

Georgia, Cherokee County

Transmittal Resolution No. 2013-R-021
Capital Improvements Element 2013 Amendment
&
2013 Capital Improvements Element / Short Term Work Plan
Annual Update

Cherokee County, Georgia

WHEREAS, Cherokee County has adopted a Capital Improvements Element as an amendment to the *Cherokee County Comprehensive Plan*; and

WHEREAS, a Capital Improvements Element 2013 Amendment and 2013 Capital Improvements Element / Short Term Work Plan Annual Update have been 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 August 20, 2013, at 6:00 P.M. in Cherokee Hall of the Cherokee County Administration Building;

BE IT THEREFORE RESOLVED that the Board of Commissioners of Cherokee County, Georgia, does hereby submit the Capital Improvements Element 2013 Amendment and 2013 Capital Improvements Element / Short Term Work Plan Annual Update to the Atlanta Regional Commission for Regional and State review, as per the requirements of the Development Impact Fee Compliance Requirements.

Adopted this 20th day of August, 2013.

BY: _____

L.B. Ahrens, Chairman

ATTEST: _____

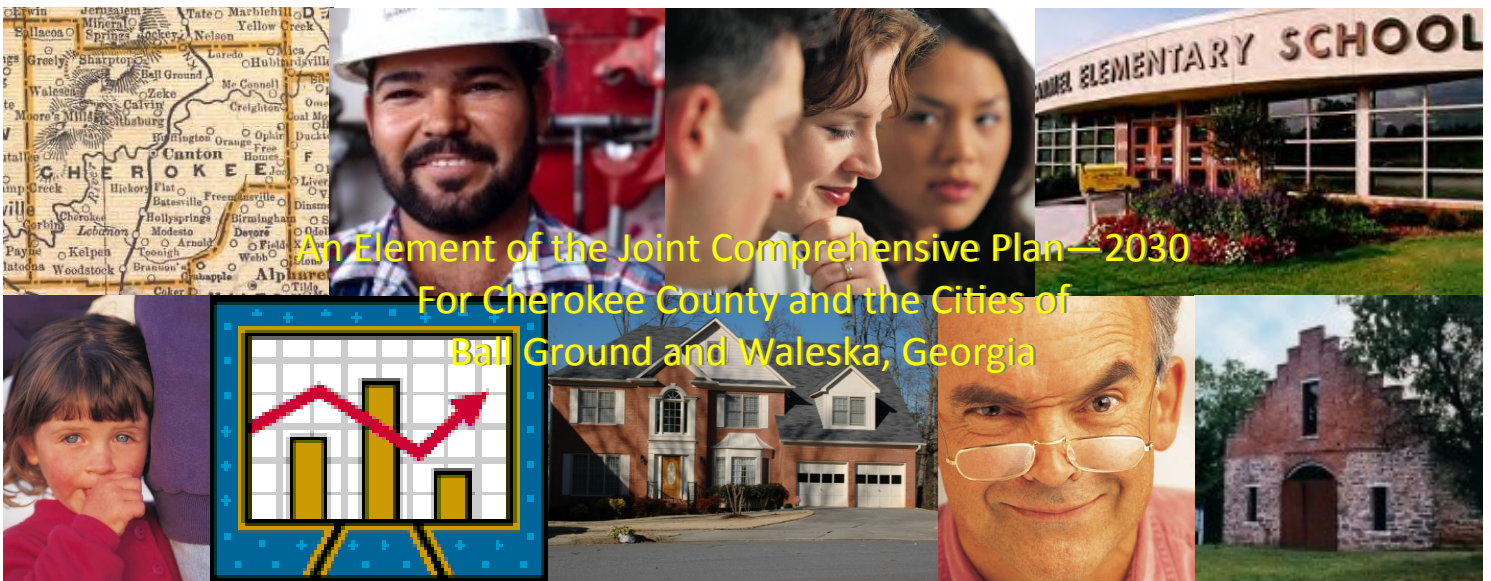
Christy Black, County Clerk



Capital Improvements Element

Cherokee County Impact Fee Program

DRAFT Amendment August 20, 2013



an Element of the Joint Comprehensive Plan—2030
For Cherokee County and the Cities of
Ball Ground and Waleska, Georgia

Capital Improvements Element

Cherokee County Impact Fee Program Including the following public facility categories:

Library
Fire Protection and EMS
Public Safety Facility
Adult Detention Center
E-911
Emergency Operations Center
Sheriff's Patrol
Parks and Recreation
Road Improvements

DRAFT Amendment – August 20, 2013

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urban planning & plan implementation

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Introduction

This document represents an update to Cherokee County's Capital Improvements Element, which will be adopted as an amendment to its Comprehensive Plan. The County's Capital Improvements Element was originally adopted in 2000 and was subsequently updated and amended in 2007.

■ Purpose

The purpose of a Capital Improvements Element (CIE) is to establish where and when certain new capital improvements will be provided within a jurisdiction and how they may be financed through an impact fee program. As required by the Georgia Development Impact Fee Law, 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 (2030);
- The designation of **levels of service** (LOS) - the service level that will be provided to existing and new development alike;
- 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.

This CIE goes beyond the minimum requirements by providing information on needed capital improvements beyond the coming 5 years to the end of the Comprehensive Planning period in 2030. System improvements expected to commence or be completed over the coming five years are shown in the County's Short-Term Work Program (STWP), which is updated and submitted on an annual basis. Each year, the STWP lists 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, Cherokee County has developed this CIE for the following public facility categories authorized by the Georgia Development Impact Fee Law:

- Libraries;
- Parks and recreation;
- Public safety, including fire protection and emergency medical services, detention, E-911, emergency operations, and law enforcement; and,
- Roads.

■ **Components of the Impact Fee System**

The Cherokee County Impact Fee System consists of several components:

- The currently adopted Comprehensive Plan, including future land use assumptions and projected future demands;
- Service area forecasts, including population, housing unit and employment forecasts to 2030;
- Service area definition and designation;
- Appropriate level of service standards for each impact fee eligible public facility category;
- A methodology report, which updates the forecasts for the county and its cities and 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 future demand for expanded services for Cherokee County, new growth and development must be quantified in future projections. These projections include forecasts for population, dwelling units and employment to the year 2030. 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 county 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. These forecasts are based on the County's most recently adopted *Comprehensive Plan Update*, the previously amended CIE (2007) and more recently available data.

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.
- Housing unit data and forecasts relate to certain service demands that are based on households, such as libraries or parks, and are used to calculate impact costs in that the cost is assessed when a building permit for a residence is issued.
- 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 fire protection and law enforcement.

In **Table 1** the population, housing unit and employment forecasts are combined by type of service area in four ways: countywide housing units (which are served by libraries and parks), countywide day/night population (Jail, 911 and EMS), unincorporated day/night population (served by the Sheriff's Patrol), and a single service area covering all of the county except Canton and Woodstock (the area of primary responsibility for County fire protection). These figures are used in subsequent public facility category chapters to calculate Levels of Service and the service demands of new growth.

Table 1: Service Area Forecasts

Year	Countywide Housing Units (Library, Parks)	Countywide Day/Night Population (Jail, 911, EOC, EMS)	Unincorporated Area Day/Night Population (Sheriff's Patrol)	Countywide Day/Night population EXCEPT Canton & Woodstock (Fire Protection)
2000	52,623	193,476	144,593	152,688
2001	55,600	203,447	149,736	158,699
2002	58,635	214,180	155,720	165,503
2003	61,480	224,029	160,859	171,482
2004	64,583	235,360	167,385	178,855
2005	68,280	248,953	175,900	188,239
2006	72,800	265,581	186,843	200,201
2007	76,679	277,987	193,957	208,250
2008	79,236	283,854	195,441	210,477
2009	81,143	285,657	193,344	209,038
2010	82,705	287,978	192,456	208,666
2011	83,798	292,313	195,090	211,668
2012	84,885	295,749	195,128	212,372
2013	88,725	309,053	203,513	221,619
2014	92,628	322,616	211,942	230,949
2015	96,586	336,423	220,393	240,341
2016	100,594	350,450	228,831	249,765
2017	104,643	364,678	237,231	259,194
2018	108,728	379,085	245,565	268,601
2019	112,840	393,647	253,795	277,953
2020	116,972	408,351	261,899	287,226
2021	121,116	423,154	269,835	296,381
2022	125,265	438,055	277,577	305,395
2023	129,410	453,016	285,087	314,230
2024	133,545	468,013	292,328	322,850
2025	137,659	483,020	299,264	331,221
2026	141,745	498,008	305,852	339,304
2027	145,794	512,959	312,058	347,066
2028	149,798	527,837	317,838	354,464
2029	153,748	542,617	323,150	361,461
2030	157,634	557,267	327,951	368,015

Net				
Increase:	105,011	363,791	183,358	215,327

Cost Adjustments

Calculations related to impact fees are made in terms of the 'present value' of past and future amounts of money, including project 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 to convert these costs into current dollars when such an adjustment is appropriate.

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 the value of money as it changes over time as the result of inflation.

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:

$$\text{Future Cost} = \text{Current Cost} \times (1 + \text{Inflation Rate})^{\text{Year of Expenditure} - \text{Current Year}}$$

$$\text{Net Present Value} = \text{Future Cost} \times (1 + \text{Net Discount Rate})^{\text{Current Year} - \text{Year of Expenditure}}$$

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, an appropriate cost inflator is identified. 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 construction, project construction or non-construction), current estimates can be used to predict future costs in the year they are expected to occur.

The second cost adjustment is a deflator – the Net Discount Rate. In essence, the Net Discount Rate is best represented by the CPI inflation rate, but applied in reverse. That is, having determined the inflated cost of a project at some future date, the cost in today's dollars can be calculated as the present value of that future expenditure. As will be seen below, the cost of project construction and building construction has been increasing at almost twice the CPI inflation rate over the past 10 years.

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.

Over the past 10 years for which full-year data is available (2003 through 2012), the Building Cost Index has increased an average of almost 4.1% per year. As a result, an average new building that cost \$100,000 in 2003 would be expected to cost \$131,570 today. Similarly, for construction projects other than buildings, the Construction Cost Index has increased on averaged a little over 4.2% per year. This means that an average construction project that cost \$100,000 in 2003 would be expected to cost over \$134,700 today.

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.

Looking at the change in CPI for the 10 years from 2003 to 2012, an average annual inflation rate of a little under 2.3% captures the change over that period, with little variation from year to year. This inflation rate is assumed to be experienced 'on average' in future years, and is used for inflation calculations for future non-construction expenditures. This assumption is consistent with recent pronouncements by the FED that an annual inflation rate of 2% would be considered normal and desirable for the national economy.

CALCULATING NET PRESENT VALUE

Determining the NPV of future project expenditures depends on the type of 'project' being funded.

For a building construction project (such as a fire station or library), the current cost estimate for the project is inflated into the future using the average Building Cost Inflator applied to the number of years until the year planned for its construction. This future cost is then deflated back to the present using the 10-year average CPI inflator since this reflects the present value of a future amount of money.

For other construction projects (such as roads or recreation facilities), the current cost estimate for the project is inflated into the future using the average Construction Cost Inflator applied to the number of years until the year planned for its construction. Like building construction projects, this future cost is then deflated back to the present using the 10-year average CPI inflator.

For non-construction capital projects (such as fire trucks or land acquisition), the 10-year average CPI inflator would be used both to estimate the project expenditure in future dollars and to deflate that future cost to present value, resulting in the same cost figure initially estimated and subsequently 'adjusted.' Currently estimated project costs for such projects are therefore assumed to be the Net Present Value of the future expenditure regardless of the year in which it is planned.

Library Facilities

Library services in Cherokee County are provided through the Sequoyah Regional Library System that also provides library services to Pickens and Gilmer Counties. Cherokee County's libraries are operated and maintained by financial contributions specifically from Cherokee County, with some limited assistance from the State of Georgia for new construction. The Cherokee library system provides services to all residents of Cherokee County through a variety of information and materials, facilities and programs. The library system serves all persons on an equal basis in meeting their educational, recreational, civic, economic and spiritual needs.

■ Service Area

Materials, facilities and services of the Cherokee County libraries are equally available to the County's population. The entire county is considered a single service district for library services. An improvement in any part of the county increases service to all parts of the county to some extent.

■ Projection of Needs

Demand for library facilities is almost exclusively related to the county's residential population. Businesses make some use of public libraries for research purposes, but the use is minimal and considered incidental compared to that of the families and individuals who live in the country. Thus, a library system impact fee is limited to future residential growth. Between 2013 and 2030, the number of dwelling units in the library facilities service area will grow from 88,725 to 157,634, an increase of 68,909 dwelling units.

■ Level of Service

The year 2013 Level of Service (LOS) is determined by the inventory of the existing library facilities and collection materials, as shown on **Table 2**.

Table 2: Inventory of Library Facilities – 2013

Facility	Square Feet	Collection Materials*
R.T. Jones	31,100	40,370
Ball Ground	9,000	15,289
Hickory Flat	10,000	17,304
Rose Creek	10,000	18,980
Woodstock	21,407	26,272
Courthouse Law Library	2,443	-
	83,950	118,215

An inventory of Cherokee County libraries and the collection materials they contain is shown on Table 2. Note that collection materials, which include bound volumes, videos, e-books and the like, must have a shelf life of 10 years or more to be impact fee eligible. Thus, children's books (which are worn out more quickly) and reference materials (which go out of date) are not included in the inventory of collection materials for impact fee calculations.

*Excludes children's and reference materials.

Table 3: Current Level of Service Calculation

Existing Square Feet	Year 2013 Housing Units	Square Feet per Housing Unit
83,950	88,725	0.9462

Existing Collection Materials	Year 2013 Housing Units	Collection Materials per Housing Unit
118,215	88,725	1.3324

Level of Service calculations, shown on **Table 3**, show the number of collection materials and square feet of library space per housing unit that serve the current residents of Cherokee County. These figures establish the adopted Level of Service for Cherokee's libraries.

■ Improvements to Serve New Growth

In **Table 4**, the facility space and collection materials LOS figures from Table 3 are used to calculate future demand in square feet and collection volumes that will be needed to maintain the LOS to the year 2030. The additional number of forecasted housing units to the year 2030 is multiplied by the Level of Service to produce the future demand figures. Based on the adopted LOS, future growth will demand 65,200 additional square feet of library space by the year 2030 in order to maintain the adopted LOS. In addition, 91,813 collection materials will need to be added to serve new growth to 2030. (Ultimately, additional collection materials will need to be acquired in order to account for future collection material discards, which will be discussed later.)

Table 4: Future Demand Calculation

Square Feet per Housing Unit	Number of New Housing Units (2013-30)	SF Demanded by New Growth
0.9462	68,909	65,200

Collection Materials per Housing Unit	Number of New Housing Units (2013-30)	Collection Materials Demanded
1.3324	68,909	91,813

Table 5 presents the facility space proposed to meet the 2030 demand in an annual format. Three proposed libraries—the Waleska, Southwest Area and Northeast Area libraries—are already proposed, and the Waleska and Southwest facilities are already included on the State Library Construction Funding list for future funding assistance. The remaining square footage needed to meet the adopted Level of Service to 2030 would, most likely, be included within a larger facility proposed in the post-2030 period and carried over into a future impact fee funding period.

Table 5: Future Library Facility Projects

Year	New Housing Units	SF Demanded (annual)	Running Total: SF Demanded	Project	Net New Square Footage
2014	3,903	3,693	3,693		
2015	3,958	3,745	7,438		
2016	4,008	3,792	11,230		
2017	4,049	3,831	15,061	Waleska Area Facility	15,000
2018	4,085	3,865	18,926		
2019	4,112	3,891	22,817		
2020	4,132	3,910	26,727		
2021	4,144	3,921	30,648		
2022	4,149	3,926	34,574	Southwest Area Facility	20,000
2023	4,145	3,922	38,496		
2024	4,135	3,912	42,408		
2025	4,114	3,893	46,301		
2026	4,086	3,866	50,167	Northeast Area Facility	18,000
2027	4,049	3,831	53,998		
2028	4,004	3,789	57,787		
2029	3,950	3,737	61,524	Future Facility or Expansion	12,200
2030	3,886	3,677	65,201		
Total to Meet New Growth Demand:					65,200

Table 6 presents the figures for collection material demand. Materials demanded by new growth are calculated in the first three columns. Note that the 'materials demanded (annual)' column represents the number of materials that must be purchased each year (on average) in order to meet new growth's demand.

Table 6: Future Collection Materials Demanded

Year	New Growth Demand			Plus Discarded Materials	Total Materials Needed (annual)
	New Housing Units	Materials Demanded (annual)	Running Total		
2014	3,903	5,200	5,200	468	5,668
2015	3,958	5,274	10,474	475	5,749
2016	4,008	5,340	15,814	481	5,821
2017	4,049	5,395	21,209	486	5,881
2018	4,085	5,443	26,652	490	5,933
2019	4,112	5,479	32,130	493	5,972
2020	4,132	5,505	37,636	495	6,000
2021	4,144	5,521	43,157	497	6,018
2022	4,149	5,528	48,685	498	6,026
2023	4,145	5,523	54,208	497	6,020
2024	4,135	5,509	59,717	496	6,005
2025	4,114	5,481	65,198	493	5,974
2026	4,086	5,444	70,643	490	5,934
2027	4,049	5,395	76,037	486	5,881
2028	4,004	5,335	81,372	480	5,815
2029	3,950	5,263	86,635	474	5,737
2030	3,886	5,178	91,813	466	5,644
			91,813	8,265	100,078
Total to Meet New Growth Demand:					91,813
Percent of Total to be Acquired:					91.74%

For collection materials the number of new items demanded by new growth that will be retained for at least 10 years is increased by an anticipated discard rate of 9.0% for "weeded" materials. This rate represents the number of materials required to meet the demand, as well as those "weeded" from the collection in a normal year that need to be replaced. By including the weeded materials, the resulting 'total materials needed (annual)' reflects the total number of items required annually to maintain the LOS once these non-impact fee eligible materials are discarded. 91,813 new materials will be needed to meet the demand of new growth to the year 2030; a total of 100,078 items will need to be purchased to maintain the level of service for both new and existing residents and to account for discarded materials (91,813 items for new growth, plus 8,265 items to account for discarded materials).

■ Capital Project Costs

The building floor area and new collection materials needed to serve new growth identified in Table 5 and Table 6 are used to calculate the future cost to meet service demand, as shown in Table 7 and Table 8. The costs are shown in current (2013) dollars (i.e., Net Present Value, as discussed in the Cost Adjustments Section of this report). Library facility construction cost is based on estimates from the State Library Construction Funding list for the Waleska and Southwest Area facilities, and estimated costs of comparable facilities for the Northeast Area and future facilities.

Table 7: Facility Costs to Meet Future Demand

Year	Project	Square Footage	Gross Cost*	State Aid**	Net Total Cost	% for New Growth	New Growth Cost	Net Present Value***
2017	Waleska Area Facility	15,000	\$ 4,307,000	\$ 2,000,000	\$ 2,307,000	100.00%	\$ 2,307,000	\$ 2,471,555
2022	Southwest Area Facility	20,000	\$ 5,743,000	\$ 2,000,000	\$ 3,743,000	100.00%	\$ 3,743,000	\$ 4,370,649
2026	Northeast Area Facility	18,000	\$ 5,168,700	\$ 2,000,000	\$ 3,168,700	100.00%	\$ 3,168,700	\$ 3,963,966
2029	Future Facility or Expansion	12,200	\$ 3,503,230	\$ 2,000,000	\$ 1,503,230	100.00%	\$ 1,503,230	\$ 1,980,233
		65,200	\$18,721,930	\$ 8,000,000	\$10,721,930		\$ 10,721,930	\$ 12,786,404

* Project costs for Northeast and future facilities based on per-square-foot costs for Waleska and Southwest facilities, from State funding list.

** State Aid for Northeast and future facilities based on historic State funding for similar facilities.

*** Based on BCI inflator, discounted by CPI. See Cost Adjustments Section.

In **Table 8** collection materials costs are estimated at \$17.56 per item based on recent purchases by the library system. The percentage of the cost attributable to new growth in each year is based on the percentage of total items demanded that are attributable to new growth's demand (drawn from Table 6).

Table 8: Collection Materials Costs to Meet Future Demand

Year	Needed (annual)	Gross Cost*	% for New Growth	New Growth Cost (NPV)
2013	0			
2014	5,668	\$ 99,534.66	91.74%	\$ 91,314.50
2015	5,749	\$ 100,944.39	91.74%	\$ 92,607.81
2016	5,821	\$ 102,219.57	91.74%	\$ 93,777.68
2017	5,881	\$ 103,266.63	91.74%	\$ 94,738.27
2018	5,933	\$ 104,179.15	91.74%	\$ 95,575.42
2019	5,972	\$ 104,863.53	91.74%	\$ 96,203.29
2020	6,000	\$ 105,366.58	91.74%	\$ 96,664.79
2021	6,018	\$ 105,682.46	91.74%	\$ 96,954.58
2022	6,026	\$ 105,817.00	91.74%	\$ 97,078.01
2023	6,020	\$ 105,705.86	91.74%	\$ 96,976.05
2024	6,005	\$ 105,454.33	91.74%	\$ 96,745.29
2025	5,974	\$ 104,910.32	91.74%	\$ 96,246.21
2026	5,934	\$ 104,202.54	91.74%	\$ 95,596.88
2027	5,881	\$ 103,266.63	91.74%	\$ 94,738.27
2028	5,815	\$ 102,108.43	91.74%	\$ 93,675.71
2029	5,737	\$ 100,739.66	91.74%	\$ 92,419.98
2030	5,644	\$ 99,101.80	91.74%	\$ 90,917.39
100,078		\$ 1,757,363.55		\$ 1,612,230.13

*Cost is based on average unit cost of \$17.56 per item.

■ Funding Sources

Capital improvements for Cherokee County's library facilities and long-term collection materials presented in this CIE are primarily funded from impact fee and SPLOST revenue, and to some extent from the general fund. It is anticipated State grant assistance will be obtained for the proposed libraries.

Fire Protection Facilities

Fire protection and emergency medical services are provided by the County through its Fire and Emergency Services Department. The Department has under its command fire stations; administrative and training facilities; fire trucks and other fire-fighting, rescue and hazardous materials vehicles; and ambulances.

■ Service Area

Fire protection is provided by the County to the entire county outside of the Cities of Canton and Woodstock, which is known as the Fire Services District. The Cities of Canton and Woodstock have their own fire departments, and operate cooperatively but independently from the County system. Emergency medical services, on the other hand, are provided countywide.

For these reasons the entire county outside of Canton and Woodstock is considered a single service area for the provision of fire protection because all residents and employees within this area have equal access to the benefits of the County program. The service area for emergency medical services, however, is the entire county including all incorporated and unincorporated areas.

The Fire Department operates as a coordinated system for fire protection, with each fire station backing up the other stations in the system. The backing up of another station is not a rare event; it is the essence of good fire protection planning. All stations do not serve the same types of land uses, nor do they all have the same apparatus. It is the strategic placement of personnel and equipment that is the backbone of good fire protection. Any new station would relieve some of the demand on the other stations in the network. Since the stations would continue to operate as “backups” to the other stations, everyone in the Fire Services District would benefit by the construction of a new station since it would reduce the “backup” times the station nearest to them may be experiencing.

The same is true of the distribution of ambulances in that the addition of new ambulances would both increase service as the population increases and further support service delivery countywide.

■ Projection of Needs

Between 2013 and 2030, the day/night population (a combination of residents and employees) in the Fire Services District service area will grow from 221,619 to 368,015, an increase of 146,396 persons. Countywide, the service area for emergency medical services is forecast to grow by a total of 248,214 persons, from 309,053 to 557,267.

■ Level of Service

The Level of Service for fire protection and emergency medical services in Cherokee County is measured with regard to two considerations: one is quantity, measured in terms of the number of heavy vehicles (engines, tankers, etc.), ambulances, and square feet of floor area in fire stations and related space. The other is the quality of fire protection, measured in terms of ISO rating criteria—specifically the standard that all development within the service area be within five road miles of a fire station. The consequence of not meeting this qualitative standard is increased response times to today’s fast-moving fire emergencies and extraordinarily higher insurance rates for uses outside the 5-mile coverage.

As noted above, there are two service areas—one being the Fire Services District and the other (for EMS) being countywide. Day/night population is used as a measure in that fire protection and

emergency medical services are provided continuously on a 24-hour basis to both residences and businesses in the service area, whether or not people are at home or businesses are open.

FIRE AND EMERGENCY SERVICES FACILITIES AND EQUIPMENT

In 2013, fire protection and emergency medical services were provided by a network of fire stations throughout the Fire Services District, several administrative and training facilities, and ambulances located strategically throughout the county. Currently, however, the Department does not achieve the 5-mile qualitative standard in all parts of its service area. To achieve this minimum standard for existing development, four new strategically located fire stations are needed, each fully equipped with a fire engine, a ladder truck and an ambulance. Two of these new stations would replace two aging and inadequate volunteer stations carried over when the Department was created. With the addition of these stations and equipment, the county will be provided with an adequate Level of Service for the present day/night population.

Table 9 presents the 2013 inventory of facilities, heavy vehicles (apparatus having a life of 10 years or more) and ambulances under the control and operation of the Cherokee County Fire and Emergency Services Department. To this inventory has been added the four new stations and rolling stock needed to raise the Level of Service to an adequate level both quantitatively and qualitatively.

For the new stations, the most-recently constructed Clayton Community Station (#6) is used as a model at 6,408 square feet. Although all four stations will be constructed at this size, two are reduced on the inventory listing to the extent of the two old stations that will be removed when they are replaced, so that the 'total facility space' will reflect the deletion of the old stations and the total floor area that will remain in operation.

Table 9: Inventory of Fire Department Facilities and Vehicles

Occupied Building Space		Heavy Vehicles - Fire*	
Facility	Floor Area (Sq. Ft.)	Description	Count
Existing Stations/Facilities		Existing Inventory	
Station 1 - Oak Grove	2,500	Engine**	28
Station 2 - Ball Ground	6,000	Tender	8
Station 3 - Hickory Flat	2,025	Ladder	1
Station 4 - Holbrook Campground	6,610	Rescue	8
Station 5 - Circle Five	4,004	Dive Rescue Truck	1
Station 6 - Clayton Community	6,408	Hazard Response	2
Station 7 - Little River	8,000	Air/Light Truck	1
Station 8 - Holly Springs	11,661	Mass Catastrophe	1
Station 9 - North Canton	8,000		
Station 12 - Waleska	8,087		
Station 13 - Suttalee	5,040		
Station 15 - Mica	5,000		
Station 17 - Lake Arrowhead	1,736		
Station 18 - Salacoa	3,750		
Station 19 - Ridgemill	9,286		
Station 20 - Oak Grove	8,000		
Station 21 - Airport Rd	7,570		
Station 22 - Bridgemill	6,125		
Station 23 - Vaughn Rd	6,726		
Station 25 VFD - Holbrook Campground	2,025		
Station 26 VFD - Nelson	1,490		
Station 27 LAVFD - Lake Arrowhead	2,050		
Station 32 - Hickory Flat	2,632		
Station 99 - Headquarters & Fire Station	4,850		
Logistics Admin - Univeter Rd	4,500		
Logistics Warehouse - Univeter Rd	13,000		
Shortfall			
New Fire Station	6,408		
New Fire Station	6,408		
Replace Station 25***	4,383		
Replace Station 26***	4,918		
Total Facility Space:		Total Heavy Vehicles:	58
		Ambulances	
		Existing Ambulances	18
		Shortfall	4
		Total Ambulances:	22

* Vehicles having a life of 10 years or more.

** In addition, there are four engines held in reserve.

*** Replacement stations are the net of standard 6,408 sf minus the square footage replaced.

CURRENTLY REQUIRED LEVEL OF SERVICE

Table 10 presents the calculation of the Level of Service (LOS) for the system as expanded with the additional stations and vehicles.

Table 10: Level of Service Calculation

System Square Feet	2013 Day/Night Population*	SF per Day/Night Population
169,192	221,619	0.7634

System Heavy Vehicles	2013 Day/Night Population*	Heavy Vehicles per Day/Night Pop
58	221,619	0.00026171041

System Ambulances	2013 Day/Night Population**	Ambulances per Day/Night Pop
22	309,053	0.00007118520

* For Fire District.

** Countywide Service Area.

This expanded system raises the LOS for existing development in the two service areas to a level that provides adequate service under basic ISO standards, and will be maintained for future growth and development anticipated to 2030.

■ Improvements to Serve New Growth

For the purposes of impact fee calculations the County has determined that the currently required (2013) Level of Service will be maintained to serve the future day/night population within each of its two service areas—the Fire Services District and (for EMS) the entire county. The system LOS figures from Table 10 are multiplied by the forecasted day/night population increase to the year 2030 in each service area, as applicable, to produce the expected future demand in **Table 11**.

Table 11: Future Demand Calculation

SF per Day/Night Population	Day/Night Pop Increase (2013-30)*	SF Demanded by New Growth
0.7634	146,396	111,764

Heavy Vehicles per Day/Night Pop	Day/night Pop Increase (2013-30)*	New Heavy Vehicles Demanded
0.00026171041	146,396	38

Ambulances per Day/Night Pop	Day/night Pop Increase (2013-30)**	New Ambulances Demanded
0.00007118520	248,214	18

* For Fire District.

** Countywide Service Area.

■ Capital Project Costs

The future facility floor area, number of heavy vehicles and number of ambulances needed to meet the demand created by new growth and development in the future are transferred from Table 11 to **Table 12**. By 2030, future demand based on day/night population can be met by the construction of the proposed facilities and the purchase of new heavy vehicles and ambulances, as shown on the table.

For new building construction, such as fire stations and administrative/training facilities, an average construction cost of \$175 per square foot of floor area is used. This figure is consistent with current construction projects the Department has currently underway. For heavy fire-fighting and related vehicles, a blended average of vehicle costs is used, reflecting the weighted average cost of the Department's entire fleet. For ambulances, four vehicles were acquired in 2013; the average cost of these new vehicles is used to estimate the cost of acquiring new ambulances in the future.

These estimated costs factors are multiplied times future demand to determine the amount of money, in 2013 dollars, required to adequately serve new growth and development at the County's currently required LOS. The Net Present Value of the cost estimates for new building construction are calculated by increasing the current estimated costs using the Engineering News Record's building cost inflation rates (BCI), and then discounting this future amount back to 2013 using the 10-year average CPI. For non-construction improvements (heavy vehicles and ambulances) the currently estimated costs are the Net Present Value. (The approaches to calculating NPV are explained in detail in the Cost Adjustments Section of this report.)

Table 12: Costs to Meet Future Demand

SF Demanded by New Growth	Cost per Unit	Total Cost in 2013 Dollars	Total Cost - Net Present Value*
111,764	\$ 175.00	\$ 19,558,700.00	\$ 22,838,422.28

New Heavy Vehicles Demanded	Cost per Unit	Total Cost in 2013 Dollars	Total Cost - Net Present Value**
38	\$ 387,775.86	\$ 14,735,482.68	\$ 14,735,482.68

New Ambulances Demanded	Cost per Unit	Total Cost in 2013 Dollars	Total Cost - Net Present Value**
18	\$ 142,857.14	\$ 2,571,428.57	\$ 2,571,428.57

* For building construction, dates vary: NPV based on BCI in an average construction year of 2022; discount rate = 10-year average CPI. See the Cost Adjustments Section for details.

** For non-construction, expenditures = current cost. See the Cost Adjustments Section.

■ Funding Sources

Capital improvements for Cherokee County's fire protection and emergency medical service facilities presented in this CIE are primarily funded from impact fee and SPLOST revenue, and to some extent from the general fund.

Public Safety Facility

The Cherokee County Sheriff's Office operates the County Jail (Adult Detention Center) and detention facilities in the Justice Center, and administers all activities of the Sheriff's Office from space in the Public Safety Facility. In addition to the Adult Detention Center and administration, the Public Safety Facility is also home to the Emergency Operations Center (EOC) and encompasses the attached 'old' jail/headquarters building. The 911 emergency communications center, which is operated by the County Marshal's Office, is also located within the Public Safety Facility. For the purposes of this public facility category, all law enforcement activities that are countywide in nature are included in this section and referred to generically as the Public Safety Facility category. The Uniform Patrol Division and the Criminal Investigations Division (CID) primarily serve the unincorporated area of the county and are addressed under the Sheriff's Patrol section of this report.

■ Service Area

The entire county is considered a single service area for the provision of the law enforcement activities provided under the Public Safety Facility category because all residents and employees in the county have equal access to the benefits of the program.

■ Projection of Needs

Between 2000 and 2030, the day/night population (a combination of residents and employees) in the Public Safety Facility service area will grow from 193,476 to 557,267, an increase of 363,791 persons.

■ Level of Service

The Public Safety Facility category is unique among the public facility categories being updated in this CIE Amendment because a 'deficiency' in floor area space was identified in 2000 and was carried forward in the impact fee calculations at that time. This 'deficiency' carry-over must continue to be considered as part of the overall space needs to 2030 because it affects the level of impact fee eligibility of past expenditures. The calculations in this section, therefore, must begin at the beginning—in the year 2000.

Table 13: Inventory of Facilities - 2000

Facility	Square Feet in 2000
Old Jail/Headquarters	48,100
Justice Center detention	11,404
	59,504

As a first step in calculating an appropriate Level of Service (LOS) to adopt, the then 'current' level in 2000 was determined. That 'current' level of service was determined by an inventory of the square footage of the facilities operated by the Sheriff's Office at that time. This included two facilities—what is now the 'old' jail and a portion of the Justice Center used by the Sheriff's Office to detain prisoners for court appearances and for other duties. These are still used by the Sheriff's Office today. Statistics for the facilities in 2000 are shown in **Table 13**.

In 2000, the County determined that it would adopt a Level of Service based on the addition of the then-planned Public Safety Facility. **Table 14** shows the calculations carried out to determine the resulting Level of Service standard.

Table 14: Adopted LOS and Deficiency Calculation

Factor	Square Feet
Floor Area Existing in 2000	59,504
Square Feet to be Added*	195,866
Total Square Feet Needed (2011)	255,370
Total Square Feet Needed (2011)	255,370
Day/Night Population in 2011	292,313
Square Feet per Day/Night Population	0.873618
Total Demand in Square Feet - 2000	169,024
Floor Area Existing in 2000	59,504
Year 2000 Deficiency (Square Feet)	(109,520)

* New Public Safety Facility, including administration, 911 communications, Adult Detention Center, and Emergency Operations Center.

The population-to-inmate housing ratio in 2000 indicated that the current and planned facilities would adequately serve the County to the year 2011. As shown in Table 14, the space added by the construction of the new Public Safety Facility¹ was added to the year 2000 square footage. This total was divided by the year 2011 service area population to calculate the resulting LOS.

This LOS figure represents an update to the figure calculated in 2000 in that the day/night population figures have been updated to the current figures found in the Forecasts section of this report.² This new figure is adopted as the updated LOS for the Public Safety Facility category.

This updated LOS was then applied to the year 2000 day/night population in order to identify the demand at that time, which resulted in a year 2000 deficiency. This deficiency is larger than in 2000 because of the updated day/night population figures.

¹ Some square footage in the Public Safety Facility is occupied by the Fire Department. This square footage does not appear here; it is included in the 'Fire Protection and EMS' section of this report.

² In 2000, the results of the 2000 Census was not yet known and the 2011 population was a projection. Today, population figures for both years have been reported by the Census Bureau.

■ Improvements to Serve New Growth

In **Table 15** the adopted LOS from Table 14 is applied to all future growth that was projected from 2000 to 2030. The 'day/night population increase' figure is derived from the countywide service area population figures for the Public Services Facility category shown in the Forecasts section of this report. This increase in day/night population to the year 2030 is multiplied by the adopted level of service to produce the future demand figure in square feet of floor area. To this is added the year 2000 carry-over deficiency to determine the total square feet that will need to be provided to serve new and pre-2000 development. Not all of this floor area is impact fee eligible, as will be seen later in this section.

Table 15: Future Demand Calculation

SF per Day/Night Population - LOS	Day/Night Pop Increase (2000-30)	SF Demanded by New Growth
0.873618	363,791	317,814
Plus: Year 2000 Deficiency:		109,520
Total SF Needed - 2030:		427,334

SF = square feet. Pop = population.

A set of projects contemplated to meet the 2000-2030 demand, both in the past and future, are scheduled on **Table 16**. Beyond the Public Safety Facility built in 2002 and the special purpose garage at the Public Safety Facility built in 2007, the table lists the Public Safety Training Facility expansion currently authorized under SPLOST VI and a 'Future Expansion' potentially needed by 2024 when demand will have well exceeded existing floor area. This 'Future Expansion' has not been assigned to any particular type of project, and may include an addition to the Adult Detention Center, additional space for other functions in the Public Safety Facility, or other construction projects in support of the law enforcement activities covered by this public facilities category. Further, 'Future Expansion' may comprise a single project or several distinct projects, yet to be determined. For the purpose of these impact fee calculations, however, the total floor area is aggregated into a single expansion targeted for 2024 for cost estimating purposes.

Table 16: Public Safety Facility Projects

Year	Day/Night Pop Increase	SF Demanded (annual)	Running Total: SF Demanded*	Project	Net New Square Footage*
2000	0	0	109,520		(109,520)
2001	9,971	8,711	118,231		
2002	10,733	9,377	127,607	New Public Safety Facility	195,866
2003	9,849	8,604	136,212		
2004	11,331	9,899	146,111		
2005	13,593	11,875	157,986		
2006	16,628	14,527	172,512		
2007	12,406	10,838	183,350	Special Purpose Garage	6,000
2008	5,867	5,126	188,476		
2009	1,803	1,575	190,051		
2010	2,321	2,028	192,079		
2011	4,335	3,787	195,866		
2012	3,436	3,002	198,868		
2013	13,304	11,623	210,490		
2014	13,563	11,849	222,339	Training Facility	11,300
2015	13,807	12,062	234,401		
2016	14,027	12,254	246,655		
2017	14,228	12,430	259,085		
2018	14,407	12,586	271,671		
2019	14,562	12,722	284,393		
2020	14,704	12,846	297,239		
2021	14,803	12,932	310,171		
2022	14,901	13,018	323,189		
2023	14,961	13,070	336,259		
2024	14,997	13,102	349,361	Future Expansion	214,168
2025	15,007	13,110	362,471		
2026	14,988	13,094	375,565		
2027	14,951	13,061	388,626		
2028	14,878	12,998	401,624		
2029	14,780	12,912	414,536		
2030	14,650	12,799	427,334		

Total to Meet New Growth Demand: 317,814

SF = square feet. Pop = population.

* Figures reflect year-2000 deficiency.

■ Capital Project Costs

Future cost to meet the square footage demanded by new growth projected from 2000 to 2030 is shown in **Table 17**. The first two projects—the Public Safety Facility and special purpose garage—are already completed; costs shown for these projects are the actual construction costs for each facility.

The cost for the Training Facility expansion is taken from the SPLOST VI budget.

The 2013 cost estimate for the 'Future Expansion' floor area is based on the actual per-square-foot construction cost of the Public Safety Facility (\$145) inflated to 2013 using the Building Cost Index (BCI) to \$175 per square foot. This 2013 cost estimate is further inflated to a 2024 cost using the 10-year BCI average and then discounted to Net Present Value using the 10-year average CPI inflator.³

Since there was a year-2000 deficiency carry-over in facility space, the portion of the Public Safety Facility project that had to cover the deficiency was not impact fee eligible. Both the amount of the deficiency and the percent of the Public Safety Facility cost that is impact fee eligible (that is, available to serve new growth as projected in 2000) have been updated to current 2013 figures.

Table 17: Facility Costs to Meet Demand

Year	Project	Square Feet	Cost*	% for New Growth	New Growth Cost (NPV)**
2002	New Public Safety Facility	195,866	\$ 34,276,550	44.08%	\$ 15,110,550
2007	Special Purpose Garage	6,000	\$ 125,512	100.00%	\$ 125,512
2014	Training Facility	11,300	\$ 1,500,000	100.00%	\$ 1,500,000
2024	Future Expansion	214,168	\$ 37,479,400	100.00%	\$ 44,975,280
			\$ 73,381,462		\$ 61,711,342

* Costs for public safety facility and special purpose garage based on actual expenditures; cost estimate for the training facility based on SPLOST VI budget.

** Net Present Value of future expansion based on current \$175/sf estimate, inflated to 2024 using the BCI and discounted using the 10-year average CPI, to \$210/sf. See the Cost Adjustments and Credits section for details.

■ Funding Sources

Capital improvements for countywide law enforcement facilities presented in this CIE are primarily funded from impact fee and SPLOST revenue, and to some extent from the general fund.

³ See the Cost Adjustments section of this report for a more detailed explanation of inflation rates and Net Present Value.

Sheriff's Patrol Facilities

The Cherokee County Sheriff's Patrol category focuses on the law enforcement activities of the Department and includes the Uniform Patrol Division and the Criminal Investigations Division (CID). These Divisions provide primary law enforcement throughout the unincorporated county, as well as back up and supplemental services within all the incorporated areas.

■ Service Area

The unincorporated county is considered a single service area for the provision of primary law enforcement services by the Uniform Patrol Division and the Criminal Investigations Division, because all residents and employees in this area of the county have equal access to the benefits of the program.

■ Projection of Needs

Between 2013 and 2030, the day/night population (a combination of residents and employees) in the Sheriff's Office facilities service area will grow from 203,513 to 327,951, an increase of 124,438 persons.

■ Level of Service

The current Level of Service is based on an inventory of the square footage of floor area used by the Sheriff's Patrol components. Statistics are shown in **Table 18**.

Table 18: Inventory of Sheriff's Patrol Space

Name	Location	Square Footage
CID	7545 Main St. Woodstock	11,524
K-9	1085 Marietta Hwy	1,040
Waleska	Fire Station 12	2,055
Ballground	Fire Station 21	2,055
Free Home	Fire Station 4	2,055
Hickory Flat	Fire Station 23	2,055
Bridge Mill	Fire Station 22	2,055
Oak Grove	Fire Station 19	3,360
Total Floor Area:		26,199

The Level of Service (LOS) for Sheriff's Patrol services in Cherokee County is measured in terms of square footage per day/night population in the service area. Day/night population is used as a measure in that the Sheriff's Patrol is a set of law enforcement services provided to both residences and businesses in the service area on a 24-hour basis. The current LOS is shown in **Table 19**.

Table 19: Current Level of Service Calculation

Existing Floor Area (SF)	Year 2013 Day/Night Pop*	Square Feet per Day/Night Pop
26,199	203,513	0.1287

Pop = population. SF = square feet.

* Unincorporated area only.

■ Improvements to Serve New Growth

The County has adopted a LOS based on the current year level. In **Table 20** the adopted Level of Service, based on the LOS calculated in Table 19, is applied to future growth. The 'day/night population added' figure is derived from the projections for the service area found in the Forecasts section of this report. The additional number of forecasted day/night population to the year 2030 is multiplied by the adopted level of service to produce the future floor area demand figure (in square feet).

Table 20: Future Demand Calculation

Square Feet per Day/Night Pop	Day/Night Pop Added (2013-30)*	SF Demanded by New Growth
0.1287	124,438	16,019

Pop = population. SF = square feet.

* Unincorporated area only.

■ Capital Project Costs

The future cost to meet the square footage demanded by new growth to 2030 is shown in **Table 21**. Estimated construction cost is based on facilities comparable to current locations. Costs are shown in current (2013) dollars and in Net Present Value (the cost in 2013 dollars of future construction costs that reflect future inflation in the construction cost of buildings mitigated by the value of future dollars today). Since construction dates are not established, the NPV calculation assumes an average construction year mid-way between 2013 and 2030.

Table 21: Costs to Meet Future Demand

SF Demanded by New Growth	Cost per Square Foot	Cost in 2013 Dollars	Cost - Net Present Value*
16,019	\$ 175.00	\$ 2,803,325.00	\$ 3,273,403.66

SF = square feet.

* Building construction dates vary. NPV based on BCI in an average construction year of 2022; discount rate = 10-year average CPI. (See the Cost Adjustments Section.)

■ Funding Sources

Capital improvements for Cherokee County's uniform patrol and criminal investigation divisions presented in this CIE are primarily funded from impact fee and SPLOST revenue, and to some extent from the general fund.

Parks and Recreation Facilities

Public recreational opportunities are available in Cherokee County through a number of parks facilities operated by the Cherokee Recreation and Parks Agency (CRPA), a County department. Demand for recreational facilities is almost exclusively related to the county'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 county. Thus, the parks and recreation impact fee is limited to future residential growth.

■ Service Area

The county park system operates as part of a countywide system of parks that are located in both cities and the unincorporated area. Parks and recreational facilities are made available to the county'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. For instance, children active in the little leagues play games at various locations throughout the county, based on scheduling rather than geography. Other programs are located only at certain centralized facilities, to which any Cherokee County resident can go without restriction. As a general rule, parks facilities are located throughout the county, and future facilities will continue to be located around the county so that all residents will have recreational opportunities available on an equal basis. Thus, the entire county is considered a single service area for parks & recreation services.

In addition to the county parks system, the cities of Ball Ground, Canton, Holly Springs, Nelson and Woodstock have parks and facilities owned and operated by the cities themselves. Although these city park systems receive financial support from various SPLOST programs and the current Parks Bonds, they are independent of county control and therefore not included in the County's impact fee program.

■ Projection of Needs

Demand for recreational facilities is almost exclusively related to the county's resident population. Businesses make some use of public parks for office events, company softball leagues, etc., but the use is minimal and considered incidental compared to that of the families and individuals who live in the county. Thus, a parks and recreation impact fee is limited to future residential growth. Between 2013 and 2030, the number of dwelling units in the park facilities service area will grow from 88,725 to 157,634, an increase of 68,909 dwelling units.

■ Level of Service

The County has adopted the current (2013) Level of Service for both the amount of land area in parks and other recreational facilities and for the recreation components, such as ball fields, playgrounds, tennis and basketball courts, trails, etc. Under the Georgia Development Impact Fee Law, the County must provide the same level of service to both the existing and future residents of the county. Thus, the 2013 LOS is used to determine the additional acres of land and number of recreation components needed to equally meet the demand created by future residential growth and development. These LOS figures are presented in conjunction with proposed improvements, below.

■ Improvements to Serve New Growth

PARK LANDS

Table 22 provides an inventory of the acreage of parks and other recreational facilities under the control of the CRPA in 2013, including both those in service and actively under construction. The total acreage of these parks divided by the current number of housing units (in thousands) in the county produces the current Level of Service (LOS) of almost 30 acres per 1,000 housing units countywide.

Table 22: Existing Park Acres & New Acres Needed

Park / Facility Name	Number of Acres
Badger Creek Park	151.00
Barnett Park	37.50
Blankets Creek Bike Trails	363.00
Buffington Park & Gym	5.00
Cherokee County Aquatic Center	37.00
Cherokee Mills Park	26.50
Cline Park	17.50
Dwight Terry Park	41.00
Field's Landing Park	280.00
Garland Mt. Horse/Hike Trails	772.00
Hickory Trails Park	34.00
Hobgood Park	83.50
J.J. Biello Park	470.00
Kenney Askew Park	13.50
Killian Property (under construction)	51.06
Lewis Park	82.00
Park Village	25.00
Recreation Center (South Annex)	8.20
Riverchase Park	9.75
Rubes Creek Park	36.38
Sequoyah Park	58.00
Union Hill Community Center	3.00
Waleska Park	27.00
Weatherby Park	25.00

Multiplying the LOS times the number of new housing units forecast to be produced by new growth and development throughout the county to the year 2030 (in thousands) produces the number of acres that are needed to serve this future residential population. As shown on Table 22, almost 2,100 acres will be needed to meet the future demand.

Total Acres:	2,656.89
	÷
2013 Housing Units:	88,725
	=
LOS - Acres per 1,000 Housing Units:	29.94522
	×
2013-2030 Housing Unit Increase:	68,909
	=
Acres Needed to Meet Future Demand:	2,063.50

Table 23: Park Acquisitions for Future Growth

Park / Facility Name*	Number of Acres	Development Options
East Park (Funk)**	149.32	Active
Patriots' Park (Kellogg Cr/Victory)**	33.88	Active
Dunn Property	39.00	Active
Priest Road Property	10.89	Active
Thompson Property	43.00	Active/Passive
Cherokee Veterans Park (Thacker)	141.00	Active/Passive
Hudgens Property	405.16	Passive
Rebecca Ray Park	15.00	Passive
Yellow Creek Road Property	538.36	Passive
Shoal Creek (Forestar & John Ford)	248.40	Passive
Willoughby-Sewell Property	226.59	Passive
Old Doss	45.12	Passive
New Park (To Be Acquired)	167.78	Active

Total Acres: 2,063.50

* Includes Parks Bond funded acquisitions plus additional needed acres.

** Construction planned with Parks Bond funds.

Anticipating the need to serve the county's future population, the County included funding in its current Parks Bond issues for the acquisition of additional park lands. **Table 23** shows the land acquisitions, some purchased and some donated, that will meet the future demand. All of the parks listed have been acquired and land-banked except for the 'new park' at the end of the list, which is not scheduled in the Parks Bond program. Some of the new parks will be developed with active recreation components, as noted on the table, while others will provide passive green space with such possible improvements as trails and leisure areas. Two of the parks (East Park and Patriot's Park) have allocations for construction using Parks Bond proceeds.

RECREATION COMPONENTS

In addition to the parks acreage Level of Service adopted by the County based on the current (2013) inventory of parks, a similar Level of Service is adopted for recreation components based on the current (2013) inventory for each component or facility.

The current inventory of components and facilities used to calculate the current LOS for each component is shown on **Table 24**. Note that other types of components may be constructed in the future in the county; the table cannot anticipate new types of recreational facilities or changes in public preferences, but the table includes all component types incorporated in the impact fee program. The current LOS figures are based on the number of housing units currently in the county as a whole.

Future demand is based on the increase in housing units forecast between 2013 and 2030. In the 'demanded to meet LOS' column, the table shows the future demand for recreation components based on the current LOS standard for each component. Except for building floor areas and lengths of trails, this is often a fractional figure, but is mathematically the specific amount that would be impact fee eligible.

The figures in the 'components proposed' column are rounded into 'whole' facilities to be built. As a result, some portions of various projects are not impact fee eligible to the extent that they provide more 'capacity' than that demanded to specifically serve new growth. This is because the CRPA cannot construct only a portion of a facility, but must provide many recreation components in 'whole' numbers. For example, new growth to 2030 requires 1.51 outdoor basketball courts in or-

der to mathematically maintain the LOS. However, 2 basketball courts will have to be built, since there is no such thing as 0.51 of a court. So 2 basketball courts will be built, and 0.49 of a court will be excess capacity; the result is that only 75.5% of the two courts will be eligible to receive impact fee funding. For any component that is rounded down (such as multi-purpose fields) the amount impact fee eligible is 100% since all of the new 'capacity' will serve new growth. Note that, although only partial funding may be available from 2013-2030 impact fee collections, the shortfall can be recouped through subsequent impact fee collections from growth beyond 2030.

Table 24: Existing Recreation Components & New Components Needed

Recreation Component	Current Inventory*	Current Level of Service**	New Components		% Impact Fee Eligible
			Demanded To Meet LOS	Components Proposed	
Administrative Offices (sq. ft.)	3,015	33.98140321	2,274	2,274	100.00%
Maintenance HQs (sq. ft.)	7,000	78.89546351	5,279	5,279	100.00%
Maintenance Yards (sq. ft.)	41,000	462.10200056	30,919	30,919	100.00%
Aquatic Center	1	0.01127078	0.75	1	75.00%
Banquet Hall	1	0.01127078	0.75	1	75.00%
Concessions w/Restrooms	12	0.13524937	9.05	10	90.50%
Gymnasium	2	0.02254156	1.51	1	100.00%
Recreation/Community Center	1	0.01127078	0.75	1	75.00%
Restrooms (stand alone)	21	0.23668639	15.84	6	100.00%
Baseball / Softball Field	37	0.41701888	27.90	28	99.64%
Basketball Court (Outdoor)	2	0.02254156	1.51	2	75.50%
Disc Golf Course	1	0.01127078	0.75	1	75.00%
Grass Event Lawn	1	0.01127078	0.75	1	75.00%
Fishing / Boat Ramp	2	0.02254156	1.51	2	75.50%
In-Line Hockey Rink	1	0.01127078	0.75	1	75.00%
Multi-Purpose Field	24	0.27049873	18.10	18	100.00%
Outdoor Classroom	1	0.01127078	0.75	1	75.00%
Picnic Area / Pavilion	32	0.36066498	24.13	24	100.00%
Playground	17	0.19160327	12.82	13	98.62%
Splash Pad	1	0.01127078	0.75	1	75.00%
Tennis Court	20	0.22541561	15.08	16	94.25%
Volleyball Court	1	0.01127078	0.75	1	75.00%
Soft Trails (miles)***	32	0.35841082	23.98	23.98	100.00%
Paved Pedestrian Trails (miles)	2	0.02209073	1.48	1.48	100.00%
2013 Housing Units =			88,725	66,909	= 2013-2030 Housing Unit Increase

* Inventory includes amenities funded with Parks Bond currently under construction (Killian Property).

** Level of Service per 1,000 housing units.

*** Includes equestrian, mountain bike and unpaved pedestrian trails.

■ Capital Project Costs

Table 25 presents the costs associated with the land acquisition projects listed on Table 23. All costs shown are the actual costs incurred by the Parks Bond program except for the 'new park' at the end of the list. The cost estimate for acquisition of the 'new park' is based on the average land acquisition costs actually experienced for all of the other parks on the list (\$15,000 per acre). All costs are in current (2013) dollars.

The table shows the amount paid for each park, which includes such associated costs as appraisals, title searches, land surveys and other legal fees. In addition, for the Parks Bond projects, the cost of bond financing (the interest paid on the bonds) is allocated to each project in proportion to its cost relative to the total for all bond projects.

Table 25: Land Acquisition Costs

Park / Facility Name	Number of Acres	Amount Paid for Property	Cost with Financing*	% for New Growth	New Growth Cost (NPV)**
East Park (Funk)	149.32	\$ 4,602,437.20	\$ 6,433,565.69	100%	\$ 6,433,565.69
Patriots' Park (Kellogg Cr/Victory)	33.88	\$ 2,180,829.64	\$ 3,048,495.86	100%	\$ 3,048,495.86
Dunn Property	39.00	\$ 1,592,666.45	\$ 2,226,325.70	100%	\$ 2,226,325.70
Priest Road Property	10.89	\$ 250,000.00	\$ 333,324.62	100%	\$ 333,324.62
Thompson Property	43.00	\$ 1,944,750.23	\$ 2,718,489.75	100%	\$ 2,718,489.75
Cherokee Veterans Park (Thacker)	141.00	\$ 2,894,631.07	\$ 4,046,290.77	100%	\$ 4,046,290.77
Hudgens Property***	405.16	\$ -	\$ -	100%	\$ -
Rebecca Ray Park***	15.00	\$ -	\$ -	100%	\$ -
Yellow Creek Road Property	538.36	\$ 1,226,608.20	\$ 1,714,627.29	100%	\$ 1,714,627.29
Shoal Creek (Forestar & John Ford)	248.40	\$ 1,563,167.11	\$ 2,185,089.74	100%	\$ 2,185,089.74
Willoughby-Sewell Property	226.59	\$ 3,339,720.68	\$ 4,668,464.00	100%	\$ 4,668,464.00
Old Doss	45.12	\$ 460,000.00	\$ 643,015.88	100%	\$ 643,015.88
New Park****	167.78	\$ 2,516,700.00	\$ 2,516,700.00	100%	\$ 2,516,700.00
Totals:	2,063.50	\$ 22,571,510.58	\$ 30,534,389.30		\$ 30,534,389.30

* Financing cost = debt service interest on Parks Bonds using a 1.3978606148 multiplier. For the Priest Road property, financed with SPLOST III and IV funding, the CPI inflation rate from 2000 is applied.

** Net Present Value for non-construction expenditures = current cost. See the Cost Adjustments Section for details.

*** Property donated at no cost.

**** Estimated acquisition cost based on average \$15,000 per acre. No bond financing assumed.

The next table, **Table 26**, lays out the costs to be incurred to provide the recreation components and facilities proposed on Table 24. The estimated average cost of constructing each component is shown in the 'net cost per unit' column, which is then increased to provide for a contingency and for professional architectural and engineering services to undertake the project (shown in the

'gross cost per unit' column). The gross cost times the number of units (square feet of floor area, number of recreational facilities or miles of trail) yields the 'total cost' for each component.

As noted above, some components have been rounded up to reflect the fact that only 'whole' facilities will actually be built. Figures in the '% impact fee eligible' column reflect these partial funding eligibilities, and result in the 'new growth share' of the total cost.

Table 26: Future Recreation Component Costs

Recreation Component	Components Proposed	Net Cost per Unit	Gross Cost per Unit*	Total Cost	% Impact Fee Eligible	New Growth Share (2014-30)	Net Present Value**
Administrative Offices***	2,274	n/a					
Maintenance HQs (sq. ft.)	5,279	\$ 100.00	\$ 122.00	\$ 644,038.00	100.00%	\$ 644,038.00	\$ 752,034.23
Maintenance Yards (sq. ft.)	30,919	\$ 3.00	\$ 3.66	\$ 113,163.54	100.00%	\$ 113,163.54	\$ 132,139.49
Combined Rec / Aquatic Center	1	\$ 16,000,000	\$ 19,520,000	\$ 19,520,000.00	75.00%	\$ 14,640,000.00	\$ 17,297,724.26
Banquet Hall	1	\$ 750,000	\$ 915,000	\$ 915,000.00	75.00%	\$ 686,250.00	\$ 810,830.82
Concessions w/Restrooms	10	\$ 250,000	\$ 305,000	\$ 3,050,000.00	90.50%	\$ 2,760,250.00	\$ 3,261,341.76
Gymnasium***	1	n/a					
Recreation/Community Ctr***	1	n/a					
Restrooms (stand alone)	6	\$ 100,000	\$ 122,000	\$ 732,000.00	100.00%	\$ 732,000.00	\$ 864,886.21
Baseball / Softball Field	28	\$ 250,000	\$ 305,000	\$ 8,540,000.00	99.64%	\$ 8,509,500.00	\$ 10,054,302.22
Basketball Court (Outdoor)	2	\$ 20,000	\$ 24,400	\$ 48,800.00	75.50%	\$ 36,844.00	\$ 43,532.61
Disc Golf Course	1	\$ 50,000	\$ 61,000	\$ 61,000.00	75.00%	\$ 45,750.00	\$ 54,055.39
Grass Event Lawn	1	\$ 250,000	\$ 305,000	\$ 305,000.00	75.00%	\$ 228,750.00	\$ 270,276.94
Fishing / Boat Ramp	2	\$ 200,000	\$ 244,000	\$ 488,000.00	75.50%	\$ 368,440.00	\$ 435,326.06
In-Line Hockey Rink	1	\$ 125,000	\$ 152,500	\$ 152,500.00	75.00%	\$ 114,375.00	\$ 135,138.47
Multi-Purpose Field	18	\$ 300,000	\$ 366,000	\$ 6,588,000.00	100.00%	\$ 6,588,000.00	\$ 7,783,975.92
Outdoor Classroom	1	\$ 5,000	\$ 6,100	\$ 6,100.00	75.00%	\$ 4,575.00	\$ 5,405.54
Picnic Area / Pavilion	24	\$ 40,000	\$ 48,800	\$ 1,171,200.00	100.00%	\$ 1,171,200.00	\$ 1,383,817.94
Playground	13	\$ 75,000	\$ 91,500	\$ 1,189,500.00	98.62%	\$ 1,173,030.00	\$ 1,385,980.16
Splash Pad	1	\$ 300,000	\$ 366,000	\$ 366,000.00	75.00%	\$ 274,500.00	\$ 324,332.33
Tennis Court	16	\$ 50,000	\$ 61,000	\$ 976,000.00	94.25%	\$ 919,880.00	\$ 1,086,873.67
Volleyball Court	1	\$ 25,000	\$ 30,500	\$ 30,500.00	75.00%	\$ 22,875.00	\$ 27,027.69
Soft Trails (miles)	23.98	\$ 35,000	\$ 42,700	\$ 1,023,946.00	100.00%	\$ 1,023,946.00	\$ 1,209,831.66
Paved Pedestrian Trails (miles)	1.48	\$ 200,000	\$ 244,000	\$ 361,120.00	100.00%	\$ 361,120.00	\$ 426,677.20
Totals:				\$ 46,281,867.54		\$ 40,418,486.54	\$ 47,745,510.58

* Includes contingency at 15% and architectural/engineering services at 7%.

** Construction dates vary. NPV based on BCI or CCI as appropriate, in an average construction year of 2022. Discount rate = 10-year average CPI. See the Cost Adjustments Section for details.

*** Included in Combined Recreation / Aquatic Center.

Note: The Net Present Value of the 'total cost' column is: \$ 54,683,810.30 of which the ineligible amount is: \$ 6,938,299.72

■ Funding Sources

Capital improvements for Cherokee County's parks and recreation facilities presented in this CIE are primarily funded from impact fee and GO Bond revenue (currently) and SPLOST revenue (in the past), and to some extent from the general fund.

Road Improvements

The information in this chapter is derived from, or taken directly from, information developed for the 2000 *Cherokee County Capital Improvements Element*, subsequently updated in 2007, and with some further data updates for two road projects. Specifically, road project data is drawn from engineering carried out for the County. Level of Service calculations, as well as determination of need, are based on this engineering, carried out by the County's Engineering Department.

■ Service Area

The service area for these road projects is defined as the entire county. In that these road projects are recognized as providing primary—if not exclusive—capacity to properties within the county, the entire county has been adopted as the service area for the purpose of assessing impact fees. All new development within the county will be assessed the road impact fee, as calculated in this section. The road network within the county 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 county.

■ Projection of Needs

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

■ 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 County's Engineering Department's calculations.

ADOPTED 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 LOS 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, developed by the County.

■ Improvements to Serve New Growth

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 County and are shown in **Table 27**. This is not an inclusive list of all County road projects. These projects were selected for inclusion in the County's impact fee program in 2000, with the exception of Bells Ferry Rd 2 and 3, which were added to the impact fee calculations in the 2007 update. Local share of the project costs are shown. All but the last two of these projects already have been completed, and appear in this report for the purposes of the continuing recoupment of the County's investment.

Table 27: Road Projects and Estimated Costs

Project	Description	Local Cost
Towne Lake Pkwy	Improvement	\$ 4,127,910
Business Hwy 5	Relocation, new road construction	\$ 2,568,641
Riverstone Blvd	New road construction	\$ 550,000
Bells Ferry Rd - 1	ROW, design, safety planning	\$ 784,956
Rope Mill Rd	New road construction	\$ 1,671,989
Reinhardt College Pkwy	New road construction	\$ 320,000
Eagle Dr	Widening	\$ 4,202,220
East Cherokee Dr	Widening	\$ 3,500,000
Bells Ferry Rd - 2	Widening, Southfork to N Victoria	\$ 28,444,533
Bells Ferry Rd - 3	Bridge replacement over Little River	\$ 2,000,000
		\$ 48,170,249

While the great majority of projects listed in Table 27 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 28** figures are given for the trip capacity and volume on a set of road projects that provide new capacity, in the year in which the project was added. For the last two projects, the capacity figures shown are updated to 2013. All the previous projects have statistics representing their volume and capacity in 2000.

Where the volume exceeds the capacity, a deficiency exists. Only one road has a measured deficiency at level of service “D”—Business Highway 5. Several road projects have no statistics in this table since they did not yet exist in 2000 (Riverstone, Rope Mill and Reinhardt Parkway); there is no capacity or traffic flow where no road exists.

Table 28: Road Capacities and Deficiencies

Project	Volume (trips)	Capacity (trips)	Excess Capacity	Existing Deficiency
Towne Lake Pkwy	19,323	23,300	3,977	0
Business Hwy 5	23,316	23,300	0	16
Riverstone Blvd	0	0	0	0
Bells Ferry Rd - 1	11,761	23,300	11,539	0
Rope Mill Rd	0	0	0	0
Reinhardt College Pkwy	0	0	0	0
Eagle Dr	12,142	23,300	11,158	0
East Cherokee Dr	5,646	12,900	7,254	0
Bells Ferry Rd - 2	n/a	23,000	0	0
Bells Ferry Rd - 3	n/a	23,000	0	0

The excess capacity represents the available road capacity, in terms of daily trips, not used by the measured volume of traffic. For example, Town Lake Parkway had excess capacity of almost 4,000 trips. More trips could be made on this road without a degradation of the level of service “D” standard. Currently, the County 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 was available to new growth. These ‘net added capacity’ figures are shown in **Table 29**. In this table, the ‘post improvement added capacity’ is the total capacity added by each project, following completion. The ‘net added capacity’ figure is the total added capacity less the ‘existing deficiency’ figure (only applicable here to Business Highway 5). The final calculation shown on 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 added capacity’ figure.

The new capacity created by all of the road projects is at 100% except two. One project—Business Highway 5—is not 100% eligible in that a portion of the added capacity is required to meet the existing deficiency on that road. In the case of the Bells Ferry Road 3 project, it has been reduced in scope to replace a 2-lane bridge with a new 2-lane bridge; therefore creating no new capacity over the original bridge.

Table 29: Post-Improvement Statistics

Project	Post-Improvement ADDED Capacity	Existing Deficiency	Net ADDED Capacity	% Impact Fee Eligible
Towne Lake Pkwy	33,700	0	33,700	100.00%
Business Hwy 5	57,000	16	56,984	99.97%
Riverstone Blvd	20,500	0	20,500	100.00%
Bells Ferry Rd - 1	33,700	0	33,700	100.00%
Rope Mill Rd	20,500	0	20,500	100.00%
Reinhardt College Pkwy	28,200	0	28,200	100.00%
Eagle Dr	33,700	0	33,700	100.00%
East Cherokee Dr	28,200	0	28,200	100.00%
Bells Ferry Rd - 2	17,650	0	17,650	100.00%
Bells Ferry Rd - 3	0	0	0	0.00%

New Trip Capacity Added to Road Network: 255,484

■ Capital Project Costs

Table 30 presents a calculation of the impact fee eligible project costs for the road improvement projects from Table 27.

Table 30: Eligible Cost Calculation

Project	Local Cost	% Impact Fee Eligible	Eligible Cost
Towne Lake Pkwy	\$ 4,127,910	100.00%	\$ 4,127,910
Business Hwy 5	\$ 2,568,641	99.97%	\$ 2,567,920
Riverstone Blvd	\$ 550,000	100.00%	\$ 550,000
Bells Ferry Rd - 1	\$ 784,956	100.00%	\$ 784,956
Rope Mill Rd	\$ 1,671,989	100.00%	\$ 1,671,989
Reinhardt College Pkwy	\$ 320,000	100.00%	\$ 320,000
Eagle Dr	\$ 4,202,220	100.00%	\$ 4,202,220
East Cherokee Dr	\$ 3,500,000	100.00%	\$ 3,500,000
Bells Ferry Rd - 2	\$ 28,444,533	100.00%	\$ 28,444,533
Bells Ferry Rd - 3	\$ 2,000,000	0.00%	\$ -
	<hr/>		<hr/>
	\$ 48,170,249		\$ 46,169,528

The total local cost, from Table 27, is multiplied by the '% impact fee eligible' figure, from Table 29, to produce the amount that is impact fee eligible. The Business Hwy 5 project is reduced due to the existing deficiency, and Bells Ferry 3 creates no added capacity.

■ Funding Sources

Capital improvements for Cherokee County's road improvements presented in this CIE are primarily funded from SPLOST revenue, supplemented by impact fees, and to some extent from the general fund. State assistance for road improvement projects, including those listed in this section, is obtained on a project-by-project basis through coordinated transportation planning.

Exemption Policy

Cherokee County recognizes that certain office, retail trade and industrial development projects provide extraordinary benefit in support of the economic advancement of the county's citizens over and above the access to jobs, goods and services that such uses offer in general. To encourage such development projects, the Board of Commissioners may consider granting a reduction in the impact fee for such a development project upon the determination and relative to the extent that the business or project represents extraordinary economic development and employment growth of public benefit to Cherokee County, 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.

Cherokee County

August 20, 2013



**Annual Impact Fee Financial Report
& Short Term Work Plan Update
2013**

CHEROKEE COUNTY		Annual Impact Fee Financial Report - 2013*					
Public Facility	Libraries	Fire Protection	Sheriff's Patrol	Public Safety Facility	Parks/Recreation	Transportation	TOTAL
Impact Fee Fund Balance Jan 1, 2012	\$464,068	\$57,160	\$23,114	\$1,228,439	\$711,743	\$1,165,819	\$3,650,343
Impact Fees Collected (January 2012 through December 2012)	\$47,780	\$96,957	\$1,793	\$45,211	\$48,236	\$114,751	\$354,728
Accrued Interest	\$15,408	\$40,209	\$2,385	\$24,521	\$22,602	\$29,582	\$134,373
Administrative/Other Costs	\$2,764	\$832	\$135	\$6,879	\$4,104	\$6,916	\$21,631
(Administrative/Other Costs)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(Impact Fee Refunds)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
(Project Expenditures)	(\$100,000)	\$0	\$0	\$0	\$0	\$0	(\$100,000)
Impact Fee Fund Balance Jan 1, 2013	\$430,020	\$195,158	\$27,427	\$1,305,050	\$786,685	\$1,317,068	\$4,061,075
Impact Fees Encumbered	\$2,873,118	\$7,913,006	\$468,915	\$4,696,946	\$4,293,032	\$5,764,117	\$26,009,135

*This annual report covers the last completed fiscal year - January to December, 2012

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility: Libraries								
Service Area: County-wide								
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered*	Status/Remarks
New Woodstock Library Facility	2003	2005	\$4,400,000	29%	General Fund, State of Georgia	\$0	\$1,276,000	Complete
R.T. Jones Library Facility Addition	2009	2011	\$1,402,007	30%	General Fund, State of Georgia	\$0	\$420,000	Complete
Waleska Library Facility	2017	2018	\$4,307,000	54%	General Fund, State of Georgia	\$0	\$0	
Library Collection Materials	2003	2003	\$272,344	56%	General Fund	\$0	\$152,513	Complete
Library Collection Materials	2003	2003	\$194,741	55%	General Fund	\$0	\$107,108	Complete
Library Collection Materials	2003	2003	\$367,845	74%	General Fund	\$0	\$273,993	Complete
Library Collection Materials	2004	2004	\$98,973	55%	General Fund	\$0	\$54,435	Complete
Library Collection Materials	2005	2005	\$65,314	53%	General Fund	\$0	\$34,616	Complete
Library Collection Materials	2006	2006	\$217,873	52%	General Fund	\$0	\$113,294	Complete
Library Collection Materials	2007	2007	\$223,690	52%	General Fund	\$0	\$116,319	Complete
Library Collection Materials	2008	2008	\$353,088	92%	General Fund	\$100,000	\$324,840.96	Complete
Library Collection Materials	2009	2009	\$359,712	92%	General Fund	\$0	\$40,968.39	
Library Collection Materials	2010	2010	\$365,325	92%	General Fund	\$0	\$0.00	
Library Collection Materials	2011	2011	\$369,899	92%	General Fund	\$0	\$0.00	
Library Collection Materials	2012	2012	\$373,493	92%	General Fund	\$0	\$0.00	
Total of Costs, Expenditures & Impact Fees Encumbered			\$13,371,304			\$100,000	\$2,873,118	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility: Fire Protection								
Service Area: County-wide except Canton and Woodstock								
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered*	Status/Remarks
Station 2 Renovation/Expansion	2003	2004	\$65,000	96%	Fire District ⁺	\$0	\$62,400	Complete
Fire Engine 9	2003	2003	\$275,000	89%	Fire District ⁺	\$0	\$244,750	Complete
Fire Engine 20	2003	2003	\$306,000	87%	Fire District ⁺	\$0	\$266,220	Complete
Training Van	2003	2003	\$50,000	88%	Fire District ⁺	\$0	\$44,000	Complete
Holly Springs Fire Station 8	2003	2004	\$1,200,000	100%	None	\$0	\$677,683	Complete
Rescue Unit (Mass Response)	2003	2004	\$216,000	100%	Fire District ⁺	\$0	\$216,000	Complete
Air Truck	2003	2004	\$355,000	100%	Fire District ⁺	\$0	\$355,000	Complete
Fire Engine	2003	2004	\$400,000	87%	Fire District ⁺	\$0	\$348,000	Complete
Station 1 Expansion	2003	2005	\$150,000	88%	Fire District ⁺	\$0	\$132,000	Complete
Station 19 Replacement	2004	2006	\$1,500,000	81%	Fire District ⁺	\$0	\$482,124	Complete
Ambulance Purchase	2004	2009	\$2,050,000	100%	None	\$0	\$2,050,000	Complete
Supply Warehouse	2005	2008	\$2,325,000	90%	Fire District ⁺	\$0	\$1,559,829	Complete
Station 13 Replacement	2010	2011	\$1,200,000	81%	Fire District ⁺	\$0	\$0	
Fire Engine	2007	2007	\$350,000	100%	None	\$0	\$350,000	Complete
Fire Engine x 3	2008	2008	\$1,125,000	100%	None	\$0	\$1,125,000	Complete
Station 15 Relocation & Replacement	2010	2011	\$1,500,000	81%	Fire District ⁺	\$0	\$0	
Heavy Vehicles x 3	2009	2009	\$971,000	90%	Fire District ⁺	\$0	\$0	
Airport Crash Truck	2010	2010	\$800,000	90%	Fire District ⁺	\$0	\$0	
Fire-Emergency Services Training Facility	2010	2012	\$3,141,850	100%	Fire District ⁺	\$0	\$0	In Process
Total of Costs, Expenditures & Impact Fees Encumbered			\$17,979,850			\$0	\$7,913,006	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

* A combination of the Fire District, SPLOST and the Insurance Premium Tax Funds

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility:		Public Safety Facility						
Service Area:		County-wide (except fire administration)						
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered	Status/Remarks
Public Safety Facility	2000	2002	\$33,599,204	58%	General Fund	\$0	\$4,571,435	In Process
Special Purpose Vehicle Garage	2006	2007	\$125,512	100%	None	\$0	\$125,511	Complete
Total of Costs, Expenditures & Impact Fees Encumbered			\$33,599,204			\$0	\$4,696,946	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility:		Parks and Recreation						
Service Area:		County-wide						
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered	Status/Remarks
Clayton Area / Weatherby Park	2004	2007	\$2,000,000	20%	General Fund	\$0	\$400,000	Complete
Fields Landing Park Expansion (was Suttalee Area Community Park)	2003	2009	\$700,000	35%	General Fund	\$0	\$245,000	Complete
Biello Park (Little River/Mill Creek County-wide Park Phase I)	2003	2010	\$4,000,000	83%	General Fund	\$0	\$2,563,032	Under Construction
Waleska City Park (Cline Park)	2004	2005	\$375,000	93%	General Fund	\$0	\$348,750	Complete
Creighton Road Park (Ray)	2009	2009	\$375,000	83%	General Fund	\$0	\$311,250	Complete
Hobgood Park	2006	2007	\$425,000	100%	General Fund	\$0	\$425,000	Complete
Total of Costs, Expenditures & Impact Fees Encumbered			\$7,875,000			\$0	\$4,293,032	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility: Transportation								
Service Area: County-wide								
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered	Status/Remarks
Towne Lake Parkway (road improvement)	2000	2001	\$4,577,900	42%	GADOT, General Fund	\$0	\$1,922,718	Construction Complete - Reimbursement Phase
Business 5 (road widening and relocation)	2000	2001	\$5,430,756	22%	GADOT, General Fund	\$0	\$1,194,766	Construction Complete - Reimbursement Phase
Riverstone Boulevard (new road construction)	2000	2001	\$1,145,349	22%	GADOT, General Fund	\$0	\$251,977	Construction Complete - Reimbursement Phase
Bell Ferry Road (design and safety planning)	2000	2003	\$784,956	46%	General Fund	\$0	\$361,080	Construction Complete - Reimbursement Phase
Rope Mill Road (new road construction)	2000	2001	\$5,252,228	15%	GADOT, General Fund	\$0	\$787,834	Construction Complete - Reimbursement Phase
Reinhardt College Road (new road construction)	2000	2001	\$718,580	21%	GADOT, General Fund	\$0	\$150,902	Construction Complete - Reimbursement Phase
Eagle Drive (road widening)	2004	2006	\$5,504,074	35%	GADOT, General Fund	\$0	\$1,094,840	Construction Complete - Reimbursement Phase
East Cherokee Drive (road widening)	2005	2007	\$4,800,000	23%	GADOT, General Fund	\$0	\$0	Construction Complete - Reimbursement Phase
Total of Costs, Expenditures & Impact Fees Encumbered			\$28,213,843			\$0	\$5,764,117	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

CHEROKEE COUNTY		Capital Improvements Project Update 2013-2017*						
Public Facility: Sheriff's Patrol								
Service Area: Unincorporated county								
Project Description	Project Start Date	Project End Date	Estimated Cost of Project	Percentage of Funding From Impact Fees	Other Funding Sources	Impact Fee Expenditures for 2012	Impact Fees Encumbered	Status/Remarks
Uniform Patrol Div Office # 19	2005	2006	\$1,295,000	58%	General Fund	\$0	\$468,915	Complete
Total of Costs, Expenditures & Impact Fees Encumberec			\$1,295,000			\$0	\$468,915	

**Impact Fees Encumbered" reflects impact fee collection for May 2000 through December 2012.

Short Term Work Plan

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Natural and Historic Resources								
Develop the Etowah River Greenway	X	X	X	X	X	\$2,000,000	County Greenspace Program	BOC, Parks & Rec.
Develop Environmental Awareness Program	X	X	X	X	X	\$10,000	US EPA, Ga DNR	Engineering, Recycling
Develop and adopt a countywide Historic Preservation Ordinance	X	X				Unknown	County, GA DNR	BOC, Planning & Land Use, Historical Society
Pursue qualification as a "Certified Local Government" under the Historic Preservation Division of Georgia DNR	X	X				Unknown	County, GA DNR	Planning & Land Use, Historical Society
Develop Historic Property Resource Kit	X	X				Unknown	County	Planning & Land Use, Historical Society
Develop Historic Resources Map	X	X				Staff Time	County	GIS, Planning & Land Use, Historical Society
Continue to update the Cemetary Location Map as needed	X	X	X	X	X	Staff Time	County	GIS, Planning & Land Use, Historical Society
Investigate developing a National Register nomination for the Reinhardt Campus area in Waleska as a historic district	X	X				\$6,500	Historical Society	Historical Society, City of Waleska
Continue to participate in the Etowah River Habitat Conservation Plan (HCP). Consider adoption of Low Impact Development Guidelines to support the HCP.	X	X				Staff Time	County	BOC, Engineering
Develop a countywide greenspace/land conservation plan.	X	X				\$50,000 + Staff Time	County	BOC, Planning & Land Use, GIS, Parks & Rec.
Develop program to acquire or set aside property identified in countwide greenspace plan.	X	X	X	X	X	Unknown	County Greenspace Program	BOC, Planning & Land Use, Parks & Rec.
Economic Development								
Facilitate stakeholder meetings concerning agribusiness and agritourism in the county.	X	X				Staff Time	Farm Bureau, Chamber of Commerce	Farm Bureau, Chamber of Commerce
Prepare Tax Increment/Finance District Guidelines	X	X				Unknown	County	BOC, Finance, Planning & Land Use
Develop and promote business and manufacturing sites within Cherokee County, especially Bluffs Business Park.	X	X	X	X	X	Staff Time	Development Authority	Development Authority, Chamber of Commerce
Continue the focused marketing campaign targeting industries identified in the Cherokee County Economic Strategic Plan	X	X	X	X	X	Staff Time	Development Authority	Development Authority, Chamber of Commerce

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Enhance the entrepreneurship and small business support programs with a comprehensive range of financial assistance, training, networking, professional advice and educational opportunities.	X	X	X	X	X	Staff Time	Development Authority	Development Authority, Chamber of Commerce
Continue the Business Expansion & Retention Program and advocacy for existing industry.	X	X	X	X	X	Staff Time	Development Authority	Development Authority
Implement the Georgia Department of Economic Development's Business InSight program for analysis of existing industry.	X	X	X	X	X	Staff Time	Development Authority	Development Authority
Focus resources on supporting and expanding existing partnerships between local business and educational institutions, such as the CCSD Advisory Committees, Career Pathways, Partners in Education and Cherokee Focus.	X	X	X	X	X	Staff Time	CCSD, Chamber of Commerce	Cherokee County School District, Chamber of Commerce
Coordinating and streamline permitting processes and development regulations across all communities in Cherokee County.	X	X				Staff Time	County	Planning & Land Use, Engineering, Building Inspection, Fire Marshal
Encourage the redevelopment of underutilized shopping centers along major transportation corridors to broaden the retail and personal service offerings in Cherokee County.	X	X	X			Staff Time	County	BOC, Planning & Land Use
Housing								
Upgrade Dilapidated Housing	X	X	X	X	X	Unknown	private	Private Developers
Continue to use federal funds (CDBG & HOME) for the Cherokee County Home Repair Program targeted for low-income seniors and affordable home ownership programs.	X	X	X	X	X	\$1,750,000	County, CDBG	Community Services, GUCC
Construct housing for the elderly and handicapped.	X	X	X	X	X	Unknown	state and federal programs, private	Private Developers
Develop Senior Housing regulations.	X					Staff Time	County	BOC, Planning & Land Use
Identify areas with adequate infrastructure to provide affordable housing opportunities.	X	X	X	X	X	Staff Time	County	GIS, Planning & Land Use, Engineering
Facilitate County-wide meetings to encourage cooperation on affordable housing financing from federal and state sources.	X	X				Staff Time	County	Planning & Land Use
Review development ordinances to identify constraints and barriers to providing affordable housing.	X	X	X	X	X	Staff Time	County	Planning & Land Use

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Community Facilities								
Review periodically Service Delivery strategies, level of services, and develop a plan to provide services to accommodate new growth.	X	X	X	X	X	Unknown	County	BOC, Public Safety, Engineering
Continue to identify, fund and implement Bells Ferry LCI projects	X	X	X	X	X	\$17,000,000	GDOT, ARC, County, Private	BOC, Planning & Land Use, Engineering, Private Developers
Parks and Recreation								
Aquatic Center	X					\$18,108,000	Parks Bond	Recreation & Parks, BOC
Barnett Park Renovations	X					\$464,000	Parks Bond	Recreation & Parks, BOC
Biello Park East (Riverside)	X					\$300,000	Impact Fees & Parks Bond	Recreation & Parks, BOC
Biello Park West	X					\$450,750	Impact Fees	Recreation & Parks, BOC
Blankets Creek	X					\$1,075,000	Parks Bond	Recreation & Parks, BOC
Buffington Park Renovations	X					\$75,000	Parks Bond	Recreation & Parks, BOC
Cherokee Mills Lake Allatoona	X					\$500,000	SPLOST & Parks Bond	Recreation & Parks, BOC
Dwight Terry Renovations	X					\$461,275	Parks Bond	Recreation & Parks, BOC
East Park			X	X		\$9,875,000	Parks Bond	Recreation & Parks, BOC
Hobgood Park Phase II	X	X				\$1,000,000	SPLOST & Parks Bond	Recreation & Parks, BOC
Hobgood Park Renovations	X	X				\$2,000,000	Parks Bond	Recreation & Parks, BOC
Kenny Askew Park Renovations	X	X				\$200,000	Parks Bond	Recreation & Parks, BOC
Lighting Improvements at Sequoyah	X					\$375,000	Parks Bond	Recreation & Parks, BOC
Patriots Park			X	X		\$7,173,350	Parks Bond	Recreation & Parks, BOC
Recreation Center Renovations	X					\$300,000	Parks Bond	Recreation & Parks, BOC
Sequoyah Park Renovations	X					\$800,000	Parks Bond	Recreation & Parks, BOC
Soccer Complex	X					\$5,150,000	Parks Bond	Recreation & Parks, BOC
Veterans (Thacker) Park					X	\$500,000	Parks Bond	Recreation & Parks, BOC
Waleska (NW) County Park	X					\$1,200,000	Parks Bond	Recreation & Parks, BOC
Weatherby Park Renovations	X					\$50,000	Parks Bond	Recreation & Parks, BOC

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Transportation								
Roadway Improvements	X	X	X	X	X	\$60,000,000	GDOT, General Fund	BOC
Develop a Context-Sensitive Design Process such as the one recommended by the Georgia Department of Transportation.	X	X				Unknown	County, DCA, ARC	Engineering, Planning & Land Use
Expand Ride/Share Program	X	X				\$15,000	County, ARC, GRTA	Community Services
Install Park/Ride Lots	X	X	X	X	X	\$25,000 per lot	County, ARC, GRTA	Engineering, BOC
Develop Alternative Transportation Education Program	X	X	X	X	X	\$30,000	County, ARC	Engineering, ARC
Bells Ferry Road widening (2 phases)				X	X	\$28,444,533	Impact Fees	Engineering
Add Interchange at I-575/Rope Mill Road	X					\$12,000,000	GDOT, General Fund, SPLOST	BOC, City of Woodstock
Public Safety								
Sheriff's Training Facility	X	X				\$1,500,000	Impact Fees	Sheriff's Department, BOC
Fire Station 1 Expansion					X	\$150,000	Impact Fees, Fire District Fund	Fire Department, BOC
Fire Station 2 Replacement (Ball Ground)				X	X	Unknown	Impact Fees, General Fund	Fire Department, BOC
Fire Station 3 Replacement		X	X			\$1,500,000	Fire District, SPLOST	Fire Department, BOC
Fire Station 5 Replacement		X	X			\$1,800,000	Fire District, SPLOST	Fire Department, BOC
Fire Station 13 Replacement Station			X	X		\$1,200,000	Impact Fees, General Fund	Fire Department, BOC
Fire Station 15 Relocation & Replacement Station			X	X		\$1,500,000	Impact Fees, General Fund	Fire Department, BOC
Fire Station 32 Renovation			X			\$100,000	Fire District, SPLOST	Fire Department, BOC
Future Fire Station (new)					X	\$1,085,000	Impact Fees, General Fund	Fire Department, BOC
Fire - Emergency Services Training Facility	X					\$3,141,850	Impact Fees, SPLOST	Fire Department, BOC
Purchase property for Future Fire Facilities	X	X	X	X	X	\$750,000	County	Fire Department, BOC

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Airport Crash Truck		X				\$800,000	Impact Fees, Fire District	Fire Department, BOC
Ladder Truck					X	\$1,000,000	Impact Fees	Fire Department, BOC
Fire Apparatus Replacement Program	X	X	X	X	X	\$800,000	SPLOST, Impact Fees	Fire Department, BOC
EMS Squad Replacement Program	X	X	X	X	X	\$700,000	County	Fire Department, BOC
Small Fleet Replacement Program	X	X	X	X	X	\$180,000	County	Fire Department, BOC
Library Services								
Library Collection Materials	X	X	X	X	X	\$835,512	Impact Fees, General Fund, SPLOST	Library System, BOC
Waleska Library Facility					X	\$4,307,000	Impact Fees, General Fund, State of Georgia	Library System, BOC
Water and Sewage								
Expand Sewer Service Area	X	X	X	X	X	\$60,000,000	CCWSA	County Water & Sewer Authority
Consolidate Water/Sewer Operations with one (1) Agency	X	X	X	X	X	Staff Time	CCWSA	County Water & Sewer Authority
School System								
Construct New Schools	X	X	X	X	X	\$41,000,000	Tax, bonds	Board of Education
Construct Additions to Existing Schools	X	X	X	X	X	\$235,000,000	Tax, bonds	Board of Education
Land Use & GIS								
Establish an agency to pursue implementing the Bells Ferry LCI Plan.	X	X	X			Unknown	County	BOC, Planning & Land Use
Create small area plans for areas experiencing significant growth pressures or infrastructure issues.	X	X	X	X	X	\$500,000	County	Planning & Land Use
Revise State Route 92 Corridor standards and regulations.	X	X				Staff Time	County	BOC, Planning & Land Use
Develop master plan for downtown Waleska and consider design guidelines for the "college-entertainment" core	X	X				Unknown	City, Reinhart College	Planning & Zoning, City of Waleska, Reinhart College
Continue to update annually the 5-year Capital Improvements Plan and STWP.	X	X	X	X	X	Staff Time	County	Planning & Land Use, Engineering, Public Safety, Parks & Rec.

Project Description	2013	2014	2015	2016	2017	Estimated Total Cost	Funding Sources	Responsible Party
Conduct annual review of Future Development Map, rezonings and capital projects for plan & map adjustments.	X	X	X	X	X	Staff Time	County	Planning & Land Use
Send a summary of all minor amendments annually to ARC.	X	X	X	X	X	Staff Time	County	Planning & Land Use
Develop Unified Code that combines the zoning ordinance, subdivision regulations and development regulations to consistently implement elements of the Community Agenda.	X	X				\$75,000 + Staff Time	County	Planning & Zoning, Engineering
Revise rezoning process to provide better information on land use changes and infrastructure impact for each proposal.	X	X				Staff Time	County	Planning & Zoning
Create design guidelines for each Character Area for residential and non-residential development.	X	X				Staff Time	County	Planning & Land Use, Engineering
Undertake a Comprehensive Plan update five years after adoption of this Plan.	X	X				Staff Time	County	Planning & Land Use