cost figure. The cost of the CIE preparation is wholly applicable to new growth since the demand for future services—the reason for the CIE preparation—is attributable to that same new growth.

<sup>2</sup> DIFA specifies that the County may collect fees for “expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element”.

■ **Gross Impact Cost Calculation**

The gross impact cost per person is calculated in **Table PR-9**. The ‘total costs attributable to new growth figure’ is the ‘gross new growth cost’ figure from the preceding table. This impact cost is not an “impact fee.” In calculating an impact fee, the cost must be reduced to the extent that new growth and development will pay future taxes toward financing the improvements, in order to avoid double taxation.

**Table PR-9  
Gross Impact Cost Calculation**

<b>Total Costs Attributable to New Growth</b>	<b>New Dwelling Units (2006-30)</b>	<b>Gross Impact COST per Dwelling Unit</b>
\$53,924,763	18,195	\$2,963.7133

■ **Credit Calculation**

There is one credit calculation that is carried out for this public facility category—property tax contributions. In **Table PR-10** the anticipated property tax contribution from new growth towards the cost to complete future capital facility projects is calculated. The tax base information is taken from Table P-5, and the annual funding requirement is drawn from Table PR-6 (the difference between total project costs and project costs attributable to new growth). The funding requirement for developed components and facility space is the portion of the capital projects that are not impact fee eligible at this time; these can reasonably be assumed to be funded through the general fund. In the absence of any other identified funding strategy, the non-eligible developed component costs have been annualized. The millage rate is simply the rate required to meet the annual funding requirement with the given tax digest value. The contribution from new growth is the millage rate multiplied by the residential added value shown in Table P-3. (Residential added value is used, rather than total added value, since the impact fee for park & recreation services will only be levied against residential growth.)

**Table PR-10**  
**New Growth Contribution Through Property Taxes**  
**2006 - 2030**

Year	Tax Digest*	Annual Funding Requirement	Millage Rate	Residential Added Value**	Contribution from New Growth
2006	\$878,545,829	\$0	0.00000	\$0	\$0
2007	\$932,423,417	\$167,197	0.17931	\$31,598,000	\$5,666
2008	\$988,356,103	\$167,197	0.16917	\$64,750,000	\$10,954
2009	\$1,046,340,795	\$167,197	0.15979	\$99,530,000	\$15,904
2010	\$1,106,412,947	\$167,197	0.15112	\$136,012,000	\$20,554
2011	\$1,168,608,013	\$167,197	0.14307	\$174,270,000	\$24,934
2012	\$1,232,774,901	\$167,197	0.13563	\$214,230,000	\$29,055
2013	\$1,299,245,065	\$167,197	0.12869	\$256,262,000	\$32,978
2014	\$1,367,757,959	\$167,197	0.12224	\$300,144,000	\$36,690
2015	\$1,438,606,491	\$167,197	0.11622	\$346,246,000	\$40,241
2016	\$1,511,568,661	\$167,197	0.11061	\$394,346,000	\$43,619
2017	\$1,586,750,831	\$167,197	0.10537	\$444,666,000	\$46,855
2018	\$1,664,375,001	\$167,197	0.10046	\$497,428,000	\$49,970
2019	\$1,744,290,079	\$167,197	0.09585	\$552,558,000	\$52,965
2020	\$1,826,531,519	\$167,197	0.09154	\$610,130,000	\$55,850
2021	\$1,911,244,229	\$167,197	0.08748	\$670,366,000	\$58,644
2022	\$1,998,502,209	\$167,197	0.08366	\$733,340,000	\$61,352
2023	\$2,088,115,821	\$167,197	0.08007	\$798,978,000	\$63,975
2024	\$2,180,455,065	\$167,197	0.07668	\$867,650,000	\$66,531
2025	\$2,275,368,849	\$167,197	0.07348	\$939,282,000	\$69,020
2026	\$2,372,892,627	\$167,197	0.07046	\$1,013,948,000	\$71,444
2027	\$2,473,283,853	\$167,197	0.06760	\$1,091,944,000	\$73,817
2028	\$2,576,539,435	\$167,197	0.06489	\$1,173,344,000	\$76,141
2029	\$2,682,546,827	\$167,197	0.06233	\$1,258,074,000	\$78,413
2030	\$2,791,679,121	\$167,197	0.05989	\$1,346,430,000	\$80,640
<b>Total New Growth Contribution, 2006-2030</b>					<b>\$586,232</b>

\*Running Total; Tax digest information taken from Table P-5.

\*\*Residential value added figures from Table P-3.

■ **Net Impact Cost Calculation**

In calculating the net impact cost, the applicable credit for future tax contributions (from Table PR-10) is subtracted from the total impact fee eligible project costs to produce a net impact-fee-eligible project cost figure. This is shown in the first part of **Table PR-11**. Using the net cost figure, the net impact cost per dwelling unit is calculated, based on the increase in dwelling units between 2006 and 2030.

**Table PR-11  
Net Impact Cost Calculation**

	Total Eligible Project Costs:	\$53,924,763
	Less New Growth Contribution (property tax):	(\$586,232)
		= NET Project Costs: \$53,338,531
<hr/>		
<b>NET Costs Attributable to New Growth</b>	<b>New Dwelling Units (2006-30)</b>	<b>Net Impact COST per Dwelling Unit</b>
\$53,338,531	18,195	\$2,931.4939

■ **Net Fee Schedule**

The fee schedule that follows presents the **maximum net impact fee** that could be charged in Woodstock for the parks and recreation public facility category, based on the calculations carried out in this section. The total impact fee shown reflects the reductions for the credit based upon anticipated tax contributions from new development. Parks and recreation impact fees are collected from residential development only.

**CITY OF WOODSTOCK PARKS AND RECREATION NET IMPACT FEE SCHEDULE**

Net Impact Cost: \$2,931.49

CODE	LAND USE	Unit of Measure	Fee per Unit
<i>Residential (200-299)</i>			
210	Single-Family Detached Housing	dwelling	\$2,931.49
220	Apartment	dwelling	\$2,931.49
230	Residential Condominium/Townhouse	dwelling	\$2,931.49

These net impact fees are transferred to the Maximum Allowable Impact Fee Schedule that is included in the Introduction section of this report. Ultimately, all net fees are increased, collectively, to include an administrative fee (not to exceed 3%). See the Other Fees and Charges section at the end of this report for details.

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# Road Improvements

## ■ Introduction

The information in this chapter is derived from, or taken directly from, information developed for the *Joint Comprehensive Plan Tenth-Year Update*. Specifically, road project data is drawn from road modeling carried out for that document. Level of service calculations, as well as determination of need, are based on a refinement of this modeling process, carried out by the City's transportation consultant. Timing of projects and assignment of projects to the impact fee program have been determined by the City.

## ■ Service Area

The service area for these road projects is defined as the entire city. In that these road projects are recognized as providing primary—if not exclusive—capacity to properties within the city, the city limit has been adopted as the service area for the purpose of assessing impact fees. All new development within the city will be assessed the road impact fee, as calculated in this section. The road network within the city is considered in its entirety by the transportation model used to generate capacity data. Improvements in any part of this portion of the network improve capacity, to some measurable extent, throughout the city.

## ■ Level of Service Standards

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 calculations developed for the *Joint Comprehensive Plan*.

■ **Proposed Level of Service**

The adopted level of service is based on Level of Service "D" for arterials and major collector roads within the service area. This level of service is used to calculate existing deficiencies through the transportation modeling process, and is reflected in projects that are less than 100% impact fee eligible. Impact cost calculation is based upon a list of road projects, themselves drawn from the *Joint Comprehensive Plan*.

## ■ Forecasts for Service Area

Projects that provide road capacity intended to serve new growth to the year 2030 by road widening, new road construction or other capacity improvements have been identified by the City and are shown in **Table R-1**. Total and local share project costs are shown. Note that the Main Street project is for operational improvements only, with no anticipated measurable increase in available capacity. For this reason, no costs for this project are considered here since the focus of these calculations is on the impact fee eligible portion of road improvement costs.

**Table R-1**  
**Future Road Projects and Estimated Costs**

<b>Project</b>	<b>Description</b>	<b>Project Type</b>	<b>Total Cost</b>	<b>Local Cost</b>
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
			<b>\$125,100,000</b>	<b>\$103,290,000</b>

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

\*Operational improvements only.

\*\*Downtown grid includes rail crossing at Haney Road.

While the great majority of projects listed in table R-1 add new capacity, any portion that will meet an existing deficiency will reduce the net increase of capacity available to new growth and development. It is important to identify what portion of each project goes toward meeting an existing deficiency in that this portion of the total project cost cannot be funded through impact fees. In **Table R-2** figures are given for the current capacity and current volume on a set of road projects that provide new capacity. (Any operation improvement projects—such as the Main Street project from Table R-1—are not included here.) Where the current volume exceeds the current capacity, a deficiency exists. Only one road currently has a deficiency at level of service “D”—Towne Lake Parkway. The Arnold Mill, and Ridgewalk Interchange projects have no statistics in this table since they do not yet exist; there is no current capacity or traffic flow where no road exists.

**Table R-2**  
**Current 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

The excess capacity represents the available road capacity, in terms of daily trips, not used by the current volume of traffic. For example, Trickum currently has excess capacity. More trips could be made on this road without a degradation of the level of service “D” standard. Currently, the City does not intend to calculate a recoupment of the value of the excess capacity.

The next step in these calculations is to identify the net trip capacity added by each of the road improvement projects that is available to new growth. These 'net added capacity' figures are shown in **Table R-3**. In this table, the 'post improvement capacity' is the final capacity for each project, following completion. The 'added capacity' figure is the 'post improvement capacity' less the 'current capacity' figure from table R-2. The 'existing deficiency' figure is taken directly from Table R-2. The 'net added capacity' figure is the 'added capacity' figure less the 'existing deficiency' figure (only applicable here to Towne Lake Parkway). The final calculation shown in this table is the identification of the portion of project costs that are attributable to new growth—the impact fee eligible project costs. This percentage is based on the 'net added capacity' figure as a percentage of the 'post improvement capacity' figure. Note that one project—Towne Lake Parkway—is not 100% eligible in that a portion of the added capacity is required to meet the existing deficiency on that road.

**Table R-3**  
**Post-Improvement Statistics**

<b>Project Name</b>	<b>Post Improvement Capacity</b>	<b>Added Capacity</b>	<b>Existing Deficiency</b>	<b>Net Added Capacity</b>	<b>Net Added Capacity as % of Post Improvement Capacity</b>
Trickum	36,000	18,000	0	18,000	100%
Rope Mill	22,000	11,000	0	11,000	100%
Arnold Mill Extension	22,000	22,000	0	22,000	100%
Ridgewalk Parkway	22,000	22,000	0	22,000	100%
Ridgewalk Interchange	15,650	15,650	0	15,650	100%
Neese Rd	22,000	11,000	0	11,000	100%
Towne Lake Parkway	36,000	18,000	3,880	14,120	78%
Woodstock Parkway	35,000	18,400	0	18,400	100%
Dupree Road	22,000	11,000	0	11,000	100%
Downtown Grid	3,500	2,500	0	2,500	100%

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

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## FUTURE COSTS

**Table R-4** presents a calculation of the impact fee eligible project costs for the road improvement projects from Table R-1. The total local cost, from R-1, is multiplied by the 'net added capacity as % as post improvement capacity' figure, from Table R-3, to produce the portion of local project costs that is impact fee eligible. Since several projects are not 100% eligible, there is a non-eligible cost component. Out of a total of \$103.3 million in local costs, \$101.1 million (about 98% of the local costs total) is eligible for collection through impact fees.

**Table R-4**  
**Impact Fee Eligible 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
	<b>\$103,290,000</b>		<b>\$101,134,444</b>	<b>\$2,155,556</b>

**Table R-5** summarizes the combined costs to provide the adopted level of service to the future population. There are four figures of note here. First, the road improvement project costs figure represents the amount of total project costs that are impact fee eligible—that is, they provide capacity for new growth (the figure is taken from Table R-4). Next, the project costs are reduced by the amount expected to come from the SPLOST V program for roads in Woodstock (from Table P-8 in the 'Forecasts' section of this report). New growth will also contribute towards road improvements through SPLOST contributions; the credit for this contribution (Table P-9 in the 'Forecasts' section of this report) is subtracted from the project costs figure. Finally, through impact fee collections the City will recoup the cost of preparing the Capital Improvements Element.<sup>3</sup> Half of the total cost to prepare the CIE (\$40,002) is added to the impact fee eligible project costs. The cost of the CIE preparation is wholly applicable to new growth since the demand for future services—the reason for the CIE preparation—is attributable to that same new growth.

<sup>3</sup> DIFA specifies that the County may collect fees for "expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element".

**Table R-5  
Total Costs to Serve New Growth**

<b>Description</b>	<b>Total</b>
Road Improvements	\$101,134,444
SPLOST Funding*	(\$7,500,000)
SPLOST Credit**	(\$91,553)
CIE Preparation***	\$40,002
<b>Gross New Growth Cost</b>	<b>\$93,582,893</b>

\*Anticipated SPLOST funding towards road projects (Table P-8)

\*\*SPLOST credit for estimated contributions from new growth (Table P-9).

\*\*\*One-half the total cost to prepare the Capital Improvements Element.

## ■ Gross Impact Cost Calculation

**Table R-6** begins with the gross costs that can be attributed to new growth. The gross cost figure is then divided by the net added capacity based on the planned improvements (from Table R-3) to produce an impact cost figure. This impact cost is not an "impact fee." In calculating the net impact fee, the cost must be reduced to the extent that new growth and development will pay future taxes toward financing the improvements, in order to avoid double taxation.

**Table R-6  
Gross Impact Cost Calculation**

<b>Gross Costs Attributable to New Growth*</b>	<b>Capacity Added (trips)</b>	<b>Gross Impact COST per Trip</b>
\$93,582,893	145,670	\$642.4308

### ■ Credit Calculation

There is a property tax credit calculation that is carried out for this public facility category. In that no funding strategy has been identified for the non-eligible cost of several projects, it can be assumed that the City will meet its financial obligations towards these project costs by general fund expenditures. For this reason, the credit calculated here is based on future property tax contributions into the general fund. In order to calculate an applicable credit, the non-eligible project cost has been annualized to the current planning horizon (2030). In **Table R-7** the anticipated property tax contribution from new growth towards the project costs is calculated. The tax base information is taken from Table P-5. The millage rate is simply the rate required to meet the annual funding requirement with the given tax digest value. The contribution from new growth is the millage rate multiplied by the total added value shown in Table P-3.

**Table R-7**  
**New Growth Contribution Through Property Taxes**  
**2006 - 2030**

<b>Year</b>	<b>Tax Digest*</b>	<b>Annual Funding Requirement</b>	<b>Millage Rate</b>	<b>New Growth Added Value**</b>	<b>Contribution from New Growth</b>
2006	\$878,545,829	\$0	0.00000	\$53,877,588	\$0
2007	\$932,423,417	\$89,815	0.09632	\$109,810,274	\$10,577
2008	\$988,356,103	\$89,815	0.09087	\$167,794,966	\$15,248
2009	\$1,046,340,795	\$89,815	0.08584	\$227,867,118	\$19,559
2010	\$1,106,412,947	\$89,815	0.08118	\$290,062,184	\$23,546
2011	\$1,168,608,013	\$89,815	0.07686	\$354,229,072	\$27,225
2012	\$1,232,774,901	\$89,815	0.07286	\$420,699,236	\$30,650
2013	\$1,299,245,065	\$89,815	0.06913	\$489,212,130	\$33,818
2014	\$1,367,757,959	\$89,815	0.06567	\$560,060,662	\$36,777
2015	\$1,438,606,491	\$89,815	0.06243	\$633,022,832	\$39,521
2016	\$1,511,568,661	\$89,815	0.05942	\$708,205,002	\$42,080
2017	\$1,586,750,831	\$89,815	0.05660	\$785,829,172	\$44,480
2018	\$1,664,375,001	\$89,815	0.05396	\$865,744,250	\$46,718
2019	\$1,744,290,079	\$89,815	0.05149	\$947,985,690	\$48,812
2020	\$1,826,531,519	\$89,815	0.04917	\$1,032,698,400	\$50,780
2021	\$1,911,244,229	\$89,815	0.04699	\$1,119,956,380	\$52,630
2022	\$1,998,502,209	\$89,815	0.04494	\$1,209,569,992	\$54,359
2023	\$2,088,115,821	\$89,815	0.04301	\$1,301,909,236	\$55,998
2024	\$2,180,455,065	\$89,815	0.04119	\$1,396,823,020	\$57,536
2025	\$2,275,368,849	\$89,815	0.03947	\$1,494,346,798	\$58,986
2026	\$2,372,892,627	\$89,815	0.03785	\$1,594,738,024	\$60,361
2027	\$2,473,283,853	\$89,815	0.03631	\$1,697,993,606	\$61,661
2028	\$2,576,539,435	\$89,815	0.03486	\$1,804,000,998	\$62,885
2029	\$2,682,546,827	\$89,815	0.03348	\$1,913,133,292	\$64,054
2030	\$2,791,679,121	\$89,815	0.03217	\$1,913,133,292	\$61,550
<b>Total New Growth Contribution, 2006-2030</b>					<b>\$1,059,815</b>

\*Running Total; Tax digest information taken from Table P-5.

\*\*New growth added value figures from Table P-3.

## ■ Net Impact Cost Calculation

For any impact fee calculation the cost must be reduced to the extent that new growth and development will pay future taxes toward financing the improvements, in order to avoid double taxation. In calculating the net impact cost, any applicable credit for future tax contributions is subtracted from the total impact fee eligible project costs to produce a net impact-fee-eligible project cost figure. Using the net project cost figure, the net impact cost per trip is calculated in **Table R-8**, based on the net costs of the road improvement projects.

**Table R-8**  
**Net Impact Cost Calculation**

Total Eligible Project Costs:		\$93,582,893	
Less New Growth Contribution (Property Tax):		(\$1,059,815)	
		= NET Project Costs: \$92,523,078	
	<b>NET Costs</b>		
	<b>Attributable to</b>	<b>Capacity Added</b>	
	<b>New Growth</b>	<b>(trips)</b>	
		<b>Net Impact COST</b>	
		<b>per Trip</b>	
	\$92,523,078	145,670	\$635.1553
			<b>Net Impact COST</b>
			<b>per TRIP END</b>
			\$317.5777

For impact fee calculations, a 'trip' consists of two 'ends', just like a line has two ends. Each trip has a starting and ending point; both of these are the 'ends' of the trip. In order to make the net impact cost calculation from Table R-8 compatible with the trip generation data available in the ITE *Trip Generation Manual*—which is based on trip ends—the net impact cost per trip must be cut in half since each 'trip' is made up of two 'ends.' This calculation is shown in the last line of Table R-8; the 'net impact cost per trip end' is the 'net impact cost per trip' divided by two.

## ■ Fee Schedule

The fee schedule that follows presents the **maximum net impact fee** that could be charged in Woodstock for the Road Improvements category, based on the calculations carried out in this section. Road Improvement impact fees are collected from residential and nonresidential development.

## CITY OF WOODSTOCK ROAD IMPROVEMENTS IMPACT FEE SCHEDULE

Net Impact Cost (Per Trip End): \$317.58

Employee data is derived from ITE's Traffic Generation Manual, 6th Ed.

ITE CODE	LAND USE	Average Rate		Unit of Measure	Fee per Unit
		Trip Ends	% New Trips		
<i>Port and Terminal (000-099)</i>					
30	Truck Terminal	81.90	92%	acres	\$23,928.84
<i>Industrial/Agricultural (100-199)</i>					
110	General Light Industrial	6.97	92%	1000 sq. ft.	\$2,036.44
120	General Heavy Industrial	1.50	92%	1000 sq. ft.	\$438.26
140	Manufacturing	3.82	92%	1000 sq. ft.	\$1,116.09
150	Warehousing (standard)	4.96	92%	1000 sq. ft.	\$1,449.17
151	Mini-Warehouse	2.50	92%	1000 sq. ft.	\$730.43
152	High-Cube Warehouse	0.12	92%	1000 sq. ft.	\$35.06
<i>Residential (200-299)</i>					
210	Single-Family Detached Housing	9.47	100%	dwelling	\$3,007.46
220	Apartment	6.63	100%	dwelling	\$2,105.54
230	Residential Condominium/Townhouse	5.86	100%	dwelling	\$1,861.01
<i>Lodging (300-399)</i>					
310	Hotel	8.92	59%	room	\$1,671.35
311	All Suites Hotel	6.24	59%	room	\$1,169.19
312	Business Hotel	7.27	59%	room	\$1,362.19
320	Motel	9.11	59%	room	\$1,706.95
<i>Recreational (400-499)</i>					
416	Campground/Recreational Vehicle Park	74.38	85%	camp sites	\$20,078.21
430	Golf Course	5.04	85%	acres	\$1,360.50
435	Multipurpose Recreational Facility	90.38	85%	acres	\$24,397.27
443	Movie Theater	78.06	85%	1000 sq. ft.	\$21,071.60
460	Arena	33.33	85%	acres	\$8,997.13
480	Amusement Park	75.76	85%	acres	\$20,450.73
491	Tennis Courts	16.26	85%	acres	\$4,389.24
492	Racquet Club	17.14	85%	1000 sq. ft.	\$4,626.79
494	Bowling Alley	33.33	85%	1000 sq. ft.	\$8,997.13
495	Recreational Community Center	22.88	85%	1000 sq. ft.	\$6,176.25
<i>Institutional (500-599)</i>					
521	Private School (K-12)	5.50	80%	1000 sq. ft.	\$1,397.34
560	Church/Synagogue	9.11	90%	1000 sq. ft.	\$2,603.82
565	Day Care Center	79.26	74%	1000 sq. ft.	\$18,626.69
566	Cemetery	4.73	90%	acres	\$1,351.93
591	Lodge/Fraternal Organization	46.90	90%	employee	\$13,404.95
<i>Medical (600-699)</i>					
610	Hospital	16.78	77%	1000 sq. ft.	\$4,103.29
620	Nursing Home	2.61	75%	bed	\$621.66
630	Clinic	7.75	77%	employee	\$1,895.14

Road Improvements fee schedule continued.

<b>CODE</b>	<b>LAND USE</b>	<b>Trip Ends</b>	<b>% New Trips</b>	<b>Unit of Measure</b>	<b>Fee per Unit</b>
<i>Office (700-799)</i>					
710	General Office Building	11.01	92%	1000 sq. ft.	\$3,216.81
714	Corporate Headquarters Building	7.72	92%	1000 sq. ft.	\$2,255.56
715	Single-Tenant Office Building	11.57	92%	1000 sq. ft.	\$3,380.42
720	Medical-Dental Office Building	36.13	77%	1000 sq. ft.	\$8,835.04
760	Research and Development Center	8.11	92%	1000 sq. ft.	\$2,369.51
<i>Retail (800-899)</i>					
812	Building Materials and Lumber Store	39.71	81%	1000 sq. ft.	\$10,214.92
813	Free-Standing Discount Superstore	46.96	75%	1000 sq. ft.	\$11,185.09
814	Specialty Retail Center	40.67	49%	1000 sq. ft.	\$6,328.78
815	Free-Standing Discount Store	56.63	61%	1000 sq. ft.	\$10,970.50
816	Hardware/Paint Store	51.29	40%	1000 sq. ft.	\$6,515.42
817	Nursery (Garden Center)	36.08	81%	1000 sq. ft.	\$9,281.14
818	Nursery (Wholesale)	39.00	81%	1000 sq. ft.	\$10,032.28
820	Shopping Center	16.76	81%	1000 sq. ft.	\$4,311.31
823	Factory Outlet Center	26.59	81%	1000 sq. ft.	\$6,839.96
831	Quality Restaurant	89.95	82%	1000 sq. ft.	\$23,424.21
832	High-Turnover (Sit-Down) Restaurant	130.34	79%	1000 sq. ft.	\$32,700.53
834	Fast-Food Restaurant	496.12	54%	1000 sq. ft.	\$85,080.58
837	Quick Lubrication Vehicle Shop	40.00	83%	service bay	\$10,543.58
840	Auto Care Center	4.01	51%	1000 sq. ft.	\$649.48
841	New Car Sales	37.50	79%	1000 sq. ft.	\$9,408.24
843	Auto Parts Store	61.91	83%	1000 sq. ft.	\$16,318.82
847	Self-Service Car Wash	108.00	40%	stall	\$13,719.36
848	Tire Store	24.87	83%	1000 sq. ft.	\$6,555.47
849	Wholesale Tire Store	20.36	83%	1000 sq. ft.	\$5,366.68
850	Supermarket	111.51	63%	1000 sq. ft.	\$22,310.24
851	Convenience Market (Open 24 Hours)	737.99	40%	1000 sq. ft.	\$93,747.66
852	Convenience Market (Open 15-16 Hours)	634.20	40%	1000 sq. ft.	\$80,563.10
853	Convenience Market with Gasoline Pumps	845.60	40%	1000 sq. ft.	\$107,417.47
860	Wholesale Market	6.73	61%	1000 sq. ft.	\$1,303.75
861	Discount Club	41.80	61%	1000 sq. ft.	\$8,097.60
862	Home Improvement Superstore	35.05	75%	1000 sq. ft.	\$8,348.32
863	Electronics Superstore	45.04	81%	1000 sq. ft.	\$11,586.00
870	Apparel Store	66.40	49%	1000 sq. ft.	\$10,332.71
881	Pharmacy/Drugstore	88.16	49%	1000 sq. ft.	\$13,718.85
890	Furniture Store	5.06	81%	1000 sq. ft.	\$1,301.62
<i>Services (900-999)</i>					
912	Drive-in Bank	265.21	61%	1000 sq. ft.	\$51,377.11

*Trip data is derived from ITE's Traffic Generation Manual, 6th Ed.*

These net impact fees are transferred to the Maximum Allowable Impact Fee Schedule that is included in the Introduction section of this report. Ultimately, all net fees are increased, collectively, to include the cost of preparing the Capital Improvements Element (CIE) and an administrative fee (not to exceed 3%). See the Other Fees and Charges section at the end of this report for details.

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## Other Fees and Charges

In addition to the net impact fees for each public facility category, there are two additional charges than can be assessed in an impact fee program. Based on the definition of “system improvement costs” (see the Glossary), there are possible impact fee charges beyond the categories already discussed that are allowed under State law. These may be directly or indirectly related to the cost of capital projects, and can include a fee for the administration of the impact fee program as well as a fee to recoup the cost to prepare the Capital Improvements Element. Specifically, DIFA allows for the collection of impact fees based on:

*“administrative costs, provided that such administrative costs shall not exceed 3 percent of the total amount of the costs”*

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”*

### ■ Program Administration

A surcharge of 3%, the maximum allowable, has been added to the subtotal of impact fees for the individual categories (this is shown in the Maximum Allowable Impact Fee Schedule in the Introduction section of this report). The fees collected in this category can only be used for the administration of the impact fee program, and are reported annually to the State just like the other service categories. Like any fee, this must have some rational and reasonable connection to the service rendered. Commonly, the administrative fee collected is used to offset some or all of the cost to handle impact fee calculations by the building permit staff, some or all of the cost for the finance department to process, record and distribute impact fees, and some or all of the cost for the management and oversight of the program by administrative staff.

### ■ Cost to Create the CIE

The cost to create the Capital Improvements Element can be recouped through impact fee collections. DIFA specifies that the City may collect fees for “expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element”. In this report the cost to create the CIE has been divided between the parks & recreation and road improvements public facility categories. If, in the future, the City had an impact fee program that included additional public facility categories, the cost to prepare the CIE should be divided among the categories.

## Appendix: Glossary

*The following terms are used in the Impact Fee Methodology Report. Where possible, the definitions are taken directly from the Development Impact Fee Act.*

**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.

**Capital improvements element:** a component of a comprehensive plan adopted pursuant to Chapter 70 of the Development Impact Fee Act which sets out projected needs for system improvements during a planning horizon established in the comprehensive plan, a schedule of capital improvements that will meet the anticipated need for system improvements, and a description of anticipated funding sources for each required improvement.

**Development:** any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any change in the use of land, any of which creates additional demand and need for public facilities.

**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.

**Eligible facilities:** capital improvements in one of the following categories:

(A) Water supply production, treatment, and distribution facilities;

(B) Waste-water collection, treatment, and disposal facilities;

(C) Roads, streets, and bridges, including rights of way, traffic signals, landscaping, and any local components of state or federal highways;

(D) Storm-water collection, retention, detention, treatment, and disposal facilities, flood control facilities, and bank and shore protection and enhancement improvements;

(E) Parks, open space, and recreation areas and related facilities;

(F) Public safety facilities, including police, fire, emergency medical, and rescue facilities; and

(G) Libraries and related facilities.

**Impact Cost:** the proportionate share of capital improvements costs to provide service to new growth, less any applicable credits.

**Impact Fee:** the impact cost plus surcharges for program administration and recoupment of the cost to prepare the Capital Improvements Element.

**Level of service:** a measure of the relationship between service capacity and service demand for public facilities in terms of demand to capacity ratios or the comfort and convenience of use or service of public facilities or both.

**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

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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 city shall be considered a project improvement.

**Proportionate share:** means that portion of the cost of system improvements which is reasonably related to the service demands and needs of the project.

**Rational Nexus:** the clear and fair relationship between fees charged and services provided.

**Service area:** a geographic area defined by a municipality, city, 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.

**System improvement costs:** costs incurred to provide additional public facilities capacity needed to serve new growth and development for planning, 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 city to finance the capital improvements element but such costs do not include routine and periodic maintenance expenditures, personnel training, and other operating costs.

**System improvements:** capital improvements that are public facilities and are designed to provide service to the community at large, in contrast to "project improvements."