

Community Development Department 2529 J. O. Stephenson Avenue Kennesaw, GA 30144

October 22, 2009

## CERTIFIED MAIL 7008 0150 0000 3898 7026 Hand Delivered

Jared Lombard AICP | Senior Planner Land Use Division Atlanta Regional Commission 40 Courtland ST NE Atlanta GA 30303

Dear Sirs/Madam:

Please find enclosed a revised/draft of the Capital Improvement Element as an amendment to the City of Kennesaw's Comprehensive Plan as per the ARC and DCA format standards.

Also enclosed is proof of hearing along with transmittal resolution adopted on October 19, 2009 by the Mayor and Council City of Kennesaw.

Should you have any questions or comments please feel free to communicate with me at 770-590-8268.

Sincerely,

Darryl Simmons Zoning Administrator

Enclosures

Building Services (770) 429-4554

Economic Dev. (770) 794-7075 Planning & Zoning (770) 590-8268

Fax (770) 429-454



MAYOR Mark Mathews

City Manager L. Steve Kennedy

City Clerk, CMC Debra Taylor



Mayor Pro-Tem Bruce Jenkins Cindy Giles Tim Killingsworth Bill Thrash Cris Welsh

#### **CLERK'S CERTIFICATION**

CITY OF KENNESAW GEORGIA, COBB COUNTY

I, Debra Taylor, hereby certify that I am the Clerk for the City of Kennesaw and the lawful custodian of the books and records of said municipality, and as such do hereby certify that the attached Resolution No. 2009-46, 2009 is a true and correct copy of document(s) on file at City Hall.

WITNESS, my hand and Seal of the City of Kennesaw, Georgia, on this <u>20<sup>th</sup></u> day of October, 2009.

ATTEST:

Debra Taylor, City Clerk



## COUNCIL

2529 J.O. Stephenson Avenue, Kennesaw, Georgia, 30144 \* (770) 424-8274 \* Fax (678) 460-2844

#### CITY OF KENNESAW GEORGIA

#### **RESOLUTION NO. 2009-46, 2009**

#### RESOLUTION ADOPTING THE TRANSMITTAL OF CAPITAL IMPROVEMENTS ELEMENT AMENDMENT TO THE CITY OF KENNESAW'S COMPREHENSIVE PLAN

## BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF KENNESAW, COBB COUNTY, GEORGIA AS FOLLOWS:

**WHEREAS**, the City of Kennesaw has prepared a Capital Improvements Element as an amendment to the *City of Kennesaw Comprehensive Plan*; and

WHEREAS, the Capital Improvements Element was prepared in accordance with the "Development Impact Fee Compliance Requirements" and the "Minimum Planning Standards and Procedures for Local Comprehensive Planning" adopted by the Board of Community Affairs pursuant to the Georgia Planning Act of 1989, and a duly advertised Public Hearing was held on October 19, 2009, at 6:30 P.M. at Kennesaw City Hall.

**BE IT THEREFORE RESOLVED**, the City Council of Kennesaw does hereby submit a Capital Improvements Element Amendment to the Atlanta Regional Commission for Regional and State review, as per the requirements of the Development Impact Fee Compliance Requirements.

PASSED AND ADOPTED by the Kennesaw City Council on this <u>19<sup>th</sup></u> day of October, 2009

ATTEST:

Debra Taylor, City Clerk



CITY OF KENNESAW

Márk Mathéws, Mayor

TUESDAY, OCTOBER 6, 2009/Marietta Daily Journal

#### CITY OF KENNESAW PUBLIC NOTICE

Notice is hereby given that the City of Kennesaw shall hold a public hearing to give consideration to transmitting a revised Capital Improvement Element as an amendment to the City's Comprehensive Plan to the Atlanta Regional Commission and Department of Community Affairs for review.

A copy of the draft is on file in the City Hall in the Planning and Zoning Office for viewing during normal business hours of 8:00am to 5:00pm Monday through Friday. City of Kennesaw is soliciting input from the public on these updates. Mayor and Council will consider adoption of this amendment later in 2009 at a scheduled public hearing following public notice.

The Mayor and Council shall hold a public hearing on this matter on October 19, 2009, at 6:30pm to be held at 2529 J.O. Stephenson Avenue, Kennesaw, Georgia. Any interested persons may attend and be heard relative thereto.

Darryl Simmons Planning and Zoning Administrator

> Come join us on Sunday, October II to celebrate our 50 years of serving preschool children and their families in Marietta and Cobb County. If you have served on our Board, served on our staff, attended a class or been a Weekday parent we

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| Stockholm 50/45/pc 57/39/sh                                     | Cairo 90/64/s 87/68/s                                    |
| s//g/// s/65/97   | Berlin 63/52/s 70/55/c                                   |
| Rio de Janeiro 89/76/s 86/73/pc                                 | 5/94/45 s/24/46/c  |
| Paris 73/59/c 77/59/c   | Bangkok 90/76/1 90/76/1                                  |
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# Capital Improvements Element

An Amendment to the

**City of Kennesaw Comprehensive Plan** 



DRAFT – October 3, 2009



urban planning & plan implementation

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## **Capital Improvements Element**

### An Amendment to the City of Kennesaw Comprehensive Plan

## Introduction

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

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

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

## **Categories for Assessment of Impact Fees**

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

## Components of the Impact Fee System

The City of Kennesaw Impact Fee System consists of several components:

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

## Forecasts

In order to accurately calculate the demand for expanded services for The City of Kennesaw, new growth and development must be quantified in future projections. These projections include forecasts for population, housing or dwelling units, and employment to the year 2025.<sup>1</sup> These projections provide the base-line conditions from which the level of service calculations are produced. Also, projections are combined to produce what is known as 'day/night population.' This is a method that combines resident population and employees in the city to produce an accurate picture of the total number of persons that rely on certain services, such as law enforcement. The projections used for each public facility category are specified in each public facility chapter. The population and employment forecasts have been provided by the City; the dwelling unit forecast has been derived from the population forecast.

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

- Population data and forecasts are used to establish current and future demand for services standards where the Level of Service (LOS) is per capita based.
- 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 data is combined with population data to produce 'day/night population' figures. These figures represent the total number of persons receiving services, both in their homes and in their businesses, particularly from 24-hour operations such as law enforcement.

#### Future Growth Projections

Table P-1 presents the forecasts for population, housing units, "value added" employment, and "day/night" population. The population forecast figures have been provided by the City; intervening year figures are based on average annual increase between the "known" data points. The dwelling unit forecast is based on the last observed average household size (2.64 persons per household in 2000, as reported in the City's Comprehensive Plan), plus a 7% vacancy rate.

"Value added" employment is a sub-set of total employment in the city, and represents the number of employees in non-transitory jobs. Basically, "value added" employment excludes agricultural and construction sector employment. The employment figures in bold have been provided by the City; intervening year figures are based on average annual increase between the "known" data points.

The "day/night" population is a combination of the resident (population) projections and "value added" employment estimates, and is used to determine level of service standards for facilities that serve both the resident population and business employment. The police department, for instance, protects one's house whether or not they are at home, and protects stores and offices whether or not they are open for business. Thus, this day/night population is a measure of the total services demanded of a 24-hour provider facility and a fair way to allocate the costs of such a facility among all of the beneficiaries.

<sup>&</sup>lt;sup>1</sup> The year 2025 is used as this is the horizon year of the City's current *Comprehensive Plan*.

#### Table P-1 Forecasts City of Kennesaw

|      |            | Dwelling | "Value<br>Added" | Day/Night  |
|------|------------|----------|------------------|------------|
|      | Population | Units    | Employment       | Population |
|      | •          |          |                  |            |
| 2005 | 30,522     | 12,371   | 15,722           | 46,244     |
| 2006 | 31,249     | 12,665   | 16,079           | 47,327     |
| 2007 | 31,992     | 12,967   | 16,444           | 48,436     |
| 2008 | 32,754     | 13,275   | 16,817           | 49,571     |
| 2009 | 33,534     | 13,591   | 17,199           | 50,732     |
| 2010 | 34,332     | 13,915   | 17,589           | 51,921     |
| 2011 | 34,976     | 14,176   | 17,900           | 52,876     |
| 2012 | 35,632     | 14,442   | 18,217           | 53,849     |
| 2013 | 36,300     | 14,713   | 18,539           | 54,839     |
| 2014 | 36,981     | 14,989   | 18,867           | 55,848     |
| 2015 | 37,675     | 15,270   | 19,200           | 56,875     |
| 2016 | 38,292     | 15,520   | 19,540           | 57,832     |
| 2017 | 38,919     | 15,774   | 19,885           | 58,804     |
| 2018 | 39,556     | 16,032   | 20,237           | 59,793     |
| 2019 | 40,204     | 16,295   | 20,595           | 60,799     |
| 2020 | 40,862     | 16,561   | 20,959           | 61,821     |
| 2021 | 41,552     | 16,841   | 21,313           | 62,865     |
| 2022 | 42,254     | 17,126   | 21,673           | 63,927     |
| 2023 | 42,968     | 17,415   | 22,039           | 65,007     |
| 2024 | 43,694     | 17,709   | 22,411           | 66,105     |
| 2025 | 44,432     | 18,008   | 22,789           | 67,221     |
|      |            |          |                  |            |

Source: Figures in **bold** provided by the City; intervening years are based on average annual increase between the Plan figures. There is no forecasted employment figure for 2015 in the *Comprehensive Plan*.

Dwelling Unit figures are based on observed average household size in 2000 (2.64 persons) and each year's specific population, with an additional 7% to account for vacant units.

"Value Added" Employment is total employment less agricultural and construction employment.

### Service Area Projections

In **Table P-2** the service area forecasts are presented for a single city-wide service area measured in two ways: city-wide dwelling units (which includes parks), and city-wide day/night population (police). These are the figures that will be used in subsequent service category chapters to calculate impact costs and fees.

#### Table P-2 Service Area Forecasts 2008 - 2025

|      | City-wide<br>Dwelling Units<br>(Parks) | City-wide<br>Day/Night<br>Population<br>(Police) |
|------|--|--|
|      |  |  |
| 2008 | 13,275                                 | 49,571   |
| 2009 | 13,591                                 | 50,732   |
| 2010 | 13,915                                 | 51,921   |
| 2011 | 14,176                                 | 52,876   |
| 2012 | 14,442                                 | 53,849   |
| 2013 | 14,713                                 | 54,839   |
| 2014 | 14,989                                 | 55,848   |
| 2015 | 15,270                                 | 56,875   |
| 2016 | 15,520                                 | 57,832   |
| 2017 | 15,774                                 | 58,804   |
| 2018 | 16,032                                 | 59,793   |
| 2019 | 16,295                                 | 60,799   |
| 2020 | 16,561                                 | 61,821   |
| 2021 | 16,841                                 | 62,865   |
| 2022 | 17,126                                 | 63,927   |
| 2023 | 17,415                                 | 65,007   |
| 2024 | 17,709                                 | 66,105   |
| 2025 | 18,008                                 | 67,221   |
|      |  |  |
|      | 0000 0005-                             |  |

Net Increase, 2008-2025:

| 4,733 | 17,650 |
|-------|--------|
|-------|--------|

## **Cost Adjustments**

Calculations related to impact fees are made in terms of the 'present value' of past and future money, including project amounts of cost expenditures and credits for future revenue. The Georgia Development Impact Fee Act defines 'present value' as "the current value of past, present, or future payments, contributions or dedications of goods, services, materials, construction, or money." This Section describes the methodologies used to make appropriate adjustments to project cost figures, both past and future, to convert such costs into current dollars, and to determine the present value of future revenue from new development that would be applied as a credit against impact fees.

Calculations for present value (PV) differ when considering past expenditures versus future costs. In both cases, however, the concept is the same - the 'actual' expenditure made or to be made is adjusted to the current year using appropriate rates (an inflation rate for past expenditures and a deflator for future costs). In essence, the present value is considered in light of an alternate investment strategy – a determination of what the same amount of money would be worth if it were invested rather than spent.

## Past Expenditures

Past expenditures are considered in impact fee calculations only for previous expenditures for projects that created excess capacity for new development and are being recouped. An expenditure that was made in the past is converted to PV using the inflation rate of money - in this case the Consumer Price Index (CPI). Although this approach ignores the value of technological innovation (i.e., better computers are available today for the same historic prices) and evolving land prices (often accelerated beyond inflation by market pressures), the approach best captures the value of the money actually spent. For instance, it is not important that you can buy a better computer today for the same price that was paid 5 years ago; what is important is the money was spent 5 years ago and what that money would be worth today had it been saved instead of spent.

Table C-1 shows the historic CPI figures going back to 1967. The approach to bring past expenditures up to current dollars (PV) is straight-forward - the year in which the expenditure is made is inflated to the

#### Table C-1

Consumer Price Index -- 1967-2008

CPI\* 1967=100% Examples of Present Value in 2008 1967 \$100.000 100.0 1968 104,200 104.2 1969 109,800 109.8 1970 116.3 116,300 1971 121.300 121.3 1972 125.3 125,300 1973 133.1 133,100 147,700 1974 147.7 1975 161.2 161,200 1976 170.5 170.500 181,500 1977 181.5 195,400 1978 195.4 1979 217.4 217,400 1980 246.8 246.800 1981 272.4 272,400 1982 289.1 289,100 1983 298.4 298,400 1984 311.1 311,100 322,200 1985 322.2 328.4 328.400 1986 1987 340.4 340,400 1988 354.3 354,300 \$100,000 1989 371.3 371,300 104,798 391.4 391,400 110.471 1990 1991 408.0 408,000 115,157 420.3 420,300 118,628 1992 1993 432.7 432,700 122,128 444.0 444,000 125,318 1994 456,500 128,846 1995 456.5 1996 469.9 469,900 132,628 1997 480.8 480,800 135,704 1998 488.3 488,300 137,821 \$100,000 499.0 499,000 140,841 102,191 1999 2000 515.8 515,800 145,583 105,632 2001 530.4 530,400 149,704 108,622 152,075 2002 538.8 538,800 110,342 2003 551,100 155,546 112,861 551.1 2004 159,695 115,871 565.8 565,800 2005 585.0 585,000 165,114 119,803 2006 603.9 603,900 170,449 123,674 2007 621,100 175,303 127,196 621.1 2008 645.0 \$645,000 \$182,049 \$132,091

\*Consumer Price Index data is from the U.S. Department of Labor.

current year using the annual CPI figures. For instance, \$100 spent in 1967 would require the expenditure of \$645 in 2008 just to stay abreast of inflation; the PV of \$100 in 1967, therefore, is \$645. (Other examples are also shown on the table).

## Future Project Costs

In order to determine the present value of a project expenditure that will be made in the future, the Net Present Value (NPV) of the expenditure is determined. To determine the NPV of any project cost, two figures are needed – the future cost of the project anticipated in the year the expenditure will be made, and the net discount rate. Given the current cost of a project, that cost is first inflated into the future to the target expenditure year to establish the estimated future cost. The future cost is then deflated to the present using the net discount rate, which establishes the NPV for the project in current dollars. These two formulas are:

Future Cost = Current Cost x (1 + Inflation Rate) Year of Expenditure – Current Year

Net Present Value = Future Cost x (1 + Net Discount Rate) Current Year - Year of Expenditure

In this section two important adjustments are discussed that are required to convert current costs into future cost figures, and then back into current dollars. First, a cost inflator is examined. This adjustment factor is important in determining the future cost of a project, based on current cost estimates. The cost inflator may be based on anticipated inflation in construction or building costs, or on anticipated inflation in the value of money (for capital projects that do not include a construction component). In essence, costs increase over time. By identifying the appropriate inflation rate that is related to the type of project (building, project construction or nonconstruction), current estimates can be used to predict future costs.

The second cost adjustment is a deflator – the Net Discount Rate – based on potential interest earnings. In essence, the Net Discount Rate represents the amount of money that, if invested instead of spent, would be put 'in the bank' now to grow with interest to pay for future costs when the money is needed. The discount rate is both 'net' of taxes and other administrative costs, and is the most risk-free investment available. For the calculations included in this report, an anticipated rate of 3.00% is used, based on the local government's current experience and anticipated conditions.

## Cost Inflators

Three different cost inflators are used in the impact fee calculations, based on the type of project being considered. For infrastructure projects, such as roads or ball fields, a 'construction cost inflator' is used. For projects that require construction of a structure (such as a fire station), a 'building cost inflator' is used as the appropriate inflation rate. For all non-construction types of projects (such as a fire truck or park land), an inflation rate is used that is based on the Consumer Price Index. These different types of inflators are discussed below.

## Engineering News Record's Cost Indexes

ENR publishes both a Construction Cost Index (CCI) and a Building Cost Index (BCI) for the Atlanta area that are widely used in the construction industry. Both indexes have a materials and labor component. The components that comprise the CCI are: 200 hours of common labor at the local average of common labor rates, plus 25 cwt of standard structural steel shapes at the fabricated local price, plus 1.128 tons of portland cement at the local price, plus 1,088 board-ft of 2 x 4 lumber at the local price. For calculation of the CCI, costs in 1913 are set at 100. The BCI uses a labor component of 68.38 hours of skilled labor at the average local wage rate, plus fringes, for carpenters, bricklayers and structural ironworkers. The materials component is the same as that used in the CCI, and the BCI is also set at 100 in 1913.

### **Construction Cost Inflator**

Table C-2 uses the example of a calculation of the annual average rate of increase reflected in construction costs. For this analysis, the 1999-2008 period is used as a base time period for an estimate of future construction cost increases due to inflation in labor and materials costs.

Table C-2 shows a construction project that cost \$100,000 in 1999, and how much the same project would cost in each subsequent year using the Construction Cost Index published by Engineering News Record for the Atlanta area. Setting the 1999 Construction Cost Index (CCI) at '1.0,' the increase in the CCI as a multiple of 1999 is also shown on the table. The equivalent cost of the same project in each subsequent year is calculated by multiplying the CCI multiplier times \$100,000. When the total for all such projects is summed for the 1999-2008 period, the equivalent average annual rate of increase is calculated as the percentage that would produce the same total. This percentage is used in the text of this analysis as the applicable inflator for future construction projects that will begin in years after 2008.

#### Table C-2 Construction Cost Inflator -- CCI

| 1999         100,000.00         3849.39         1.0000         \$         100,000.00         < |      |               | CCI*     |          | Effect of        | Infl | ation      |
|--|------|---------------|----------|----------|------------------|------|------------|
| 1999       \$ 100,000.00       3849.39       1.0000         2000       4105.86       1.0666         2001       4045.52       1.0510         2002       4189.12       1.0883         2003       4374.69       1.1365         2004       4611.31       1.1979         2005       4829.74       1.2547  | Year | Amount        | 1913=100 | 1998=1.0 | CCI              | ŀ    | vg. Rate = |
| 20004105.861.0666\$ 106,662.61\$ 103,879.20014045.521.0510\$ 105,095.09\$ 107,910.20024189.121.0883\$ 108,825.55\$ 112,096.20034374.691.1365\$ 113,646.32\$ 116,446.20044611.311.1979\$ 119,793.27\$ 120,964.20054829.741.2547\$ 125,467.67\$ 125,657.   |      |               |          |          |                  |      | 3.879837%  |
| 20004105.861.0666\$ 106,662.61\$ 103,879.20014045.521.0510\$ 105,095.09\$ 107,910.20024189.121.0883\$ 108,825.55\$ 112,096.20034374.691.1365\$ 113,646.32\$ 116,446.20044611.311.1979\$ 119,793.27\$ 120,964.20054829.741.2547\$ 125,467.67\$ 125,657.   |      |               |          |          |                  |      |            |
| 20014045.521.0510\$ 105,095.09\$ 107,910.20024189.121.0883\$ 108,825.55\$ 112,096.20034374.691.1365\$ 113,646.32\$ 116,446.20044611.311.1979\$ 119,793.27\$ 120,964.20054829.741.2547\$ 125,467.67\$ 125,657.  | 1999 | \$ 100,000.00 | 3849.39  | 1.0000   | \$<br>100,000.00 | \$   | 100,000.00 |
| 20024189.121.0883\$ 108,825.55\$ 112,096.20034374.691.1365\$ 113,646.32\$ 116,446.20044611.311.1979\$ 119,793.27\$ 120,964.20054829.741.2547\$ 125,467.67\$ 125,657.   | 2000 |               | 4105.86  | 1.0666   | \$<br>106,662.61 | \$   | 103,879.84 |
| 2003         4374.69         1.1365         \$ 113,646.32         \$ 116,446.           2004         4611.31         1.1979         \$ 119,793.27         \$ 120,964.           2005         4829.74         1.2547         \$ 125,467.67         \$ 125,657.  | 2001 |               | 4045.52  | 1.0510   | \$<br>105,095.09 | \$   | 107,910.21 |
| 2004         4611.31         1.1979         \$ 119,793.27         \$ 120,964           2005         4829.74         1.2547         \$ 125,467.67         \$ 125,657  | 2002 |               | 4189.12  | 1.0883   | \$<br>108,825.55 | \$   | 112,096.94 |
| 2005 4829.74 1.2547 \$ 125,467.67 \$ 125,657.  | 2003 |               | 4374.69  | 1.1365   | \$<br>113,646.32 | \$   | 116,446.12 |
|  | 2004 |               | 4611.31  | 1.1979   | \$<br>119,793.27 | \$   | 120,964.04 |
|  | 2005 |               | 4829.74  | 1.2547   | \$<br>125,467.67 | \$   | 125,657.25 |
| 2006 4893.35 1.2712 \$ 127,120.14 \$ 130,532   | 2006 |               | 4893.35  | 1.2712   | \$<br>127,120.14 | \$   | 130,532.55 |
| 2007 5259.37 1.3663 \$ 136,628.66 \$ 135,597.  | 2007 |               | 5259.37  | 1.3663   | \$<br>136,628.66 | \$   | 135,597.00 |
| 2008 5801.13 1.5070 \$ 150,702.58 \$ 140,857.  | 2008 |               | 5801.13  | 1.5070   | \$<br>150,702.58 | \$   | 140,857.94 |

\$ 1,193,941.89 \$ 1,193,941.89

\* Construction Cost Index. Source: Engineering News Record, Annual (December) Indices.

#### **Building Cost Inflator**

The inflator for future construction costs for buildings is based on ENR's Building Cost Index for each year from 1999 through 2008, and is calculated in the same manner as described above for the Construction Cost Inflator. Table C-3 shows the results.

#### Table C-3 Building Cost Inflator -- BCI

|      |               | BCI*     |          | Effect of        | Infl | ation       |
|------|---------------|----------|----------|------------------|------|-------------|
| Year | Amount        | 1913=100 | 1998=1.0 | BCI              | ŀ    | Avg. Rate = |
|      |               |          |          |                  |      | 3.204070%   |
|      |               |          |          |                  |      |             |
| 1999 | \$ 100,000.00 | 2,816.44 | 1.0000   | \$<br>100,000.00 | \$   | 100,000.00  |
| 2000 |               | 2,947.56 | 1.0466   | \$<br>104,655.52 | \$   | 103,204.07  |
| 2001 |               | 2,928.63 | 1.0398   | \$<br>103,983.40 | \$   | 106,510.80  |
| 2002 |               | 2,942.62 | 1.0448   | \$<br>104,480.12 | \$   | 109,923.48  |
| 2003 |               | 3,018.37 | 1.0717   | \$<br>107,169.69 | \$   | 113,445.51  |
| 2004 |               | 3,321.80 | 1.1794   | \$<br>117,943.22 | \$   | 117,080.38  |
| 2005 |               | 3,599.04 | 1.2779   | \$<br>127,786.85 | \$   | 120,831.71  |
| 2006 |               | 3,624.54 | 1.2869   | \$<br>128,692.25 | \$   | 124,703.25  |
| 2007 |               | 3,624.54 | 1.2869   | \$<br>128,692.25 | \$   | 128,698.83  |
| 2008 |               | 3,768.88 | 1.3382   | \$<br>133,817.16 | \$   | 132,822.43  |

\$ 1,157,220.46 \$ 1,157,220.46

\* Building Cost Index.

Source: Engineering News Record, Annual (December) Indices.

## **CPI Inflator**

For projects that do not involve construction, only the future value of money needs to be considered (without regard to inflation in labor or materials costs). For this calculation, the Consumer Price Index (CPI) is used, assuming past experience will continue into the foreseeable future.

Table C-4 shows the CPI figures for every year since 1967, with 1967 being 100%. In 2008 the CPI is 644.951% of the 1967 CPI. Thus, an amount of money saved in 1967 would be worth 6.45 times its 1967 face value in 2008, including interest earned and discounted for inflation. The first column under the CPI heading shows the annual CPI percentages. Using 2008 as the base (2008=1.0), the second column under CPI on the table shows the multipliers that would convert an amount of money spent in each year into year 2008 present value dollars.

Using an annual amount of \$10,000 as an example, the multipliers yield the figures shown for the CPI on the table under the Present Value heading. Cumulatively, the \$420,000 spent over the 1967-2008 period would have a total present value of just over a million dollars. Considering the present value figures for the \$10,000

annual expenditures, an 'average' overall inflation rate of almost 4.08% yields the same total amount over the same period.

The 42-year average of annual CPI change (the period of 1967-2008) shown on Table C-4 includes years of great variation, and may not be the best indicator of future change. While the historic CPI multipliers reflect major swings in interest and inflation in the past, these rates have moderated considerably in recent years as inflation has become a primary target of federal monetary policy. Looking only at the change in CPI from 1999 to 2008, an average annual inflation rate of about 3.02% best captures the change over that period. This lower inflation rate (compared to the 1967-2008 period) is assumed to be experienced 'on average' in future years, and is used for inflator calculations for future nonconstruction expenditures.

## Table C-4 Non-Construction Cost Inflator -- CPI

Based on Historic Consumer Price Index

|                    |                                | CI         | Ы         | Present                        | t Value        |              |
|--------------------|--------------------------------|------------|-----------|--------------------------------|----------------|--------------|
| Year               | Amount                         | 1967=100%* | 2008.=1.0 | CPI                            | Inflator =     |              |
|                    |                                |            |           | Ĺ                              | 4.07591%       |              |
| 1967               | \$ 10,000.00                   | 100.0      | 6.44951   | \$ 64,495.10                   | 51,446.84      |              |
| 1968               | 10,000.00                      | 104.2      | 6.18955   | 61,895.49                      | 49,432.04      |              |
| 1969               | 10,000.00                      | 109.8      | 5.87387   | 58,738.71                      | 47,496.14      |              |
| 1970               | 10,000.00                      | 116.3      | 5.54558   | 55,455.80                      | 45,636.05      |              |
| 1971               | 10,000.00                      | 121.3      | 5.31699   | 53,169.91                      | 43,848.82      |              |
| 1972               | 10,000.00                      | 125.3      | 5.14725   | 51,472.55                      | 42,131.57      |              |
| 1973               | 10,000.00                      | 133.1      | 4.84561   | 48,456.12                      | 40,481.58      |              |
| 1974               | 10,000.00                      | 147.7      | 4.36663   | 43,666.28                      | 38,896.21      |              |
| 1975               | 10,000.00                      | 161.2      | 4.00094   | 40,009.37                      | 37,372.92      |              |
| 1976               | 10,000.00                      | 170.5      | 3.78270   | 37,827.04                      | 35,909.29      |              |
| 1977               | 10,000.00                      | 181.5      | 3.55345   | 35,534.49                      | 34,502.98      |              |
| 1978               | 10,000.00                      | 195.4      | 3.30067   | 33,006.70                      | 33,151.74      |              |
| 1979               | 10,000.00                      | 217.4      | 2.96666   | 29,666.56                      | 31,853.43      |              |
| 1980               | 10,000.00                      | 246.8      | 2.61325   | 26,132.54                      | 30,605.96      |              |
| 1981               | 10,000.00                      | 272.4      | 2.36766   | 23,676.62                      | 29,407.34      |              |
| 1982               | 10,000.00                      | 289.1      | 2.23089   | 22,308.92                      | 28,255.66      |              |
| 1983               | 10,000.00                      | 298.4      | 2.16136   | 21,613.64                      | 27,149.09      |              |
| 1984               | 10,000.00                      | 311.1      | 2.07313   | 20,731.31                      | 26,085.86      |              |
| 1985               | 10,000.00                      | 322.2      | 2.00171   | 20,017.10                      | 25,064.26      |              |
| 1986               | 10,000.00                      | 328.4      | 1.96392   | 19,639.19                      | 24,082.67      |              |
| 1987               | 10,000.00                      | 340.4      | 1.89469   | 18,946.86                      | 23,139.53      |              |
| 1988               | 10,000.00                      | 354.3      | 1.82035   | 18,203.53                      | 22,233.32      |              |
| 1989               | 10,000.00                      | 371.3      | 1.73701   | 17,370.08                      | 21,362.60      |              |
| 1903               | 10,000.00                      | 391.4      | 1.64781   | 16,478.05                      | 20,525.98      |              |
| 1990               | 10,000.00                      | 408.0      | 1.58076   | 15,807.62                      | 19,722.12      |              |
| 1991               | 10,000.00                      | 408.0      | 1.53450   | 15,345.02                      | 18,949.75      |              |
| 1992               |                                |            |           |                                |                |              |
|                    | 10,000.00                      | 432.7      | 1.49053   | 14,905.27                      | 18,207.62      |              |
| 1994               | 10,000.00                      | 444.0      | 1.45259   | 14,525.92                      | 17,494.56      |              |
| 1995               | 10,000.00                      | 456.5      | 1.41282   | 14,128.17                      | 16,809.42      | Inflator =   |
| 1996               | 10,000.00                      | 469.9      | 1.37253   | 13,725.28                      | 16,151.12      |              |
| 1997               | 10,000.00                      | 480.8      | 1.34141   | 13,414.12                      | 15,518.59      | 3.02086%     |
| 1998               | 10,000.00                      | 488.3      | 1.32081   | 13,208.09                      | 14,910.84      | 40.074.50    |
| 1999               | 10,000.00                      | 499.0      | 1.29249   | 12,924.87                      | 14,326.89      | 13,071.53    |
| 2000               | 10,000.00                      | 515.8      | 1.25039   | 12,503.90                      | 13,765.81      | 12,688.24    |
| 2001               | 10,000.00                      | 530.4      | 1.21597   | 12,159.71                      | 13,226.70      | 12,316.19    |
| 2002               | 10,000.00                      | 538.8      | 1.19701   | 11,970.14                      | 12,708.70      | 11,955.04    |
| 2003               | 10,000.00                      | 551.1      | 1.17030   | 11,702.98                      | 12,211.00      | 11,604.49    |
| 2004               | 10,000.00                      | 565.8      | 1.13989   | 11,398.92                      | 11,732.78      | 11,264.21    |
| 2005               | 10,000.00                      | 585.0      | 1.10248   | 11,024.80                      | 11,273.29      | 10,933.91    |
| 2006               | 10,000.00                      | 603.9      | 1.06798   | 10,679.76                      | 10,831.79      | 10,613.30    |
| 2007               | 10,000.00                      | 621.1      | 1.03839   | 10,383.91                      | 10,407.59      | 10,302.09    |
| 2008               | 10,000.00                      | 645.0      | 1.00000   | 10,000.00                      | 10,000.00      | 10,000.00    |
| 1967-08<br>1999-08 | \$ 420,000.00<br>\$ 100,000.00 |            |           | \$1,068,320.44<br>\$114,748.99 | \$1,068,320.43 | \$114,748.99 |

\*Consumer Price Index data is from the U. S. Department of Labor.

## NPV Net Discount Rate

The Consumer Price Index is also used in determining the current value of money that will be spent in the future, based on inflation (the Net Present Value). In essence, the approach compares the expenditure to placing the funds in a savings account. That is, if one planned to spend \$10,000 in 2010, how much would need to be placed in a savings account now to have \$10,000 at that time? Since impact fees deal in public dollars, no deduction for taxes is required in the calculations.

## **Police Department Facilities**

The City Police Department provides primary law enforcement to the city. Impact fee calculations for the Police Department functions will be based on a service area that includes the entire city.

#### Service Area

The entire city is considered a single service area for the provision of Police Department services because all residents and employees in the city have equal access to the benefits of the program.

#### Level of Service

The year 2007 level of service is determined by an inventory of the square footage used by the Police Department. Statistics are shown in **Table PD-1**. (An inventory of equipment appears in Table PD-2.)

## Table PD-1Inventory of Police Facilities

| Facility          | Square Feet |
|-------------------|-------------|
| Polico Dopartmont | 11.900      |
| Police Department | 11,900      |

The level of service for police services in the City of Kennesaw is measured in terms of square footage and equipment per day/night population in the service area. Day/night population is used as a measure in that the Police Department is a set of law enforcement services provided to both residences and businesses in the service area. The year 2008 LOS is shown in **Table PD-2**.

#### Table PD-2 Current Level of Service Calculation

| Current Square<br>Feet | 2008 day/night population | SF/day/night population    |
|------------------------|---------------------------|----------------------------|
| 11,900                 | 49,571                    | 0.2401                     |
| Equipment              | Current<br>Inventory      | LOS per 1,000<br>day/night |
| Equipment              | (2008)                    | population                 |
| Hand Guns              | 100                       | 2.017                      |
| Shotguns               | 35                        | 0.706                      |
| Rifles                 | 15                        | 0.303                      |

#### Forecasts for Service Area

The City has determined that it would adopt a LOS based on the current level of service for both facility space and equipment. In **Table PD-3** the adopted level of service, based on the LOS calculated in Table PD-2, is applied to future growth. The 'day/night population increase' figure is calculated from Table P-2. The additional number of forecasted day/night population to the year 2025 is multiplied by the adopted level of service to produce the future demand figure. There is no existing deficiency.

| Table PD-3           |             |
|----------------------|-------------|
| <b>Future Demand</b> | Calculation |

| SF/day/night<br>population | Day/night Pop<br>Increase<br>(2008-25) | New Square<br>Feet<br>Demanded |
|----------------------------|--|--------------------------------|
| 0.2401                     | 17,650                                 | 4,237                          |

| LOS per 1,000<br>day/night<br>population | New Equipment Demanded<br>(2008-2025) |           |  |
|--|---------------------------------------|-----------|--|
|  |                                       |           |  |
| 2.017                                    | 35.6                                  | Hand Guns |  |
| 0.706                                    | 12.5                                  | Shotguns  |  |
| 0.303                                    | 5.3                                   | Rifles    |  |

A future police facility project is contemplated to meet future demand. **Table PD-4** presents the annual forecasted square footage demand, accompanied by the proposed facility expansion project. This project could be reconfigured; 4,237 square feet are ultimately impact fee eligible.

#### Table PD-4 Future Facility Projects

| Year | Day/night<br>Pop<br>Increase | SF<br>Demanded<br>(annual) | Running<br>Total: SF<br>Demanded | l Project         | Net New<br>Square<br>Footage            |
|------|------------------------------|----------------------------|----------------------------------|-------------------|---|
|      |                              | (unitional)                |                                  |                   | ······································· |
| 2008 | 0                            | 0                          | 0                                |                   |   |
| 2009 | 1,161                        | 279                        | 279                              |                   |   |
| 2010 | 1,189                        | 285                        | 564                              |                   |   |
| 2011 | 955                          | 229                        | 793                              |                   |   |
| 2012 | 973                          | 233                        | 1,027                            |                   |   |
| 2013 | 991                          | 238                        | 1,265                            |                   |   |
| 2014 | 1,009                        | 242                        | 1,507                            |                   |   |
| 2015 | 1,027                        | 247                        | 1,753                            |                   |   |
| 2016 | 956                          | 230                        | 1,983                            | New Facility      | 4,237                                   |
| 2017 | 973                          | 233                        | 2,216                            |                   |   |
| 2018 | 989                          | 237                        | 2,454                            |                   |   |
| 2019 | 1,006                        | 241                        | 2,695                            |                   |   |
| 2020 | 1,022                        | 245                        | 2,941                            |                   |   |
| 2021 | 1,044                        | 251                        | 3,191                            |                   |   |
| 2022 | 1,062                        | 255                        | 3,446                            |                   |   |
| 2023 | 1,080                        | 259                        | 3,705                            |                   |   |
| 2024 | 1,098                        | 264                        | 3,969                            |                   |   |
| 2025 | 1,116                        | 268                        | 4,237                            |                   |   |
|      |                              |                            |                                  | -                 |   |
|      |                              |                            |                                  | New Growth Total: | 4,237                                   |

## Future Costs

Future costs to meet the square footage demanded by new growth to 2025 are shown in **Table PD-5**. Estimated project cost is based on comparable facility estimates of other jurisdictions. The costs are shown in current dollars, and then adjusted to reflect the net present value. The costs are shown in current dollars, and then adjusted to reflect the net present value. For facility construction, the cost of construction is adjusted to reflect the construction cost inflation factor, before conversion to net present value.<sup>2</sup>

#### Table PD-5 Project Costs to Meet Future Demand

|      |              |         |           | Adjusted     | Const. Cost - |           |            |
|------|--------------|---------|-----------|--------------|---------------|-----------|------------|
|      |              | Square  |           | Construction | Net Present   | % for New | New Growth |
| Year | Project      | Footage | Cost*     | Cost**       | Value**       | Growth    | Cost (NPV) |
| 2015 | New Facility | 4,237   | \$741,475 | \$924,643    | \$751,820     | 100.00%   | \$751,820  |

\*Cost estimate is based on an estimated per square foot cost of \$175.

\*\*Adjusted cost is based on building construction cost estimate adjustment (Table C-3); net present value is based on anticipated interest earnings.

<sup>&</sup>lt;sup>2</sup> For more information on the construction cost inflator and net present value, see the 'Cost Adjustments and Credits' section of this report.

**Table PD-6** presents a calculation of the costs to meet the future demand in equipment. Like facility cost estimates, these costs are converted into a net present value figure. Note that not all costs are currently 100% impact fee eligible. This is because, in some cases, only a portion of a piece of equipment may be demanded by new growth to 2025, but the City can only purchase whole items—there is no such thing as 20% of a handgun. For example, future demand in handguns is 35.6; the City will have to purchase a total of 36 handguns to meet this demand. But only 0.6 of the last handgun is demanded by new growth to 2025; the remaining portion (0.4) of the handgun is "excess capacity" available to serve new growth beyond the current planning horizon (and recoupable at that time).

#### Table PD-6 Future Equipment Costs

|      |           |          |              |               |                | Net Present   |           |               |
|------|-----------|----------|--------------|---------------|----------------|---------------|-----------|---------------|
|      |           | Units to |              |               | Adjusted       | Value         |           | Net Cost to   |
|      | Equipment | be       | Cost per     | Gross         | Cost           | (Adjusted     | % for New | New           |
| Year | Туре      | Added    | Unit*        | Cost          | (Inflation)**  | Cost)**       | Growth    | Growth        |
| 0000 | 11        |          | <b>#</b> 000 | <b>M4 450</b> | <b>\$4,400</b> | <b>#4 450</b> | 400.000/  | <b>#4 450</b> |
| 2009 | Handguns  | 4        | \$363        | \$1,452       | \$1,496        | \$1,452       | 100.00%   | ÷, -          |
| 2011 | Handguns  | 4        | \$363        | \$1,452       | \$1,588        | \$1,453       | 100.00%   | + )           |
| 2013 | Handguns  | 4        | \$363        | \$1,452       | \$1,685        | \$1,453       | 100.00%   | \$1,453       |
| 2015 | Handguns  | 4        | \$363        | \$1,452       | \$1,788        | \$1,454       | 100.00%   | \$1,454       |
| 2017 | Handguns  | 4        | \$363        | \$1,452       | \$1,898        | \$1,455       | 100.00%   | \$1,455       |
| 2019 | Handguns  | 4        | \$363        | \$1,452       | \$2,014        | \$1,455       | 100.00%   | \$1,455       |
| 2021 | Handguns  | 4        | \$363        | \$1,452       | \$2,138        | \$1,456       | 100.00%   | \$1,456       |
| 2023 | Handguns  | 4        | \$363        | \$1,452       | \$2,269        | \$1,456       | 100.00%   | \$1,456       |
| 2025 | Handguns  | 4        | \$363        | \$1,452       | \$2,408        | \$1,457       | 90.14%    | \$1,313       |
| 2012 | Shotguns  | 2        | \$415        | \$830         | \$935          | \$831         | 100.00%   | \$831         |
| 2014 | Shotguns  | 2        | \$415        | \$830         | \$992          | \$831         | 100.00%   | \$831         |
| 2016 | Shotguns  | 2        | \$415        | \$830         | \$1,053        | \$831         | 100.00%   | \$831         |
| 2018 | Shotguns  | 2        | \$415        | \$830         | \$1,118        | \$832         | 100.00%   | \$832         |
| 2020 | Shotguns  | 2        | \$415        | \$830         | \$1,186        | \$832         | 100.00%   | \$832         |
| 2022 | Shotguns  | 2        | \$415        | \$830         | \$1,259        | \$832         | 100.00%   | \$832         |
| 2024 | Shotguns  | 1        | \$415        | \$415         | \$668          | \$416         | 46.19%    | \$192         |
| 2012 | Rifles    | 1        | \$780        | \$780         | \$879          | \$781         | 100.00%   | \$781         |
| 2014 | Rifles    | 1        | \$780        | \$780         | \$932          | \$781         | 100.00%   | \$781         |
| 2016 | Rifles    | 1        | \$780        | \$780         | \$990          | \$781         | 100.00%   | \$781         |
| 2018 | Rifles    | 1        | \$780        | \$780         | \$1,050        | \$782         | 100.00%   | \$782         |
| 2020 | Rifles    | 1        | \$780        | \$780         | \$1,115        | \$782         | 100.00%   |               |
| 2024 | Rifles    | 1        | \$780        | \$780         | \$1,256        | \$783         | 34.08%    | \$267         |
|      |           |          |              | \$23,143      | \$30,717       | \$23,186      | =         | \$22,303      |

\*Where available City cost estimates are shown; otherwise costs estimates are based on comparable unit costs.

\*\*Adjusted cost is based on on CPI adjustment (Table C-4); net present value is based on anticipated interest earnings.

## Parks and Recreation Facilities

Public recreational opportunities are available in the City of Kennesaw through a number of parks facilities 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

The city park system operates as part of a city-wide system of parks. Parks and recreational facilities are made available to the city's population without regard to where in the city 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 are located throughout the city, and future facilities will continue to be located around 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.

#### Level of Service

**Table PR-1** provides an inventory of the acreage of parks under the control of the City in 2008; **Table PR-2** presents an inventory of park facility square footage. This total acreage of developed parks is equivalent to 9.16 acres and 2,276 square feet per 1,000 dwelling units. The calculation of year 2008 parks acreage level of service is shown in **Table PR-3**.

In addition to the parks acreage and square footage levels of service, a level of service can also be calculated for park facilities such as ball fields, football fields, etc. The current inventory of facilities is used to calculate the current LOS in these categories in Table PR-3. Note that other types of components that may exist now or in the future in the city are also included; this listing is not exhaustive. but includes all component types being included in the impact fee program.

| Table PR-1        |         | Table PR-2               |                   |
|-------------------|---------|--------------------------|-------------------|
| Inventory of Par  | k Acres | Inventory of Fac         | llities           |
| Facility          | Acreage | Facility                 | Square<br>Footage |
| Adams             | 33.00   | Community Center         | 26,000            |
| Botanical Gardens | 15.20   | 5                        | 26,000            |
| Butlers Ridge     | 0.50    | Community House<br>Depot | 2,940             |
| Chalker           | 2.25    | Depot                    | 1,200             |
| City Hall         | 0.50    |                          |                   |
| Community Center  | 2.00    |                          | 30,220            |
| Community House   | 1.00    |                          | 50,220            |
| Deerfield         | 5.00    |                          |                   |
| Depot             | 4.50    |                          |                   |
| Downtown Park     | 0.75    |                          |                   |
| Fairfax           | 2.00    |                          |                   |
| Kennesaw Station  | 0.20    |                          |                   |
| Martha Moore      | 1.00    |                          |                   |
| McCollum          | 0.50    |                          |                   |
| Pine Mountain     | 4.70    |                          |                   |
| Shillings         | 0.25    |                          |                   |
| Swift Cantrell    | 42.00   |                          |                   |
| Tara              | 0.50    |                          |                   |
| Terry Lane        | 0.50    |                          |                   |
| Winchester Forest | 1.20    |                          |                   |
| Woodland          | 3.50    |                          |                   |
| Wrens Ridge       | 0.50    |                          |                   |

121.55

#### Table PR-3 Current Level of Service Calculation

| Total Park | 2008 Dwelling | AC/1,000       |
|------------|---------------|----------------|
| Acreage    | Units         | Dwelling Units |
| 121.6      | 13,275        | 9.16           |

| Total Square | 2008 Dwelling | SF/1,000       |
|--------------|---------------|----------------|
| Feet         | Units         | Dwelling Units |
| 30,220       | 13,275        | 2,276          |

| Component Type  | Current<br>Inventory<br>(2008) | LOS per 1,000<br>Dwelling Units |
|-----------------|--------------------------------|---------------------------------|
|                 |                                |                                 |
| Ball Fields     | 11                             | 0.829                           |
| Soccer Fields   | 4                              | 0.301                           |
| Football Fields | 2                              | 0.151                           |
| Tennis Courts   | 2                              | 0.151                           |
| Basketball Ct.s | 3                              | 0.226                           |
| Volleyball Ct.s | 0                              | 0.000                           |
| Tracks/Trails*  | 5                              | 0.377                           |
| Swimming Pools  | 0                              | 0.000                           |
| Playgrounds     | 15                             | 1.130                           |
| Pavilions       | 20                             | 1.507                           |
| Concess/RR      | 7                              | 0.527                           |
| Maint. Building | 3                              | 0.226                           |

#### Forecasts for Service Area

The City has adopted a level of service standard for parks acreage and developed components based on the *City of Kennesaw Parks, Recreation and Open Space Master Plan*, March 2004. **Table PR-4** presents a calculation of the desired level of service for certain park components, park land, and facility space, based on that *Plan*. The planning horizon in that document was 2014, so the first step is to calculate the desired level of service for acres, square footage and developed components for that year. However, several items shown here have been planned with a horizon year of 2025 (volleyball courts, swimming pools, concession stand & restroom buildings, and recreation facility space). The resulting LOS is then applied to the current inventory to determine if any existing deficiency or excess capacity exists. Negative numbers in the last column shown here represent existing deficiencies (tennis courts, volleyball courts, swimming pools, and square footage), while positive numbers represent excess capacity.

#### Table PR-4 Future Level of Service Determination

| Facility Type   | Desired<br>Inventory in<br>2025 | LOS per 1,000<br>Dwelling Units<br>in 2025 | Demand in<br>2008 | Current<br>Inventory | Excess<br>Capacity or<br>(Existing<br>Deficiency) |
|-----------------|---------------------------------|--|-------------------|----------------------|---|
| Ball Fields     | 11                              | 0.611                                      | 8.1               | 11.0                 | 2.9   |
| Soccer Fields   | 5                               | 0.278                                      | 3.7               | 4.0                  | 0.3   |
| Football Fields | 3                               | 0.167                                      | 2.2               | 2.0                  | (0.2)   |
| Tennis Courts   | 6                               | 0.333                                      | 4.4               | 2.0                  | (2.4)   |
| Basketball Ct.s | 3                               | 0.167                                      | 2.2               | 3.0                  | 0.8   |
| Tracks/Trails*  | 5                               | 0.278                                      | 3.7               | 5.0                  | 1.3   |
| Playgrounds     | 16                              | 0.888                                      | 11.8              | 15.0                 | 3.2   |
| Pavilions       | 23                              | 1.277                                      | 17.0              | 20.0                 | 3.0   |
| Maint. Building | 4                               | 0.222                                      | 2.9               | 3.0                  | 0.1   |
| Park Acreage    | 146.55                          | 8.138                                      | 108.03            | 121.55               | 13.52   |
|                 | Desired<br>Inventory in<br>2025 | _  |                   |                      |   |
| Volleyball Ct.s | 1                               | 0.056                                      | 0.7               | 0.0                  | (0.7)   |
| Swimming Pools  | 1                               | 0.056                                      | 0.7               | 0.0                  | (0.7)   |
| Concess/RR      | 9                               | 0.500                                      | 6.6               | 7.0                  | 0.4   |
| Facilities (SF) | 65,220                          | 4,351.29                                   | 57,765            | 30,220               | (27,545)  |

**Table PR-5** shows the future demand in parks acreage and components based on the adopted LOS standard for parks acreage, facility space and developed components as calculated in Table PR-4. The increase in dwelling units between 2008 and 2025 is multiplied by the level of service standards to produce the future demand. The 'new dwelling units' figure is taken from Table P-2.

#### Table PR-5 Future Demand Calculation New Growth

| AC/1,000<br>Dwelling Units | Number of New<br>Dwelling Units<br>(2008-25) | Acres Demanded          |
|----------------------------|--|-------------------------|
| 8.14                       | 4,733  | 39                      |
|                            | Number of New                                |                         |
| SF/1,000<br>Dwelling Units | Dwelling Units<br>(2008-25)                  | Square Feet<br>Demanded |
| 4,351                      | 4,733  | 20,595                  |

| Adopted LOS<br>per 1,000<br>Dwelling Units | New Components Demanded<br>(2008-2025) |                 |  |
|--|--|-----------------|--|
|  |  |                 |  |
| 0.611                                      | 2.9                                    | Ball Fields     |  |
| 0.278                                      | 1.3                                    | Soccer Fields   |  |
| 0.167                                      | 0.8                                    | Football Fields |  |
| 0.333                                      | 1.6                                    | Tennis Courts   |  |
| 0.167                                      | 0.8                                    | Basketball Ct.s |  |
| 0.056                                      | 0.3                                    | Volleyball Ct.s |  |
| 0.278                                      | 1.3                                    | Tracks/Trails*  |  |
| 0.056                                      | 0.3                                    | Swimming Pools  |  |
| 0.888                                      | 4.2                                    | Playgrounds     |  |
| 1.277                                      | 6.0                                    | Pavilions       |  |
| 0.500                                      | 2.4                                    | Concess/RR      |  |
| 0.222                                      | 1.1                                    | Maint. Building |  |

**Table PR-6** 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, 39 total acres are ultimately impact fee eligible, while a net of 25 new acres must be added to meet the demand of new growth (accounting for the current excess capacity).

#### Table PR-6 Future Park Land Acquisition

|      | New<br>Dwelling | AC<br>Demanded | Running<br>Total: AC |                   | Net New |
|------|-----------------|----------------|----------------------|-------------------|---------|
| Year | Units           | (annual)       | Demanded*            | Project           | Acres*  |
|      |                 |                |                      |                   |         |
| 2008 | 0               | 0              | (14)                 |                   | 14      |
| 2009 | 316             | 2.6            | (11)                 |                   |         |
| 2010 | 324             | 2.6            | (8)                  | New Park A        | 5       |
| 2011 | 261             | 2.1            | (6)                  |                   |         |
| 2012 | 266             | 2.2            | (4)                  |                   |         |
| 2013 | 271             | 2.2            | (2)                  | New Park B        | 5       |
| 2014 | 276             | 2.2            | 0                    |                   |         |
| 2015 | 281             | 2.3            | 3                    |                   |         |
| 2016 | 250             | 2.0            | 5                    |                   |         |
| 2017 | 254             | 2.1            | 7                    | New Park C        | 5       |
| 2018 | 258             | 2.1            | 9                    |                   |         |
| 2019 | 263             | 2.1            | 11                   |                   |         |
| 2020 | 267             | 2.2            | 13                   |                   |         |
| 2021 | 280             | 2.3            | 16                   | New Park D        | 5       |
| 2022 | 284             | 2.3            | 18                   |                   |         |
| 2023 | 289             | 2.4            | 20                   |                   |         |
| 2024 | 294             | 2.4            | 23                   |                   |         |
| 2025 | 299             | 2.4            | 25                   | New Park E        | 5       |
|      |                 |                |                      |                   |         |
|      |                 |                | Net N                | New Growth Total: | 39      |

\*Figures reflect current excess capacity.

**Table PR-7** presents a calculation of the net new developed components that must be added to the parks system to both serve new growth and meet the existing deficiencies in certain categories (tennis courts, volleyball courts, swimming pools). Where excess capacity was identified in Table PR-4, the future demand is reduced since that excess capacity is available to serve new growth. (In this table, excess capacity appears as a negative number and an existing deficiency appears as a positive number.)

#### Table PR-7 Future Facility Demand

|                 |            | Current       |            |
|-----------------|------------|---------------|------------|
|                 | New        | Deficiency or | Net New    |
|                 | Components | (Excess       | Components |
| Facility Type   | Demanded   | Capacity)     | Demanded   |
|                 |            |               |            |
| Ball Fields     | 2.9        | (2.9)         | 0.0        |
| Soccer Fields   | 1.3        | (0.3)         | 1.0        |
| Football Fields | 0.8        | 0.2           | 1.0        |
| Tennis Courts   | 1.6        | 2.4           | 4.0        |
| Basketball Ct.s | 0.8        | (0.8)         | 0.0        |
| Volleyball Ct.s | 0.3        | 0.7           | 1.0        |
| Tracks/Trails*  | 1.3        | (1.3)         | (0.0)      |
| Swimming Pools  | 0.3        | 0.7           | 1.0        |
| Playgrounds     | 4.2        | (3.2)         | 1.0        |
| Pavilions       | 6.0        | (3.0)         | 3.0        |
| Concess/RR      | 2.4        | (0.4)         | 2.0        |
| Maint. Building | 1.1        | (0.1)         | 1.0        |
|                 |            |               |            |

## Future Costs

**Table PR-8** is a listing of the future capital projects costs for the developed components required in order to attain and maintain the adopted level of service standards. The 'units to be added' figures are drawn directly from Table PR-7, and rounded up to the next whole facility. As a result, some portions of these projects are not impact fee eligible since they provide excess capacity beyond that demanded by currently forecasted growth. This is because the City cannot construct a portion of a facility, but must provide developed components in 'whole' numbers. For example, new growth to 2025 requires 0.3 volleyball courts in order to maintain the current LOS (see table PR-5), but an additional 0.7 of a volleyball court in order to meet an existing deficiency. A total of 1 volleyball court will have to be built, since there is no such thing as 0.3 of a court. So a court will be built, and 0.7 of it will be capacity required to meet the existing deficiency, and thus not eligible for impact fee collection. Project years have been selected to match the proposed projects from Table PR-6 where practical. Project cost estimates have been supplied by the City, or are based on comparable facility construction estimates; these gross costs have been converted to net present value figures.<sup>3</sup>

#### Table PR-8 Future Park Facility Costs

|      |                 |          |                 |                  |                             | Net Present      |           |                  |
|------|-----------------|----------|-----------------|------------------|-----------------------------|------------------|-----------|------------------|
|      |                 |          |                 |                  | Adjusted                    | Value            |           |                  |
|      |                 | Units to |                 |                  | Cost                        | (Adjusted        | % for New | Net Cost to      |
| Year | Facility Type   | be Added | Cost per Unit*  | Gross Cost       | (Inflation)**               | Cost)**          | Growth    | New Growth       |
| 0047 |                 |          | <b>*</b> ~~~~~~ | <b>*</b> ~~~~~~~ | <b>*</b> ~~~ <b>~ ~ ~ ~</b> | <b>0</b> 015 010 | 400.000/  | <b>*</b> 015 010 |
| 2017 | Soccer Fields   | 1        | \$200,000       | \$200,000        | \$281,716                   | \$215,912        | 100.00%   | \$215,912        |
| 2013 | Football Fields | 1        | \$200,000       | \$200,000        | \$241,928                   | \$208,689        | 100.00%   | \$208,689        |
| 2013 | Tennis Courts   | 2        | \$60,000        | \$120,000        | \$145,157                   | \$125,214        | 50.00%    | \$62,607         |
| 2017 | Tennis Courts   | 2        | \$60,000        | \$120,000        | \$169,030                   | \$129,547        | 50.00%    | \$64,774         |
| 2012 | Volleyball Ct.s | 1        | \$45,000        | \$45,000         | \$52,401                    | \$46,557         | 28.92%    | \$13,467         |
| 2018 | Swimming Pools  | 1        | \$600,000       | \$600,000        | \$877,938                   | \$653,268        | 28.92%    | \$188,957        |
| 2019 | Playgrounds     | 1        | \$50,000        | \$50,000         | \$76,000                    | \$54,904         | 100.00%   | \$54,904         |
| 2013 | Pavilions       | 1        | \$42,000        | \$42,000         | \$50,805                    | \$43,825         | 100.00%   | \$43,825         |
| 2017 | Pavilions       | 1        | \$42,000        | \$42,000         | \$59,160                    | \$45,341         | 100.00%   | \$45,341         |
| 2021 | Pavilions       | 1        | \$42,000        | \$42,000         | \$68,890                    | \$46,911         | 100.00%   | \$46,911         |
| 2013 | Concess/RR      | 1        | \$225,000       | \$225,000        | \$272,169                   | \$234,775        | 100.00%   | \$234,775        |
| 2017 | Concess/RR      | 1        | \$225,000       | \$225,000        | \$316,930                   | \$242,901        | 100.00%   | \$242,901        |
| 2014 | Maint. Building | 1        | \$125,000       | \$125,000        | \$157,072                   | \$131,545        | 100.00%   | \$131,545        |
|      |                 |          | -               |                  |                             |                  | 1         |                  |
|      |                 |          |                 | \$2,036,000      | \$2,769,195                 | \$2,179,389      |           | \$1,554,607      |

\*Estimated costs are drawn from the City of Kennesaw Parks, Recreation and Open Space Master Plan, March 2004..

\*\*Adjusted cost is based on construction cost estimate adjustment (Table C-2); net present value is based on anticipated interest earnings.

<sup>&</sup>lt;sup>3</sup> For more information on the cost inflator factor and net present value, see the 'Cost Adjustments and Credits' section of this report.

**Table PR-9** presents the estimated costs for the land acquisition projects. The cost estimates are drawn from the *City of Kennesaw Parks, Recreation and Open Space Master Plan*, further modified by the City, and are adjusted to reflect the net present value.<sup>4</sup>

#### Table PR-9 Land Acquisition Costs

| Year | Project    | Acres | Gross Cost* | Adjusted<br>Cost<br>(Inflation)** | Net Present<br>Value<br>(Adjusted<br>Cost)** | % for New<br>Growth | New Growth<br>Cost |
|------|------------|-------|-------------|-----------------------------------|--|---------------------|--------------------|
| 2010 | New Park A | 5     | \$625,000   | \$663,331                         | \$625,253                                    | 100.00%             | \$625.253          |
| 2013 | New Park B | 5     | \$625,000   | \$725,280                         | \$625,633                                    | 100.00%             | \$625,633          |
| 2017 | New Park C | 5     | \$625,000   | \$816,971                         | \$626,140                                    | 100.00%             | \$626,140          |
| 2021 | New Park D | 5     | \$625,000   | \$920,253                         | \$626,648                                    | 100.00%             | \$626,648          |
| 2025 | New Park E | 5     | \$625,000   | \$1,036,592                       | \$627,155                                    | 100.00%             | \$627,155          |
|      |            | 25    | \$3,125,000 | \$4,162,428                       | \$3,130,830                                  |                     | \$3,130,830        |

\*Estimated acquisition costs based on an average of \$125,000 per acre.

\*\*Adjusted cost is based on on CPI adjustment (Table C-4); net present value is based on anticipated interest earnings.

<sup>&</sup>lt;sup>4</sup> For more information on net present value, see the 'Cost Adjustments and Credits' section of this report.

**Table PR-10** presents the estimated costs for the facility (square footage) projects. The projects and cost estimates are drawn from the *City of Kennesaw Parks, Recreation and Open Space Master Plan*, further modified by the City, and are adjusted to reflect the net present value. The cost of construction is also adjusted to reflect the construction cost inflation factor, before conversion to net present value.<sup>5</sup> Note that only a portion of the second project is impact fee eligible; portions of this and all of the third project are required to meet the existing deficiency in facility space.

## Table PR-10Recreation Center Costs to Meet Future Demand

| Year         | Project                     | Square<br>Footage | Cost*                      | Adjusted<br>Construction<br>Cost** | Const. Cost -<br>Net Present<br>Value** | % for New<br>Growth | New Growth<br>Cost (NPV)   |
|--------------|-----------------------------|-------------------|----------------------------|------------------------------------|---|---------------------|----------------------------|
| 2014<br>2015 | Museum<br>Recreation Center | 10,500<br>35,000  | \$1,155,000<br>\$3,850,000 |                                    | \$1,168,798<br>\$3,903,713              | 100.00%<br>28.84%   | \$1,168,798<br>\$1,125,964 |
|              |                             | 45,500            |                            | \$6,196,681                        | \$5,072,512                             |                     | \$2,294,763                |

\*Estimated costs are drawn from the City of Kennesaw Parks, Recreation and Open Space Master Plan, March 2004...

\*\*Adjusted cost is based on building construction cost estimate adjustment (Table C-3); net present value is based on anticipated interest earnings.

<sup>&</sup>lt;sup>5</sup> For more information on the construction cost inflator and net present value, see the 'Cost Adjustments and Credits' section of this report.

## **Exemption Policy**

The City of Kennesaw recognizes that certain office, retail trade and industrial development projects provide extraordinary benefit in support of the economic advancement of the city's citizens over and above the access to jobs, goods and services that such uses offer in general. To encourage such development projects, the City Council may consider granting a reduction in the impact fee for such development projects upon either the determination and relative to the extent that the business or project represents extraordinary economic development and employment growth of public benefit to City of Kennesaw, in accordance with adopted exemption criteria. It is also recognized that the cost of system improvements otherwise foregone through exemption of any impact fee must be funded through revenue sources other than impact fees.

## CITY OF KENNESAW COMPREHENSIVE PLAN

## Short Term Work Program

#### (2009–2013) AMENDMENT

### Short Term Work Program Amendment (2009--2013)

| <b>.</b>                              |      |    | rt Yea |    |    | Responsible            |   | Anticipated Funding |  |
|---------------------------------------|------|----|--------|----|----|------------------------|---|---------------------|--|
| Project                               | 2009 | 10 | 11     | 12 | 13 | Party                  | Estimated Cost  | Source(s)           |  |
|                                       |      |    |        |    |    | City Council,          | <b>*</b> 4 <b>* *</b>   |                     |  |
| Handguns (4)                          | X    |    |        |    |    | Police                 | \$1,452   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Handguns (4)                          |      |    | Х      |    |    | Police                 | \$1,453   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Handguns (4)                          |      |    |        |    | Х  | Police                 | \$1,453   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Shotguns (2)                          |      |    |        | Х  |    | Police                 | \$831   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Rifle (1)                             |      |    |        | Х  |    | Police                 | \$781   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| New Park A (5 acres)                  |      | X  |        |    |    | Parks                  | \$625,253   | 100% Impact Fees    |  |
| , , , , , , , , , , , , , , , , , , , |      |    |        |    |    | Department             | . ,   |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| New Park B (5 acres)                  |      |    |        |    | х  | Parks                  | \$625,633   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             | +,  |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Football Field                        |      |    |        |    | х  | Parks                  | \$208,689   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             | <i><i><i><i><i>ϕ</i></i><sup>2</sup><i></i><sup>0</sup><i></i><sup>0</sup>,<i></i><sup>0</sup><i></i><sup>0</sup></i></i></i> |                     |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Tennis Courts (2)                     |      |    |        |    | х  | Parks                  | \$125,214   | 50% Impact Fees,    |  |
|                                       |      |    |        |    |    | Department             | φ120,211  | General Fund        |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Volleyball Court                      |      |    |        | x  |    | Parks                  | \$46,557  | 29% Impact Fees,    |  |
|                                       |      |    |        |    |    | Department             | φ+0,007   | General Fund        |  |
|                                       |      |    |        |    |    | City Council,          |   |                     |  |
| Picnic Pavilion                       | 1    |    |        |    | х  | Parks                  | \$43,825  | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             | ψ+0,020   | 10070 Impact 1 665  |  |
|                                       | +    |    |        |    |    |                        |   |                     |  |
| Concession                            |      |    |        |    |    | City Council,<br>Parks | ¢001 775  | 100% Impact Ecco    |  |
| stand/Restroom                        |      |    |        |    | Х  |                        | \$234,775   | 100% Impact Fees    |  |
|                                       |      |    |        |    |    | Department             |   |                     |  |