

**DAWSON COUNTY BOARD OF COMMISSIONERS
WORK SESSION AGENDA - THURSDAY, DECEMBER 14, 2017
DAWSON COUNTY GOVERNMENT CENTER ASSEMBLY ROOM
4:00 PM**

NEW BUSINESS

1. Presentation of Big Canoe Water and Sewer Authority Enabling Legislation- Phil Anderson, President- Big Canoe POA
2. Presentation of Impact Fee Methodology Report Final Draft- Bill Ross, Ross & Associates
3. Presentation of Non-Profit Food Service Permits for Temporary Events- Bill Ringle, Dawson County Environmental Health
4. Presentation of Cancellation Notice of Fire Engine Approved Funding and Request for Use of Another Vendor- Lanier Swafford, Emergency Services Director
5. Presentation of Firefighter Cancer and Disability Insurance Options- Lanier Swafford, Emergency Services Director
6. Presentation of #299-17 IFB- Construction Services for Veterans Memorial Park Pool House- Lisa Henson, Parks and Recreation Director
7. Presentation of #305-17 IFB- Stand-by Road Striping Services- David McKee, Public Works Director
8. Presentation of #296-17 RFP- Banking Services Award Recommendation- Vickie Neikirk, Chief Financial Officer
9. Board Appointment:
 - a. Dawson County Board of Assessors**
 - i. Sam Gutherie- reappointment (Term: January 2018 through December 2020)
10. County Manager Report
11. County Attorney Report

Backup material for agenda item:

1. Presentation of Big Canoe Water and Sewer Authority Enabling Legislation- Phil Anderson, President- Big Canoe POA



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Big Canoe Water & Sewer Authority

Work Session: 12/14/17

Prepared By: Danielle Yarbrough

Voting Session: 12/21/17

Presenter: Phil Anderson

Public Hearing: Yes _____ No _____

Agenda Item Title: Presentation of Big Canoe Water and Sewer Authority Enabling Legislation

Background Information:

Attached is the final draft legislation for the creation of the Big Canoe Water and Sewer Authority.

Current Information:

We are requesting that the Dawson County Board of Commissioners favorably endorse and forward this draft legislation to Speaker David Ralston for him to sponsor during the 2018 Georgia Legislative Session. We will also make the same request of the Pickens County Board of Commissioners.

Budget Information: Applicable: _____ Not Applicable: _____ Budgeted: Yes _____ No _____

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Motion to approve the Big Canoe Water and Sewer Authority Enabling Legislation

Department Head Authorization: _____

Date: _____

Finance Dept. Authorization: Vickie Neikirk

Date: 12.7/17

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

BIG CANOE WATER AND SEWER AUTHORITY ACT

AN ACT To create the Big Canoe Water and Sewer Authority; to provide a short title; to define certain terms; to provide for membership, appointment, terms, cooperation, quorums, and officers of the Authority; to provide for purposes; to provide for powers; to provide for the issuance of revenue bonds; to provide for ordinance proposals; to provide for tax exemption; to provide for construction and operation; to provide for cumulative nature of powers; to provide an effective date; to repeal conflicting laws; and for other purposes.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF GEORGIA:

SECTION 1.

This Act shall be known and may be cited as the "Big Canoe Water and Sewer Authority Act."

SECTION 2.

There is hereby created a body corporate and politic, to be known as the Big Canoe Water and Sewer Authority, which shall be a political subdivision of the State of Georgia and a public corporation, and by that name, style, and title said body may contract and be contracted with, sue and be sued, implead and be impleaded, and complain and defend in all courts of law and equity. The Big Canoe Water and Sewer Authority shall have perpetual existence and shall be deemed a governmental body within the meaning of the "Revenue Bond Law," Article 3 of Chapter 82 of Title 36 of the Official Code of Georgia Annotated, specifically under subparagraph (C) of paragraph (2) of Code Section 36-82-61.

SECTION 3.

As used in this Act, the terms:

- 1) "Authority" means the Big Canoe Water and Sewer Authority created by Section 2 of this Act.
- 2) "Big Canoe" means all that tract or parcel of land lying and being in the 4th District, 2nd Section, Pickens County, Georgia; and in the 5th District, 2nd Section, Dawson County, Georgia, and in the 5th District, 2nd Section, Pickens County, Georgia, within a planned unit development community, known as Big Canoe, including any expansion thereof.
- 3) "Project" means the acquisition, construction, and equipping of a water system, sewer system, or combined water and sewer system and all property used or useful in connection therewith.
- 4) "Revenue bonds" and "bonds" mean revenue bonds, certificates, and other obligations of the Authority, as defined and provided for in Article 3 of Chapter 82 of Title 36 of the Official Code of Georgia Annotated, the "Revenue Bond Law," and such type of obligations may be issued by the Authority under this Act and as authorized under said article.
- 5) "Self-liquidating" means any project which, in the sole judgment of the Authority, the revenues and earnings to be derived by the Authority therefrom will be sufficient to pay the

cost of operating, maintaining and repairing, improving and extending the project and to pay the principal and interest of the revenue bonds which may be issued for the cost of such project or projects.

- 6) "System" means any water system or sewer system or combined water and sewer system of the Authority.
- 7) "Users of the system" shall mean those persons, firms, corporations, companies and organizations who receive a bill from the Authority for their use of the system.

SECTION 4.

a) The Authority shall consist of five members. The following persons are hereby designated as the initial members of the Authority:

- 1) Grant Grimes, who shall hold an initial term of office expiring on April 30, 2020
- 2) Martha Power, who shall hold an initial term of office expiring on April 30, 2021
- 3) Gary Cherry, who shall hold an initial term of office expiring on April 30, 2021
- 4) David Howe, who shall hold an initial term of office expiring on April 30, 2022
- 5) Hollis Lathem, who shall hold an initial term of office expiring on April 30, 2022

The initial members of the Authority shall enter upon the duties of their office on the effective date of this Act and shall serve until the expiration of their respective terms of office or until their successors are duly elected and qualified. During the month of April 2020, and in the month of April of each year thereafter, a meeting of the users of the system shall be called by the Authority for the purpose of electing successors to those members whose terms expire in such year. Said meeting shall be called and conducted as hereinafter prescribed. Except as otherwise provided herein, each member elected by the users of the system, shall enter upon the duties of his office on April 30 immediately following his election and shall serve for a term of office of four years and until his successor is duly elected and qualified. Members of the Authority shall serve without compensation but shall be reimbursed for their actual expenses necessarily incurred in the performance of their duties. The Authority shall have the power to establish bylaws and to promulgate and adopt rules and regulations necessary or convenient for the governance of the Authority.

b) To be eligible for election as a member of the Authority the person shall be at least 18 years of age, shall not have been convicted of a felony, and shall be a user of the system residing in Big Canoe for at least two years prior to the date of his election.

c) The members of the Authority shall elect one of their number as Chairman, another as Vice Chairman, and may also elect a Secretary and Treasurer or a Secretary or a Treasurer, who need not be a member of the Authority. Such officers shall serve for a period of one year and until their successors are duly elected and qualified.

d) Three members of the Authority shall constitute a quorum. No vacancy on the Authority shall impair the right of the quorum to exercise all the rights and perform all the duties of the Authority.

- e) Should the initial term of any member of the Authority expire before there are any users of the system, the remaining members of the Authority shall elect, by majority vote, a person who is otherwise duly qualified as a member of the Authority to serve until the first annual meeting of the users. In the event of a vacancy by reason of death, disqualification, resignation or other reason, the remaining members of the Authority shall elect, by majority vote, a qualified person to fill the vacancy until the next annual meeting of the users of the system, at which time said users shall elect a qualified person to fill the remaining unexpired term of the member whose position has been vacated. A vacancy shall exist in the office of any member of the Authority indicted or convicted of a felony, or who removes his residence from Big Canoe. If, for any reason whatsoever, the users of the system shall fail to elect a member at any meeting to replace a member whose term expires, the remaining members of the Authority shall elect, by majority vote, a duly qualified person as a member of the Authority to serve until the next annual meeting.
- f) Annual meetings of the users of the system shall be held in April of each year. Such annual meeting shall be called by the Authority, after notice thereof has been published in the newspapers in Dawson and Pickens Counties in which the sheriffs advertisements are published, at least ten days prior to the date of such meeting. The Authority is hereby authorized to promulgate and adopt rules and regulations providing for the method and procedures for holding such annual meetings and elections.
- g) The Authority shall have a complete audit of its financial condition made at least once in each calendar year by a certified public accountant. Such audit shall remain on file at the office of the Authority for public inspection.

SECTION 5.

Without limiting the generality of any provision of this Act, the general purposes of the Authority are declared to be those of acquiring, constructing, equipping, maintaining and operating adequate water supply, treatment, and distribution facilities and sewage collection, treatment, and distribution facilities to serve Big Canoe and its environs; making such facilities and services available to consumers and users located in Big Canoe and environs; extending and improving such facilities; and doing all things deemed by the Authority to be necessary, convenient and desirable for and incident to the efficient and proper development and operation of the Authority.

SECTION 6.

The Authority shall have the following powers and duties:

- 1) To have a seal and to alter same at its pleasure;
- 2) To operate a water and sewer system or systems including, but not limited to, a unified water or sewer system, or both, and to provide water (and sewer services as applicable) to its customers. The Authority shall operate its system or systems in conformity with all applicable regulations, licenses, and permits and shall be liable to pay any fines or assessments resulting from failure to conform to same;

- 3) To acquire by purchase, lease, gift, or otherwise and to hold, lease, and dispose of real and personal property of every kind and character for its corporate purposes;
- 4) To acquire real and personal property in its own name by condemnation in accordance with the provisions of any and all laws applicable to the condemnation of property for public use, and by purchase, lease, exchange, gift, or otherwise on such terms and conditions and in such a manner as it may deem proper, necessary, or convenient for its corporate purposes, to use the same so long as its corporate existence shall continue, to lease or make contracts with respect to the use of the same, or dispose of the same in any manner it deems to the best advantage of the Authority; and no property shall be acquired under the provisions of this Act upon which any lien or other encumbrance exists unless at the time such property is so acquired a sufficient sum of money shall be deposited in trust to pay and reduce the face value of such lien or encumbrance;
- 5) To appoint, select, and employ such officers, agents, and employees as shall be necessary in the judgment of the Authority to accomplish the purposes of the Authority, including accountants, auditors, attorneys, engineers, and other professionals; to fix their respective compensation; and to provide for retirement plans for these officers, agents, and employees;
- 6) To formulate and adopt an annual operating budget of all its revenues and expenses on or before December 31 of each year;
- 7) To make contracts and leases and to execute all instruments necessary or convenient, including contracts for construction of projects and leases of projects or contracts for the use or operation of projects which it causes to be constructed, erected, or acquired. Any and all persons, firms, and corporations and any and all political subdivisions, departments, institutions, or agencies of the state are authorized to enter into contracts, leases, or agreements with the Authority upon such terms and for such purposes as they deem advisable;
- 8) To make contracts, leases and to execute all instruments necessary or convenient, including contracts for construction of projects and leases of projects or contracts with respect to the use or projects which it causes to be erected or acquired, and any and all persons, firms and corporations and any and all political subdivisions, departments, institutions or agencies of the State are hereby authorized to enter into contracts, leases or agreements with the Authority upon such terms and for such purposes as they deem advisable; and without limiting the generality of the above, authority is specifically granted to municipal corporations and counties and to the Authority to enter into contracts, lease agreements, or other undertakings relative to the furnishing of water and related services and facilities by the Authority to such municipal corporations and counties for a term not exceeding 50 years.
- 9) To construct, erect, acquire, own, repair, remodel, maintain, add to, extend, improve, equip, operate, and manage projects, as defined in this Act, and to pay the cost of the project in whole or in part from the proceeds of revenue bonds of the Authority or from such proceeds and any grant or contribution from the United States of America or any agency or instrumentality thereof or from the State of Georgia or any political subdivision, agency, or instrumentality thereof;

- 10) To borrow money for any of its corporate purposes and to issue revenue bonds payable solely from funds pledged for that purpose and to provide for the payment of the same and for the rights of the holders thereof;
- 11) To exercise any power usually possessed by private corporations performing similar functions, including the power to make short-term loans and approve, execute, and deliver appropriate evidence of such indebtedness, provided no such power is in conflict with the Constitution or general laws of this State;
- 12) To be liable for payment of all charges and expenses of operating any system or unified system and to receive all income from the operation of any system or unified system;
- 13) To prescribe, fix, and collect rates, fees, tolls, or charges and to revise fees from time to time and collect such rates, fees, tolls, or charges, provided that such rates, fees, tolls, or charges shall be calculated to cover the cost of providing services; to provide capital to expand facilities; to maintain, replace, or expand existing facilities; to provide a reasonable reserve for operations; to fund bond sinking funds; and for such other costs, expenses and investments as determined by the Authority. The Authority shall not make any distributions as defined in O.C.G.A 14-3-140 (9);
- 14) To accept grants of money, materials, or property of any kind from the United States of America or any agency or instrumentality thereof upon terms and conditions as the United States of America or such agency or instrumentality may impose;
- 15) To accept grants of money, materials, or property of any kind from the State of Georgia or any agency or instrumentality or political subdivision thereof upon terms and conditions as the State of Georgia or such agency or instrumentality or political subdivision may impose;
- 16) To accept grants of money, materials, or property of any kind from any other source, private or public, provided that such grant or gift is not encumbered with any terms or conditions;
- 17) To do all things necessary or convenient to carry out the powers and duties expressly given in this Act.

SECTION 7.

The Authority, or other entity or body which has or which may in the future succeed to the powers, duties, and liabilities vested in the Authority created in this Act, shall have power and is authorized at one time, or from time to time, to borrow money for the purpose of paying all or any part of the cost of any one or more projects and to provide by resolution for issuance of revenue bonds for that purpose. The bonds of each issue shall be dated, shall mature at such time or times not exceeding 40 years from their date or dates, shall be payable in such medium of payment as to both principal and interest as may be determined by the Authority, and may be made redeemable before maturity, at the option of the Authority, at such price or prices and under such terms and conditions as may be fixed by the Authority in the resolution providing for the issuance of the bonds. The interest rate or rates to be borne by any bonds and the time of payment of such interest shall be fixed, and with respect to any interest rate which floats in response to a variable, the method of calculation shall be fixed by the Authority in the resolution providing for the issuance of all bonds.

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12/14/17

SECTION 8.

The Authority is authorized to provide by resolution for the issuance of refunding bonds of the Authority for the purpose of refunding any revenue bonds issued under the provisions of this Act and then outstanding, together with accrued interest thereon, and to refund any revenue bonds issued by a county or the Authority with respect to any facilities to be acquired by the Authority from a county, or other political subdivision or authority.

SECTION 9.

Any action to protect or enforce any rights under the provisions of this Act or any action against the Authority shall be brought in either the Superior Court of Pickens County or the Superior Court of Dawson County, Georgia, and any action pertaining to validation of any bonds issued under the provisions of this Act shall likewise be brought in either of such courts, which shall have exclusive, original jurisdiction of such actions.

SECTION 10.

Bonds of the Authority shall be confirmed and validated in accordance with the procedure provided for in Article 3 of Chapter 82 of Title 36 of the Official Code of Georgia Annotated, the "Revenue Bond Law," as now or hereafter amended.

SECTION 11.

The properties of the Authority, both real and personal, are declared to be public properties used for the benefit and welfare of the Authority's customers and not for purposes of private or corporate benefit and income. Such Authority's properties and the Authority shall be exempt from all taxes of any city, any county, the State, or any political subdivision thereof.

SECTION 12.

This Act, being for the welfare of various political subdivisions of the State and its inhabitants, shall be liberally construed to effect the purposes thereof.

SECTION 13.

This Act shall become effective upon its approval by the Governor or upon its becoming law without such approval.

SECTION 14.

All laws and parts of laws in conflict with this Act are repealed.

GEORGIA, FULTON COUNTY

Personally appeared before me, the undersigned authority, duly authorized to administer oaths, _____, who on oath deposes and says that he is the Representative from _____ and further deposes and says that the attached Notice of Intention to Introduce Local Legislation was published in _____ which is the official organ of _____ County on _____, 20____, and that the notice requirements of Code Section 28-1-14 have been met.

/s _____

Representative, District ____

Sworn to and subscribed before me,
this ____ day of _____, 20____.

/s _____

Notary Public, _____ County, Georgia
My Commission Expires _____, 20____
(SEAL)

Backup material for agenda item:

2. Presentation of Impact Fee Methodology Report Final Draft- Bill Ross, Ross & Associates



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Planning

Work Session: 12.14.17

Prepared By: Streetman

Voting Session: TBD?

Presenter: B. Ross

Public Hearing: Yes No

Agenda Item Title: Final Draft of Impact Fee Methodology Report

Background Information:

Bill Ross with Ross & Associates would like to come before the BOC and present/discuss his final draft of his Impact Fee Methodology Report.

Current Information:

Final report draft

Budget Information: Applicable: Not Applicable: Budgeted: Yes No

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Approve

Department Head Authorization: JStreetman

Date: 12.5.17

Finance Dept. Authorization: Vickie Neikirk

Date: 12.7.17

County Manager Authorization: DH

Date: 12/07/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

[Empty box for comments/attachments]



Impact Fee Methodology Report



Dawson County Impact Fee Program

Including the following
public facility categories:

Library Services
Parks and Recreation
Fire Protection
Emergency/911
Law Enforcement
Road Improvements

Draft – 11/20/17

ROSS+associates

urban planning & plan implementation



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Introduction

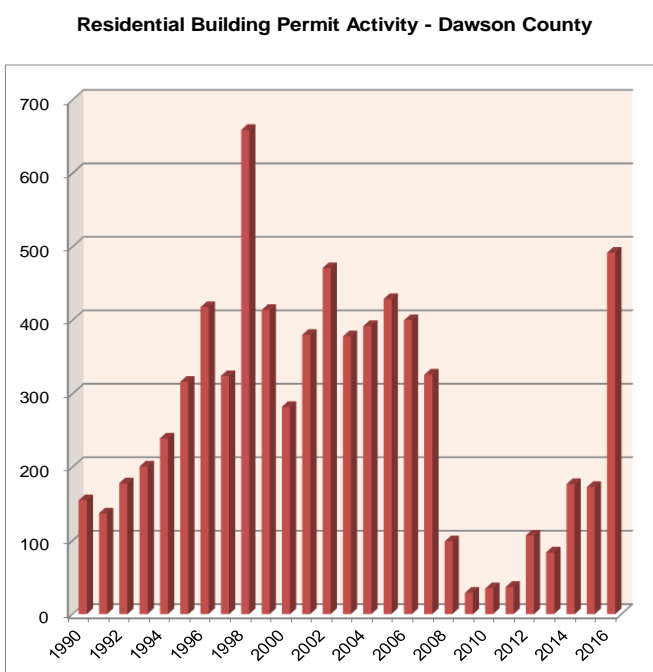
■ Looking Ahead

Forecasts indicate major growth ahead for Dawson County as people continue to move up the GA 400 corridor, propelled by growth in the Atlanta Metro Area, and attracted to favorable housing prices, a great school system, and avoiding the increasingly crowded, traffic congested Forsyth County. Over the next 22 years to 2040, it is expected that almost two-thirds of the people that will be living in Dawson County and the housing they occupy are not here today. This equates to an almost tripling of the population and housing supply over 2017—2.8 times as many people and 2.7 times as many housing units as today.

This is not as unprecedented as it seems. Looking back over the past 22 years, since 1995 the county's population has more than doubled, from 11,888 to 24,841—a 52% increase—in spite of the housing market crash of 2008 and the ensuing Great Recession.

Building permit data tell the story. Going back to 1990, the county was on a clear upswing in development, trending higher and higher overall, slipping a bit in 2006, and then plummeting with the nationwide housing market crash.

Calendar Year	Housing Units Permitted
1990	155
1991	137
1992	178
1993	201
1994	239
1995	316
1996	418
1997	324
1998	659
1999	414
2000	282
2001	380
2002	471
2003	378
2004	392
2005	429
2006	400
2007	326
2008	99
2009	29
2010	35
2011	37
2012	107
2013	84
2014	177
2015	173
2016	492



Source: US Bureau of the Census, annual building permit data, 1990-2016.

Recovery from the crash was slow but steady—even outpacing the rebound in Gainesville-Hall County and the Atlanta Metro Area on an annual percent increase basis. Most recently, the county's housing industry has regained its footing and permits are clearly on the rise.

Though not as robust as population growth, nonresidential growth forecasts indicate an almost doubling in the number of private-sector jobs with a 41% growth and a 1.7 multiplier. (These numbers exclude government, construction and agricultural workers, since they are not assessed impact fees.) According to Woods & Poole Economics, Inc., the

county will see its greatest increase in retail trade, followed by service industries, insurance/finance and real estate, and health care.

What this means is that Dawson County will be called upon to expand its services and infrastructure if it is to maintain the quality of life and business environment enjoyed by its residents and workers today. Failing to keep up will bring an erosion of the lifestyles and employment opportunities that attracts new growth and investment tomorrow and that the population enjoys today.

■ Impact Fees

Impact fees present a potential revenue source in the on-going search for public facilities funding, which this report examines.

We identify the current levels of service provided throughout the county and the desired levels of service for the future in order to quantify the capital facilities needed to achieve the Dawson County's goals for the future. Based on that analysis, calculations have been carried out in order to identify what portion of future capital facilities could be funded through impact fee collections.

In this report capital costs have been examined for six public facility categories: library services, parks & recreation, public safety (including fire protection, emergency management/911 communications, and law enforcement), and road improvements. Based on plans of the County and projections of future capital investment needs, the portion of future capital costs that could be met through impact fees has been calculated. In short, impact fees could be used to fund a large portion of the capital costs in these public facility categories, and at the desired Level of Service standards, over the next 22 years to 2040.

In the end, impact fees represent a potential funding source that must be balanced against other needs of the County. In this report the maximum allowable impact fee for each public facility category has been calculated; this is the most that could be charged. The impact fee amount ultimately charged will represent a shifting of the burden to fund these capital projects from the tax base as a whole, to the new growth and development actually demanding the services being added through these projects.

The goal is the essence and basis of impact fees: everyone pays their fair share of the capital improvements needed to serve them on an equal basis.

Impact Fees Authorized

Under State law, the County can collect money from new development based on that development's proportionate share—the 'fair share'—of the cost to provide the facilities it needs. The State law allows impact fees to be collected in the categories of libraries, public safety, parks, and roads, among others. Ultimately, and importantly, the services provided in the public facility categories for which impact fees are being charged must be the same for both the existing community and future growth.

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

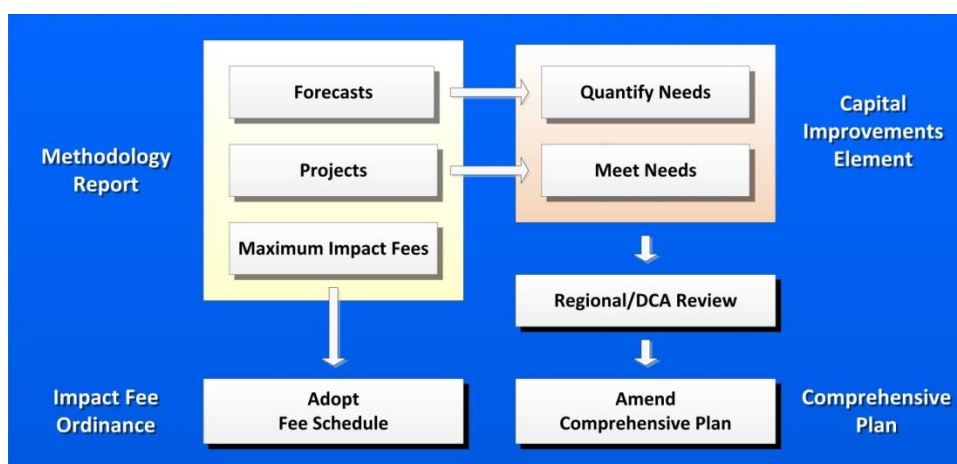
Impact Fee Documentation

One document required for the collection of impact fees is called the Capital Improvements Element (CIE), and is adopted as a chapter, or 'element', of the County's Comprehensive Plan. As defined by the Georgia Development Impact Fee Act (DIFA), the CIE must include certain calculations and information, and those are included in this report along with additional information regarding the amount that could be charged in an impact fee program. The calculations and information, repeated (as applicable) for each public facility category for which an impact fee will be charged, are:

- a **projection of needs** for the planning period of the adopted Comprehensive Plan;
- the designation of **service areas** - the geographic area in which a defined set of public facilities provide service to development within the area;

- the designation of **levels of service** (LOS) - the service level that will be provided;
- a **schedule of improvements** listing impact fee related projects and costs for the planning period of the adopted Comprehensive Plan;
- a description of **funding sources** for the planning period of the adopted Comprehensive Plan;
- The calculation of the gross impact of new development, credits, and **net impact cost**; and
- A schedule of **maximum impact fees** that could be adopted, by land use category.

The following diagram illustrates the documents and their interrelationship in an impact fee program.



This Methodology Report contains the growth forecasts for the county, identifies capital projects that would be needed to meet the County's Level of Service standards, and presents all of the calculations related to establishing the maximum impact fees that could be charged for each public facility category.

The forecasts and the identified capital improvement projects go into the Capital Improvements Element which, in turn, will be reviewed by the Georgia Mountains Regional Commission (GMRC) and DCA for compliance with the state's requirements. Once approved, the County would adopt the CIE as an amendment to its Comprehensive Plan.

The maximum impact fees established in this Methodology Report are intended to generate discussion and determination by the Board of Commissioners as to the appropriate fees to be charged. The state law provides that new growth and development may not be charged more than their 'fair share' of the cost of capital improvements that will serve them. The maximums establish that ceiling beyond which the County cannot go. Lower fees, however, are fully within the purview of the County Commission.

Once determined, the new fees are summarized in an Impact Fee Schedule and amended to the County's Impact Fee Ordinance to authorize their collection.

■ Editorial Conventions

This report observes the following conventions:

- The capitalized word 'County' applies to the government of Dawson County, the Board of Commissioners or any of its departments or officials, as appropriate to the context. An example is "the County has adopted an impact fee ordinance".

- The lower case word 'county' refers to the geographical area of Dawson County, as in "the population of the county has grown".
- The same conventions are applied to the words 'City' and 'city', 'State' and 'state'.
- Single quote marks (` and `) are used to highlight a word or phrase that has a particular meaning or refers to a heading in a table.
- Double quote marks (" and ") are used to set off a word or phrase that is a direct quote taken from another source, such as a passage or requirement copied directly from a law or report.
- Numbers shown on tables are often rounded from the actual calculation of the figures for clarity, but the actual calculated number of decimal points is retained within the table for accuracy and further calculations.

Updating the Impact Fee Program

Dawson County adopted its impact fee program in 2006, including its initial Capital Improvements Element, Impact Fee Ordinance and Impact Fee Schedule. Impact fee collections were suspended in 2009 in response to the worsening economic conditions brought on by the Great Recession. This Methodology Report updates the County’s documentation, including the recognition of current prices and costs for capital equipment and facilities, and extends the horizon of the program to 2040.

Adoption of a new CIE and fee schedule would therefore update the County’s program that has been in place for many years.

■ Eligible Facilities

The following table shows the facility categories that are eligible for impact fee funding under Georgia law and that are included in the County’s current impact fee program (with the addition of the ‘Emergency/911’ category).. The service area for each public facility category—that is, the geographical area served by the facility category—is also given, along with the basis for the standard adopted as the Level of Service to be delivered for each facility category. All the listed categories are considered in this report.

Table 1: Overview of Impact Fee Program - Facilities

	Eligible Facilities	Service Area	Level of Service Standard Based on ...	Historic Funding Sources
Library Services	Library facilities including collection materials	Countywide	Square footage and number of collection materials per dwelling unit	General Fund, State Grants, impact fees
Parks and Recreation	Park acres, recreation components	Countywide	Number of acres and recreation components per dwelling unit	General Fund, SPLOST and impact fees
Fire Protection	Fire stations, fire trucks & auxiliary vehicles	Countywide	Square footage and number of vehicles per day-night population	General Fund, SPLOST and impact fees
Emergency/911	Emergency Operations Center and 10-yr equipment	Countywide	Square footage and equipment installations per day-night population	General Fund and impact fees
Law Enforcement	Sheriff's administration space and inmate detention	Countywide	Square footage of facilities per day-night population	General Fund, SPLOST and impact fees
Road Improvements	Road projects providing new trip capacity	Countywide	LOS "D" for entire road network	General Fund, SPLOST and impact fees

Terms used in Table 1:

Eligible Facilities under the State Act are limited to capital items having a life expectancy of at least 10 years, such as land, buildings and other facilities, and major rolling stock (such as fire trucks). Impact fees cannot be used for the maintenance, supplies, personnel salaries, or other operational costs, or for short-term capital items such as computers, furniture or automobiles. None of these costs are included in the impact fee system.

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

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

■ Maximum Impact Fee Schedule

The summary fee schedule presented here shows the **maximum impact fee** for the public facility categories included in this report that could be charged in Dawson County for each of the land use categories shown, based on the calculations carried out in this report. The total impact fee shown for each public facility category is drawn from that public facility category's chapter and reflects the reductions for any applicable credit based upon anticipated tax contributions from new development, as well as a 3% fee for administration of the Impact Fee Program and a charge for recoupment of the cost to prepare the CIE. The 'Total Maximum Fee' shown in the last column is a summary of all of the maximum fees allowed in each public facility category. As discussed below, the County could not charge more than the maximum in any given public facility category, only less.

To read the table, first find the land use you want to investigate. Land uses are listed on the left side of the table, and are grouped into categories. For example, industrial and warehouse uses are grouped together, as are all retail uses. Next, find the 'Total Maximum Fee' figure on the right of the row. This is the total impact fee per unit of measure. Finally, find the unit of measure—it is the last column of the land use category. The information can be read as follows: *this land use has a maximum impact fee of \$X per unit of measure.*

Adoption of Impact Fees

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

It must be remembered that any across-the-board reduction in the maximum allowable impact fee must be funded ultimately with other revenue—General Fund or SPLOST, for instance—to make up the shortfall in collections.

Table 2: Summary Maximum Impact Fee Schedule

Land Use	Library Services	Parks & Recreation	Fire Protection	Emergency/ 911	Law Enforcement	Road Projects	Total Maximum Fee	Unit of Measure
Residential (200-299)								
Single-Family Detached Housing	\$ 558.84	\$ 2,708.14	\$ 1,038.01	\$ 22.79	\$ 361.70	\$ 518.61	\$ 5,208.09	per dwelling
Apartment	\$ 558.84	\$ 2,708.14	\$ 1,038.01	\$ 22.79	\$ 361.70	\$ 362.26	\$ 5,051.74	per dwelling
Residential Condominium/Townhouse	\$ 558.84	\$ 2,708.14	\$ 1,038.01	\$ 22.79	\$ 361.70	\$ 316.50	\$ 5,005.98	per dwelling
Port and Terminal (000-099)								
Intermodal Truck Terminal	\$ -	\$ -	\$ 0.63	\$ 0.01	\$ 0.22	\$ 0.49	\$ 1.36	per square foot
Industrial/Agricultural (100-199)								
General Light Industrial	\$ -	\$ -	\$ 1.03	\$ 0.02	\$ 0.36	\$ 0.35	\$ 1.76	per square foot
General Heavy Industrial	\$ -	\$ -	\$ 0.81	\$ 0.02	\$ 0.28	\$ 0.08	\$ 1.19	per square foot
Manufacturing	\$ -	\$ -	\$ 0.80	\$ 0.02	\$ 0.28	\$ 0.19	\$ 1.29	per square foot
Warehousing	\$ -	\$ -	\$ 0.41	\$ 0.01	\$ 0.14	\$ 0.18	\$ 0.74	per square foot
Mini-Warehouse	\$ -	\$ -	\$ 0.03	\$ 0.00	\$ 0.01	\$ 0.13	\$ 0.17	per square foot
High-Cube Warehouse	\$ -	\$ -	\$ 0.03	\$ 0.00	\$ 0.01	\$ 0.08	\$ 0.13	per square foot
Lodging (300-399)								
Hotel or Conference Motel	\$ -	\$ -	\$ 253.68	\$ 5.57	\$ 88.39	\$ 445.06	\$ 792.70	per room
All Suites Hotel	\$ -	\$ -	\$ 222.63	\$ 4.89	\$ 77.58	\$ 266.93	\$ 572.02	per room
Motel	\$ -	\$ -	\$ 195.69	\$ 4.30	\$ 68.19	\$ 306.70	\$ 574.87	per room
Recreational (400-499)								
Golf Course	\$ -	\$ -	\$ 109.36	\$ 2.40	\$ 38.11	\$ 233.37	\$ 383.24	per acre
Bowling Alley	\$ -	\$ -	\$ 0.45	\$ 0.01	\$ 0.16	\$ 1.54	\$ 2.15	per square foot
Movie Theater	\$ -	\$ -	\$ 0.65	\$ 0.01	\$ 0.23	\$ 3.62	\$ 4.51	per square foot
Arena	\$ -	\$ -	\$ 1,484.04	\$ 32.58	\$ 517.12	\$ 1,543.30	\$ 3,577.04	per acre
Amusement Park	\$ -	\$ -	\$ 4,049.52	\$ 88.91	\$ 1,411.07	\$ 3,507.97	\$ 9,057.48	per acre
Tennis Courts	\$ -	\$ -	\$ 108.59	\$ 2.38	\$ 37.84	\$ 752.90	\$ 901.72	per acre
Racquet/Tennis Club	\$ -	\$ -	\$ 0.14	\$ 0.00	\$ 0.05	\$ 0.65	\$ 0.84	per square foot
Health/Fitness Center	\$ -	\$ -	\$ 0.31	\$ 0.01	\$ 0.11	\$ 1.52	\$ 1.95	per square foot
Recreational Community Center	\$ -	\$ -	\$ 0.55	\$ 0.01	\$ 0.19	\$ 1.56	\$ 2.32	per square foot

Updating the Impact Fee Program

Summary Maximum Impact Fee Schedule continued

Land Use	Library Services	Parks & Recreation	Fire Protection	Emergency/ 911	Law Enforcement	Road Projects	Total Maximum Fee	Unit of Measure
<i>Institutional (500-599)</i>								
Private Elementary School	\$ -	\$ -	\$ 0.44	\$ 0.01	\$ 0.15	\$ 0.67	\$ 1.27	per square foot
Private High School	\$ -	\$ -	\$ 0.29	\$ 0.01	\$ 0.10	\$ 0.60	\$ 0.99	per square foot
Church/Place of Worship	\$ -	\$ -	\$ 0.15	\$ 0.00	\$ 0.05	\$ 0.45	\$ 0.66	per square foot
Day Care Center	\$ -	\$ -	\$ 1.25	\$ 0.03	\$ 0.44	\$ 0.43	\$ 2.15	per square foot
Cemetery	\$ -	\$ -	\$ 36.26	\$ 0.80	\$ 12.63	\$ 231.90	\$ 281.59	per acre
<i>Medical (600-699)</i>								
Hospital	\$ -	\$ -	\$ 1.31	\$ 0.03	\$ 0.46	\$ 0.55	\$ 2.35	per square foot
Nursing Home	\$ -	\$ -	\$ 1.04	\$ 0.02	\$ 0.36	\$ 0.31	\$ 1.73	per square foot
Clinic	\$ -	\$ -	\$ 1.75	\$ 0.04	\$ 0.61	\$ 1.32	\$ 3.71	per square foot
<i>Office (700-799)</i>								
General Office Building	\$ -	\$ -	\$ 1.48	\$ 0.03	\$ 0.52	\$ 0.55	\$ 2.58	per square foot
Corporate Headquarters Building	\$ -	\$ -	\$ 1.52	\$ 0.03	\$ 0.53	\$ 0.40	\$ 2.49	per square foot
Single-Tenant Office Building	\$ -	\$ -	\$ 1.40	\$ 0.03	\$ 0.49	\$ 0.58	\$ 2.50	per square foot
Medical-Dental Office Building	\$ -	\$ -	\$ 1.81	\$ 0.04	\$ 0.63	\$ 1.81	\$ 4.28	per square foot
Research and Development Center	\$ -	\$ -	\$ 1.30	\$ 0.03	\$ 0.45	\$ 0.41	\$ 2.19	per square foot
Business Park	\$ -	\$ -	\$ 1.37	\$ 0.03	\$ 0.48	\$ 0.62	\$ 2.50	per square foot
<i>Retail (800-899)</i>								
Building Materials and Lumber Store	\$ -	\$ -	\$ 0.63	\$ 0.01	\$ 0.22	\$ 1.99	\$ 2.85	per square foot
Free-Standing Discount Superstore	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 2.07	\$ 2.66	per square foot
Variety Store	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 1.71	\$ 2.29	per square foot
Free-Standing Discount Store	\$ -	\$ -	\$ 0.88	\$ 0.02	\$ 0.31	\$ 1.90	\$ 3.11	per square foot
Hardware/Paint Store	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 1.12	\$ 1.70	per square foot
Nursery (Garden Center)	\$ -	\$ -	\$ 1.39	\$ 0.03	\$ 0.48	\$ 3.01	\$ 4.91	per square foot
Nursery (Wholesale)	\$ -	\$ -	\$ 0.74	\$ 0.02	\$ 0.26	\$ 1.72	\$ 2.73	per square foot
Shopping Center	\$ -	\$ -	\$ 0.74	\$ 0.02	\$ 0.26	\$ 1.75	\$ 2.77	per square foot
Factory Outlet Center	\$ -	\$ -	\$ 0.74	\$ 0.02	\$ 0.26	\$ 1.17	\$ 2.19	per square foot
Specialty Retail Center	\$ -	\$ -	\$ 0.88	\$ 0.02	\$ 0.31	\$ 1.95	\$ 3.16	per square foot
Automobile Sales	\$ -	\$ -	\$ 0.68	\$ 0.01	\$ 0.24	\$ 1.39	\$ 2.32	per square foot

Summary Maximum Impact Fee Schedule continued

Land Use	Library Services	Parks & Recreation	Fire Protection	Emergency/ 911	Law Enforcement	Road Projects	Total Maximum Fee	Unit of Measure
Retail Continued								
Auto Parts Store	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 1.48	\$ 2.07	per square foot
Tire Store	\$ -	\$ -	\$ 0.57	\$ 0.01	\$ 0.20	\$ 0.91	\$ 1.69	per square foot
Tire Superstore	\$ -	\$ -	\$ 0.57	\$ 0.01	\$ 0.20	\$ 0.92	\$ 1.70	per square foot
Supermarket	\$ -	\$ -	\$ 0.52	\$ 0.01	\$ 0.18	\$ 2.39	\$ 3.10	per square foot
Convenience Market (Open 24 Hrs)	\$ -	\$ -	\$ 0.80	\$ 0.02	\$ 0.28	\$ 8.04	\$ 9.14	per square foot
Convenience Market w/Gas Pumps	\$ -	\$ -	\$ 0.80	\$ 0.02	\$ 0.28	\$ 7.37	\$ 8.46	per square foot
Discount Supermarket	\$ -	\$ -	\$ 1.00	\$ 0.02	\$ 0.35	\$ 2.58	\$ 3.95	per square foot
Wholesale Market	\$ -	\$ -	\$ 0.37	\$ 0.01	\$ 0.13	\$ 0.22	\$ 0.72	per square foot
Discount Club	\$ -	\$ -	\$ 0.58	\$ 0.01	\$ 0.20	\$ 1.39	\$ 2.18	per square foot
Home Improvement Superstore	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 0.52	\$ 1.10	per square foot
Electronics Superstore	\$ -	\$ -	\$ 0.43	\$ 0.01	\$ 0.15	\$ 0.66	\$ 1.25	per square foot
Apparel Store	\$ -	\$ -	\$ 0.74	\$ 0.02	\$ 0.26	\$ 1.77	\$ 2.79	per square foot
Department Store	\$ -	\$ -	\$ 0.88	\$ 0.02	\$ 0.31	\$ 0.61	\$ 1.82	per square foot
Pharmacy/Drugstore	\$ -	\$ -	\$ 0.74	\$ 0.02	\$ 0.26	\$ 1.96	\$ 2.98	per square foot
Furniture Store	\$ -	\$ -	\$ 0.18	\$ 0.00	\$ 0.06	\$ 0.06	\$ 0.31	per square foot
Services (900-999)								
Drive-in Bank	\$ -	\$ -	\$ 2.13	\$ 0.05	\$ 0.74	\$ 1.77	\$ 4.69	per square foot
Quality Restaurant	\$ -	\$ -	\$ 3.32	\$ 0.07	\$ 1.16	\$ 1.86	\$ 6.41	per square foot
High-Turnover (Sit-Down) Restaurant	\$ -	\$ -	\$ 3.32	\$ 0.07	\$ 1.16	\$ 2.64	\$ 7.19	per square foot
Fast-Food Restaurant	\$ -	\$ -	\$ 4.85	\$ 0.11	\$ 1.69	\$ 7.29	\$ 13.94	per square foot
Quick Lubrication Vehicle Shop	\$ -	\$ -	\$ 935.04	\$ 20.53	\$ 325.82	\$ 1,808.57	\$ 3,089.95	per service bay
Gasoline/Service Station	\$ -	\$ -	\$ 71.24	\$ 1.56	\$ 24.82	\$ 1,836.46	\$ 1,934.09	per pump
Gasoline Station w/Convenience Mkt	\$ -	\$ -	\$ 0.10	\$ 0.00	\$ 0.03	\$ 1,241.44	\$ 1,241.58	per pump
Self-Service Car Wash	\$ -	\$ -	\$ 89.05	\$ 1.96	\$ 31.03	\$ 2,353.32	\$ 2,475.36	per stall

"Square foot" means square foot of gross building floor area.

All figures shown rounded to whole cents for readability; actual fees generally run to multiple decimal places.

Interpretation

Listed in the fee schedule are the most common land uses as identified in the *Trip Generation Manual*, 9th Edition, 2012, Institute of Transportation Engineers (ITE). Persons per land use for residential uses are determined based on average numbers of persons per household; for non-residential land uses the average number of employees per unit of measure is based on data provided in the ITE *Trip Generation Manual*. As it is impossible, and impractical, to list every possible land use type, following is the methodology that will be used to determine employment for land uses that are not on the actual fee table.

The nomenclature used in the fee schedules may be different from that used by developers. For example, a developer may be building a 35,000 square foot grocery store, but does not see a grocery store on the fee schedule. In this situation, the applicable fee would be found under 'supermarket.' Simply inquiring to the County should clarify any such uncertainty. However, reference to a source document, such as the *North American Industrial Classification System* (from the U.S. Office of Management and Budget; latest edition available on the U.S. Census Bureau website), may be helpful as an objective means of distinguishing among the types of land uses set out in the schedules.

For land uses not specified, a simple approach may be the most useful for most situations: an office type operation can be set at the same rate as a general office building, various retail uses not listed can be set at the same rate as for specialty retail uses, and industrial uses are assumed to be the same as general light industry. For example, a retail land use that does not appear on the impact fee schedule, such as a stained-glass shop, would be assessed the same fee as 'specialty retail'.

■ Reductions in Impact Fee Assessments

Because the state law provides that new growth and development cannot be charged more than their fair proportionate share of the costs of the capital improvements needed to serve it, this Methodology Report calculates the maximum that could be charged as an impact fee in order to establish the 'ceiling' above which the County cannot go. There are, however, several ways that a lower impact fee could be charged, either for a specific project, across the board for all projects, or for a group of specific that are of special benefit to the County. These are discussed below.

Individual Fee Assessment

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

Adoption of Reduced Impact Fees

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

Individual Appeals

The Impact Fee Ordinance provides for the appeal by anyone assessed an impact fee first to the Impact Fee Administrator and then, if not resolved, to the Board of Commissioners.

Credits

The County's Impact Fee Ordinance provides for credits against impact fee that can be applied for expenditures made by a development toward the construction or provision of facilities that are included for impact fee funding in the adopted Capital Improvements Element. These credits are often established through a private contractual agreement between the County and the developer or builder (as regulated by the Impact Fee Ordinance).

Exemptions

Exemptions from the established impact fee amounts on the adopted Impact Fee Schedule can be adopted by the Board of Commissioners for development that encourages affordable housing or represents 'extraordinary economic or employment growth.' The exemptions must be spelled out as part of the Impact Fee Ordinance and can be applied by the Board of Commissioners in whole or in part to specified uses based on standards included in the Ordinance. There are currently no exemptions in the Ordinance.

■ Limitations on Impact Fees

There are several requirements placed on impact fees by the Georgia Development Impact Fee Act and the rules and regulations of the Georgia Department of Community Affairs. These include:

- Impact fees must be spent in the same public facility category for which they were collected.
- Impact fees must be deposited into an interest bearing account.
- Impact fees not encumbered within six years must be refunded to the fee payer, with interest.
- The same Level of Service must be applied to both the existing population and to new growth.
- All calculations must be made in Net Present Value.
- Annual Financial Reporting and Community Work Program Update required.

■ Periodic Review Recommended

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

- The "planning horizon" of this methodology report is 2040; this is intended to match the "horizon" of the County's *Comprehensive Plan* when it is updated in 2018. When the *Comprehensive Plan* is again updated, the methodology report (and impact fee methodologies) should be reviewed and updated as needed to meet any new "horizon".
- The amount of future tax revenue generated by future growth is directly related to the County's population and employment projections. These projections should be reviewed every year against other data, such as building permits and utility hook-ups, to confirm continuing validity or to modify the methodologies.

- Any changes to the employment, dwelling unit and population forecasts in this report (i.e., figures used in future updates to the County's *Comprehensive Plan*) should be reflected in the impact cost calculations.
- Costs should be maintained in present value terms. The land costs for libraries, public safety facilities, roads and parks, as well as the various facility construction costs, should be updated annually. In addition, the cost of collection materials should also be updated to reflect current dollars.
- The library collection material "weed rate" and state contribution towards collection materials purchases should both be reviewed annually, and updated as necessary.
- Projections in tax base growth should be updated each year to reflect actual growth, and to update the average new house values and value/employee then current in future years.
- Any changes in funding strategy for the facilities included in the impact fee program should be reflected in the impact fee calculation.
- New revenue sources, such as implementation of a new SPLOST program, should be reviewed for potential tax credits against impact fees.

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



Forecasts

Extensive growth and development is forecast for Dawson County over the coming 23 years to 2040 as expansion of the Atlanta Metro Area washes over Forsyth County into Dawson—a process that has already begun.



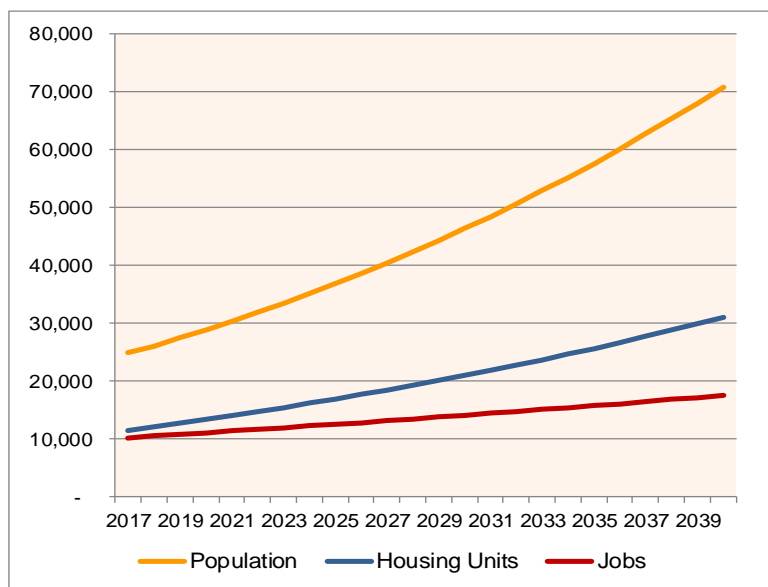
Forecasts

Population projections reflect this massive growth which were previously prepared for the Etowah Water and Sewer Authority and approved by the U.S. Army Corps of Engineers. Though that projection has been adjusted slightly in interim years based on more recent Census estimate data, the ultimate population forecast for 2040 is the same (70,709 people) for both projections.

The numbers in the 'jobs' column are private sector, building occupying employment figures and exclude what are referred to as 'non-building related' jobs. 'Non-building related' jobs are those that do not normally require issuance of a building permit, and thus would not be assessed an impact fee. Such jobs include any employment that is considered to be transitory in nature, such as those working on construction sites, or are strictly land-based such as farming and other agricultural workers. In addition, the number of workers employed by governmental entities (city, county, state and federal) is excluded because governments are exempt from impact fees.

Table 3: Forecasts of Future Growth

	Population	Housing Units	Jobs
2017	24,841	11,411	10,290
2018	26,133	12,039	10,578
2019	27,481	12,684	10,857
2020	28,887	13,348	11,136
2021	30,351	14,031	11,414
2022	31,875	14,728	11,697
2023	33,460	15,437	11,981
2024	35,106	16,165	12,270
2025	36,815	16,914	12,567
2026	38,587	17,685	12,868
2027	40,425	18,478	13,175
2028	42,328	19,296	13,485
2029	44,298	20,133	13,802
2030	46,337	20,990	14,119
2031	48,444	21,870	14,442
2032	50,622	22,772	14,774
2033	52,871	23,696	15,106
2034	55,193	24,648	15,441
2035	57,588	25,621	15,780
2036	60,058	26,629	16,128
2037	62,604	27,679	16,478
2038	65,227	28,772	16,831
2039	67,929	29,907	17,196
2040	70,709	31,086	17,560



	Population	Housing Units	Jobs
2017	24,841	11,411	10,290
2040	70,709	31,086	17,560
Increase	45,868	19,675	7,270
Percent	64.9%	63.3%	41.4%

By 2040, almost two-thirds (64.9%) of the population in the county will have been generated by new growth; virtually the same is true for the number of housing units. In other words, population and housing units in 2040 will be a bit less than 3 times the numbers today (2.8 and 2.7 times, respectively). Growth in private sector jobs will comprise over 40% of all such jobs in the county (somewhat less than doubling at 1.7 times 2017).

A much more extensive socioeconomic analysis and description of the growth projections is contained in the Appendix: Future Growth.

Cost Adjustments and Credits

■ 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, both past and future, 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.

Past Expenditures

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

Future Project Costs

In order to determine the present value of a project expenditure that will be made in the future, the Net Present Value (NPV) of the expenditure is determined. To calculate 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 2017 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. Essentially, the Net Discount Rate is the interest rate that accrues to monies being held in escrow. That is, as impact fees are collected and ‘saved up’ over the years for future expenditure, they increase at the rate that the account is accruing interest. Having determined the inflated cost of a project at some future date, the cost in today’s dollars can be reduced to the extent that interest will increase the funds on hand as they build up. This calculation determines how much money needs to be added to the account so that, with interest, it will grow to the amount needed for that future expenditure at that time. This is the Net Present Value of that future expenditure. As will be seen below, the cost of project and building construction has been increasing faster than the CPI inflation rate over the past 10 years.

■ Cost Inflat

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) that are widely used in the construction industry. The indexes are based on annual cost increases of various construction materials and applicable labor rates and calibrated regionally. For calculation of the CCI and the BCI, costs in 1913 are set at 100.

Construction Cost Inflat

Table 4 uses the example of a calculation of the annual average rate of increase reflected in construction costs. For this analysis, the 2006-2016 ten-year period is used as a base time period for an estimate of future construction cost increases due to inflation in labor and materials costs.

Table 4: Construction Cost Inflat – CCI

Year	Amount	CCI*		Effect of Inflation	
		1913=100	2006=1.0	CCI	Avg. Rate =
3.3593423%					
2006	\$ 100,000	4,854.43	1.000000	\$ 100,000.00	\$ 100,000.00
2007		5,136.09	1.058021	105,802.15	103,359.34
2008		5,488.43	1.130604	113,060.39	106,831.54
2009		5,737.82	1.181978	118,197.78	110,420.37
2010		5,742.83	1.183009	118,300.88	114,129.77
2011		5,829.65	1.200893	120,089.33	117,963.78
2012		5,892.64	1.213869	121,386.95	121,926.59
2013		5,983.23	1.232531	123,253.13	126,022.52
2014		6,147.52	1.266375	126,637.47	130,256.05
2015		6,245.74	1.286607	128,660.72	134,631.79
2016		6,277.14	1.293075	129,307.49	139,154.54
				\$ 1,304,696.29	\$ 1,304,696.29

* Construction Cost Index, Atlanta Region, Engineering News Record.

The table shows a construction project that cost \$100,000 in 2006, and how much the same project would cost in each subsequent year using the Construction Cost Index published by Engineering News Record for the Atlanta area. Setting the 2005 Construction Cost Index (CCI) at '1.0,' the increase in the CCI as a multiple of 2006 is also shown on the table. The equivalent cost of the same project in each subsequent year is calculated by multiplying the CCI multiplier times \$100,000. When the total for all such projects is summed for the 2006-2016 period, the equivalent average annual rate of increase is calculated as the percentage that would produce the same total. This percentage is used in the text of this report as the applicable inflator for construction projects that will begin in future years.

Building Cost Inflator

The inflator for future construction costs for buildings is based on ENR’s Building Cost Index (BCI) for each year from 2006 through 2016, and is calculated in the same manner as described above for the Construction Cost Inflator. Table 5 shows the results.

Table 5: Building Cost Inflator – BCI

Year	Amount	BCI*		Effect of Inflation	
		1913=100	2006=1.0	BCI	Avg. Rate =
				1.3671770%	
2006	\$ 100,000	3,611.02	1.000000	\$ 100,000.00	\$ 100,000.00
2007		3,623.91	1.003568	100,356.82	101,367.18
2008		3,721.86	1.030695	103,069.49	102,753.05
2009		3,715.58	1.028954	102,895.44	104,157.86
2010		3,736.56	1.034764	103,476.44	105,581.88
2011		3,837.47	1.062710	106,271.03	107,025.38
2012		3,970.93	1.099670	109,967.01	108,488.60
2013		4,022.11	1.113842	111,384.22	109,971.83
2014		4,076.81	1.128991	112,899.07	111,475.34
2015		4,108.05	1.137641	113,764.09	112,999.41
2016		4,126.72	1.142812	114,281.23	114,544.31
				\$ 1,178,364.84	\$ 1,178,364.84

* Building Cost Index, Atlanta Region, Engineering News Record.

CPI Inflator

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

Table 6 shows the CPI figures for every year since 1982, with the 1982-84 index being 100.

Table 6: Non-Construction Cost Inflator – CPI

Year	Amount	CPI*		Present Value: CPI	Long Term Inflator =	10-Year Inflator =
		1982-84=100	2016=1.0			
				2.365497%		
1982	\$ 10,000.00	96.5	2.48712	\$ 24,871.21	\$ 22,142.28	
1983	\$ 10,000.00	99.6	2.40971	\$ 24,097.11	\$ 21,630.61	
1984	\$ 10,000.00	103.9	2.30998	\$ 23,099.82	\$ 21,130.76	
1985	\$ 10,000.00	107.6	2.23055	\$ 22,305.50	\$ 20,642.46	
1986	\$ 10,000.00	109.6	2.18985	\$ 21,898.46	\$ 20,165.45	
1987	\$ 10,000.00	113.6	2.11274	\$ 21,127.39	\$ 19,699.46	
1988	\$ 10,000.00	118.3	2.02880	\$ 20,288.01	\$ 19,244.24	
1989	\$ 10,000.00	124.0	1.93554	\$ 19,355.42	\$ 18,799.54	
1990	\$ 10,000.00	130.7	1.83632	\$ 18,363.21	\$ 18,365.11	
1991	\$ 10,000.00	136.2	1.76217	\$ 17,621.67	\$ 17,940.72	
1992	\$ 10,000.00	140.3	1.71067	\$ 17,106.71	\$ 17,526.14	
1993	\$ 10,000.00	144.5	1.66095	\$ 16,609.49	\$ 17,121.14	
1994	\$ 10,000.00	148.2	1.61948	\$ 16,194.82	\$ 16,725.50	
1995	\$ 10,000.00	152.4	1.57485	\$ 15,748.50	\$ 16,339.00	
1996	\$ 10,000.00	156.9	1.52968	\$ 15,296.82	\$ 15,961.44	
1997	\$ 10,000.00	160.5	1.49537	\$ 14,953.72	\$ 15,592.59	
1998	\$ 10,000.00	163.0	1.47244	\$ 14,724.37	\$ 15,232.28	
1999	\$ 10,000.00	166.6	1.44062	\$ 14,406.19	\$ 14,880.28	
2000	\$ 10,000.00	172.2	1.39377	\$ 13,937.70	\$ 14,536.42	
2001	\$ 10,000.00	177.1	1.35521	\$ 13,552.07	\$ 14,200.51	
2002	\$ 10,000.00	179.9	1.33411	\$ 13,341.14	\$ 13,872.36	
2003	\$ 10,000.00	184.0	1.30439	\$ 13,043.87	\$ 13,551.79	
2004	\$ 10,000.00	188.9	1.27055	\$ 12,705.51	\$ 13,238.63	
2005	\$ 10,000.00	195.3	1.22892	\$ 12,289.15	\$ 12,932.71	1.479985%
2006	\$ 10,000.00	201.6	1.19051	\$ 11,905.12	\$ 12,633.86	\$ 11,582.54
2007	\$ 10,000.00	207.3	1.15754	\$ 11,575.42	\$ 12,341.91	\$ 11,413.62
2008	\$ 10,000.00	215.3	1.11474	\$ 11,147.41	\$ 12,056.71	\$ 11,247.17
2009	\$ 10,000.00	214.5	1.11872	\$ 11,187.22	\$ 11,778.10	\$ 11,083.14
2010	\$ 10,000.00	218.1	1.10067	\$ 11,006.68	\$ 11,505.93	\$ 10,921.50
2011	\$ 10,000.00	224.9	1.06699	\$ 10,669.88	\$ 11,240.04	\$ 10,762.22
2012	\$ 10,000.00	229.6	1.04535	\$ 10,453.55	\$ 10,980.30	\$ 10,605.27
2013	\$ 10,000.00	233.0	1.03026	\$ 10,302.64	\$ 10,726.57	\$ 10,450.60
2014	\$ 10,000.00	236.7	1.01382	\$ 10,138.18	\$ 10,478.69	\$ 10,298.19
2015	\$ 10,000.00	237.0	1.01262	\$ 10,126.16	\$ 10,236.55	\$ 10,148.00
2016	\$ 10,000.00	240.0	1.00000	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00
1982-16	\$350,000.00			\$ 535,450.12	\$ 535,450.12	
2006-16	\$110,000.00			\$ 118,512.25	← →	\$ 118,512.25



*Average annual Consumer Price Index data is from the U. S. Department of Labor, Bureau of Labor Statistics.

By 2016 the CPI had risen considerably over the 1982 CPI. The first column under the 'CPI' heading on the table shows the average annual CPI figures. Using 2016 as the base (2016=1.0), the second column under 'CPI' on the table shows the multipliers that would convert an amount of money spent in each year into current present value dollars.

Using an annual expenditure of \$10,000 as an example, the multipliers on Table 6 yield the figures shown for the CPI on the table under the 'present value' heading. Cumulatively, the \$350,000 spent over the 1982-2016 period would have a total present value of \$535,450.12 in today's dol-

lars. Considering the present value figures for the \$10,000 annual expenditures, an average annual inflation rate of over 2.365% yields the same total amount over the 1982-2016 period.

The 34-year average of annual CPI change (the period of 1982-2016) shown on Table 6 would be useful in estimating the present value (PV) of past expenditures, but would not be the best indicator of future change because of the long timeframe covered. While the historic CPI multipliers reflect the swings in inflation in the past, these rates have moderated somewhat in recent years as inflation has become a primary target of federal monetary policy. Looking only at the change in CPI for the ten years from 2006 to 2016, an average annual inflation rate of slightly under 1.48% best captures the change over that period. This lower inflation rate (compared to the 1982-2016 period) is assumed to be experienced 'on average' in future years, and is used for inflator calculations for future non-construction expenditures.

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), the current cost estimate for the project is inflated into the future using the average Building Cost Inflator (from Table 5) 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 Net Discount Rate (currently 0.5%) since this reflects the present value of a future amount of money.

For other construction projects (such as recreation facilities and roads), the current cost estimate for the project is inflated into the future using the average Construction Cost Inflator (from Table 4) 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 Net Discount Rate.

For non-construction capital projects (such as fire truck purchases or land acquisition), the ten-year average CPI inflator (from Table 6) is used to estimate the project expenditure in future dollars while the Net Discount Rate is applied to deflate that future cost to present value.

■ SPLOST Tax Credits

Given the County's past history with funding capital improvements through SPLOST sales taxes, bonds or a combination of both, it is assumed that similar funding approaches will be used in the future, instead of using property taxes through the General Fund.

Future SPLOST Financing

Some capital projects in the impact fee program have portions that are not impact fee eligible. These are situations in which a project serves both a future (impact fee eligible) need and a need to provide service to the current residents and businesses at the same Level of Service as new growth. These non-eligible portions are the responsibility of the current residents and businesses and are assumed to be financed by future SPLOST programs. However, both existing and future residents and businesses will be paying the SPLOST sales taxes.

To the extent that new growth will be contributing taxes for non-eligible portions of impact fee projects (for which they are not financially responsible), a credit must be applied against these fee collections in order to avoid new growth paying more than their 'fair share' of total costs.

As the county grows, new growth will be paying a larger proportion of the sales taxes each year.

Table 7: Future SPLOST Tax Generation - New Growth

Year	Day-Night Population			Residential Population		
	Total County	New Growth	% New Growth	Total County	New Growth	% New Growth
2017	35,131			24,841		
2018	36,711	1,580	4.30%	26,133	1,292	3.52%
2019	38,338	3,207	8.37%	27,481	2,640	6.89%
2020	40,023	4,892	12.22%	28,887	4,046	10.11%
2021	41,765	6,634	15.88%	30,351	5,510	13.19%
2022	43,572	8,441	19.37%	31,875	7,034	16.14%
2023	45,441	10,310	22.69%	33,460	8,619	18.97%
2024	47,376	12,245	25.85%	35,106	10,265	21.67%
2025	49,382	14,251	28.86%	36,815	11,974	24.25%
2026	51,455	16,324	31.72%	38,587	13,746	26.71%
2027	53,600	18,469	34.46%	40,425	15,584	29.07%
2028	55,813	20,682	37.06%	42,328	17,487	31.33%
2029	58,100	22,969	39.53%	44,298	19,457	33.49%
2030	60,456	25,325	41.89%	46,337	21,496	35.56%
2031	62,886	27,755	44.14%	48,444	23,603	37.53%
2032	65,396	30,265	46.28%	50,622	25,781	39.42%
2033	67,977	32,846	48.32%	52,871	28,030	41.23%
2034	70,634	35,503	50.26%	55,193	30,352	42.97%
2035	73,368	38,237	52.12%	57,588	32,747	44.63%
2036	76,186	41,055	53.89%	60,058	35,217	46.23%
2037	79,082	43,951	55.58%	62,604	37,763	47.75%
2038	82,058	46,927	57.19%	65,227	40,386	49.22%
2039	85,125	49,994	58.73%	67,929	43,088	50.62%
2040	88,269	53,138	60.20%	70,709	45,868	51.96%

Table 7 shows the percentage of the total that will be comprised of new growth for two scenarios:

On the left portion of the table, the countywide day-night population (i.e., resident population and employees combined; see Appendix: Future Growth for details) is shown and the proportion of the total that will be new growth. This would apply to credits for public facility categories that are countywide in nature and serve both residents and businesses—Fire Protection, Emergency/911, Law Enforcement and Road Improvements.

The right-hand portion of the table shows only residential population growth on a countywide basis. These figures would apply to projects for which only residential land uses would be assessed impact fees—Library Services and Parks & Recreation.

■ Funds on Hand

The County has impact fee monies from previous collections in its various impact fee accounts. To the extent that the funds have not been retained for previous on-going impact fee projects, the amounts will be applied to new impact fee costs as a credit. The most recently reported fund balances are shown on Table 8.

Table 8: Impact Fee Fund Balances

Libraries	Fire Protection	Detention	Roads	Parks & Recreation
\$ 5,631.83	\$ 3,237.41	\$ 45,715.05	\$ 1,215.49	\$ 68,292.70

As of end of last fiscal year (12/31/2016).

Library Services

■ Introduction

The Dawson County Library System provides library services through a central library facility in Dawsonville and a small satellite branch on Liberty Drive (east of Ga 400). Together, the two facilities contain a total of 14,700 square feet and have a current collection of almost 43,000 materials.



The Dawson County Library is part of the Chestatee Regional Library System and is maintained by financial contributions from Dawson County. The library provides services to all residents of Dawson 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.

Demand for library services is almost exclusively related to the county's resident population. Businesses make some use of public libraries for research purposes, but the use is incidental compared to that of the families and individuals who live in the county. Thus, a library services system impact fee is limited to future residential growth.

■ Service Area

Materials, facilities and services of the Dawson County library system are equally available to the county's population. The entire county is therefore 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.

■ Level of Service

The year 2017 Level of Service (LOS) is determined by an inventory of the existing library facilities and collection materials, as shown in Table 9.

Table 9: Inventory of Library Facilities

Facility	Gross Floor Area in Square Feet	Collection Materials
Dawson County Library*	14,700	42,908

*Includes the main branch and the satellite facility.

Level of service calculations, shown in Table 10 below, determine that the facilities provide slightly more than 3.76 collection materials and almost 1.29 square feet of library space per dwelling unit to serve the current population.

Table 10: Current Level of Service Calculation

Facility	Current Service Population	Current Level of Service
Existing Square Feet	Number of Housing Units (2017)	Square Feet of Floor Area per Housing Unit
14,700	11,411	1.2882
Existing Collection Materials	Number of Housing Units (2017)	Collection Materials per Housing Unit
42,908	11,411	3.7602

■ **Forecasts for Service Area**

Future Demand

The County adopted a Level of Service for library facilities based on the current floor area of facility space, and the current number of collection materials, per dwelling unit. In Table 11, the Level of Service figures are used to calculate future demand in square feet and collection materials between 2017 and 2040. The additional number of forecasted dwelling units to the year 2040 is multiplied by the Level of Service to produce the future demand figures. Future growth will demand over 25,300 additional square feet of library space by the year 2040 in order to maintain the current Level of Service for all county residents, both existing and future. In the same way, a net increase of almost 74,000 collection materials will need to be added.

Table 11: Future Demand Calculation

Current Level of Service	Service Population Growth	New Growth Demand
Square Feet of Floor Area per Housing Unit	Number of New Housing Units (2017-40)	Square Feet of New Floor Area Needed
1.2882	19,675	25,346
Collection Materials per Housing Unit	Number of New Housing Units (2017-40)	Collection Materials Needed
3.7602	19,675	73,983

Table 12 presents the expected facility demand in an annual format. The table shows two future projects roughly in pace with the anticipated growth in dwelling units (assuming that a new library branch will be needed when about one-half the service demand is reached) Alternately, an expansion of the current main library could be considered, or more than only two new branch libraries. In whatever future configuration, it is the addition of 25,346 square feet that is impact fee eligible.

Table 12: Future Library Facility Projects

Year	New Dwelling Units	Running Total: SF Demanded	Project	Square Footage
2017	0			
2018	628	809		
2019	645	1,640		
2020	664	2,495		
2021	683	3,375		
2022	697	4,273		
2023	709	5,186		
2024	728	6,124		
2025	749	7,089		
2026	771	8,082	New Branch Library	14,000
2027	793	9,104		
2028	818	10,158		
2029	837	11,236		
2030	857	12,340		
2031	880	13,474		
2032	902	14,636		
2033	924	15,826		
2034	952	17,052	New Branch Library	11,346
2035	973	18,305		
2036	1,008	19,604		
2037	1,050	20,957		
2038	1,093	22,365		
2039	1,135	23,827		
2040	1,179	25,346		
Total	19,675			25,346

Table 13 presents the figures for collection material demand. Materials demanded by new growth are calculated in the first columns by multiplying the Level of Service standard (from Table 11) times the net new dwelling units each year (from Table 3). Thus the 'New Materials Needed (annual)' column represents the number of materials that must be purchased in order to meet new growth's demand in each year. The 'Running Total' column shows the accumulated number of new collection materials that will meet the needs of future residential growth in the county.

However, the Library System discards a few of its collection materials each year as they become worn out, disfigured, broken or out of date. To maintain the collection, these materials need to be replaced with new materials. Since these materials replenish the overall collection, the responsibility for these replacements falls to the current residents and not to new growth.

Library Services

Over the past several years the discard rate has averaged 0.524% of all materials in the collection. As the collection grows in the future, this discard rate will continue relative to the new materials being acquired. By including the discarded materials for replacement each year, the resulting 'total materials needed (annual)' column reflects the total number of volumes required annually to maintain the LOS once these non-impact fee eligible volumes are discarded. Thus, the new materials that will be needed each year will meet both the demand of new growth and the replenishment of the current collection. A total of 74,369 books will need to be purchased to maintain the Level of Service for new and existing development and to account for discarded volumes. As will be seen below, only the cost of the new materials needed to meet the future demand of new growth will be impact fee eligible.



Table 13: Future Collection Materials Needed

Year	New Growth Demand			Plus Discarded Materials	Total Materials Needed (annual)
	New Dwelling Units	New Materials Needed (annual)	Running Total		
2017	0	0			
2018	628	2,361	2,361	12	2,373
2019	645	2,425	4,786	13	2,438
2020	664	2,497	7,283	13	2,510
2021	683	2,568	9,851	13	2,581
2022	697	2,621	12,472	14	2,635
2023	709	2,666	15,138	14	2,680
2024	728	2,737	17,875	14	2,751
2025	749	2,816	20,691	15	2,831
2026	771	2,899	23,590	15	2,914
2027	793	2,982	26,572	16	2,998
2028	818	3,076	29,648	16	3,092
2029	837	3,147	32,795	17	3,164
2030	857	3,223	36,018	17	3,240
2031	880	3,309	39,327	17	3,326
2032	902	3,392	42,719	18	3,410
2033	924	3,474	46,193	18	3,492
2034	952	3,580	49,773	19	3,599
2035	973	3,659	53,432	19	3,678
2036	1,008	3,790	57,222	20	3,810
2037	1,050	3,948	61,170	21	3,969
2038	1,093	4,110	65,280	22	4,132
2039	1,135	4,268	69,548	22	4,290
2040	1,179	4,433	73,981	23	4,456
Total	19,675	73,981		388	74,369

Note: Discard rate = 0.524%

■ Future Costs

New Library Space

The building floor area needed to serve new growth identified in Table 12 is used to calculate the future cost to meet service demand, as shown in Table 14. The costs are shown in current dollars, and then adjusted to reflect the Net Present Value based on the year in which the expenditure is anticipated. For facility construction, the estimated current cost of construction is adjusted using the CCI (construction cost index), and then reduced by the Discount Rate to determine the Net Present Value.¹

Table 14: Facility Costs to Meet Future Demand

Year	Project	Square Footage	Cost (2017 Dollars)*	% for New Growth	Total New Growth Cost (NPV)**
2026	New Branch Library	14,000	\$ 4,368,000	100%	\$ 4,719,155
2034	New Branch Library	11,346	\$ 3,539,952	100%	\$ 4,096,654
Total		25,346	\$ 7,907,952	100%	\$ 8,815,809

* Project cost based on \$312 per square foot, *Green Building Square Foot Costbook*, 2017 Edition, published by BNI Building News.

** Net Present Value = 2017 cost estimate inflated to target year using the Building Cost Index (BCI), reduced to NPV using the Discount Rate.

New Collection Materials

The new collection materials needed to serve new growth and to offset the discard rate, identified on Table 13, are used to calculate the future cost to meet service demand, as shown in Table 16.

The average cost of a collection material is based on the overall value of all of the materials in the current collection. The inventory of the current collection is shown on Table 15 by type of material, number of materials, the average cost to acquire a volume in each category, and the total value of all materials in each category. Overall, the system’s collection of 42,908 materials has a current (replacement) value of almost \$940,200. Dividing one by the other, and assuming the relative ratios will persist into the future, the average material in the collection is almost \$22.



¹ For more information on the cost inflator factor and net present value, see the 'Cost Adjustments and Credits' chapter of this report.

Table 15: Value of Collection Materials - 2017

Collection Materials	Number of Volumes	Avg Value per Volume	Total Value
Adult fiction books	1,220	\$ 23.33	\$ 28,462.60
Adult nonfiction books	10,431	\$ 24.09	\$ 251,282.79
Juvenile books	9,376	\$ 16.49	\$ 154,610.24
Easy books	7,638	\$ 15.73	\$ 120,145.74
EZ books	916	\$ 13.03	\$ 11,935.48
Magazines	1,108	\$ 22.00	\$ 24,376.00
Realia items	98	\$ 41.05	\$ 4,022.90
Large print books	1,616	\$ 27.17	\$ 43,906.72
Young adult books	2,585	\$ 16.17	\$ 41,799.45
Videogames	148	\$ 24.83	\$ 3,674.84
Music CDs	334	\$ 13.95	\$ 4,659.30
DVDs	3,129	\$ 22.84	\$ 71,466.36
Audiobooks	2,481	\$ 36.62	\$ 90,854.22
Ref/Georgianna	1,828	\$ 48.67	\$ 88,968.76
Total	42,908		\$ 940,165.40
	Overall Average per Volume		\$ 21.91

This average cost-per-material from Table 15 is used in Table 16 to calculate the total cost each year to acquire the needed number of materials (from Table 13). The costs are shown in current dollars, and then adjusted to reflect the Net Present Value based on the year in which the expenditure is anticipated. For the acquisition of collection materials, the current cost is adjusted to reflect the CPI (consumer price index) inflation factor, and then reduced by the Net Discount Rate to determine the Net Present Value.



In Table 16, the number of books needed each year is taken from Table 13. The total cost each year (in current 2017 dollars) is produced by multiplying the number of collection materials times the average per-volume cost calculated in Table 15. The percentage of the cost attributable to new growth in each year is based on the percentage of total volumes demanded that are attributable to new growth's demand (i.e., excluding the volumes needed to replace the discarded volumes).

This 'New Growth Cost (2017 \$)' is converted to Net Present Value as described above, using the CPI inflation rate to the future year indicated, and then reducing that figure using the Net Discount Rate back to present value of the future cost.

Table 16: Collection Material Costs to Meet Future Demand

Year	Total Materials Needed (annual)	Total Cost (2017 Dollars)	% for New Growth	New Growth Cost (2017 \$)	Net Present Value
2018	2,373	\$ 51,992.43	99.49%	\$ 51,729.51	\$ 52,233.93
2019	2,438	\$ 53,416.58	99.47%	\$ 53,131.75	\$ 54,172.99
2020	2,510	\$ 54,994.10	99.48%	\$ 54,709.27	\$ 56,325.35
2021	2,581	\$ 56,549.71	99.50%	\$ 56,264.88	\$ 58,491.77
2022	2,635	\$ 57,732.85	99.47%	\$ 57,426.11	\$ 60,281.09
2023	2,680	\$ 58,718.80	99.48%	\$ 58,412.06	\$ 61,913.95
2024	2,751	\$ 60,274.41	99.49%	\$ 59,967.67	\$ 64,182.63
2025	2,831	\$ 62,027.21	99.47%	\$ 61,698.56	\$ 66,679.09
2026	2,914	\$ 63,845.74	99.49%	\$ 63,517.09	\$ 69,313.78
2027	2,998	\$ 65,686.18	99.47%	\$ 65,335.62	\$ 71,993.51
2028	3,092	\$ 67,745.72	99.48%	\$ 67,395.16	\$ 74,987.07
2029	3,164	\$ 69,323.24	99.46%	\$ 68,950.77	\$ 77,466.00
2030	3,240	\$ 70,988.40	99.48%	\$ 70,615.93	\$ 80,110.42
2031	3,326	\$ 72,872.66	99.49%	\$ 72,500.19	\$ 83,050.03
2032	3,410	\$ 74,713.10	99.47%	\$ 74,318.72	\$ 85,963.33
2033	3,492	\$ 76,509.72	99.48%	\$ 76,115.34	\$ 88,899.95
2034	3,599	\$ 78,854.09	99.47%	\$ 78,437.80	\$ 92,505.82
2035	3,678	\$ 80,584.98	99.48%	\$ 80,168.69	\$ 95,469.09
2036	3,810	\$ 83,477.10	99.48%	\$ 83,038.90	\$ 99,851.34
2037	3,969	\$ 86,960.79	99.47%	\$ 86,500.68	\$ 105,028.26
2038	4,132	\$ 90,532.12	99.47%	\$ 90,050.10	\$ 110,404.10
2039	4,290	\$ 93,993.90	99.49%	\$ 93,511.88	\$ 115,766.29
2040	4,456	\$ 97,630.96	99.48%	\$ 97,127.03	\$ 121,414.28
Total	74,369	\$ 1,629,424.79		\$ 1,620,923.71	\$ 1,846,504.04

■ Credit Calculation

There is a credit calculation for this public facility category for SPLOST sales tax contributions generated from new growth and development. Table 17 below shows the anticipated sales tax contribution from new residential growth towards the cost to replace discarded materials.

The sales tax information is taken from the Cost Adjustments and Credits chapter. The funding requirement for collection materials is the portion of the capital projects that are not impact fee eligible.

The 'Annual Funding Required (NPV)' column shows the cost (inflated to each year of purchase) of the discarded materials which have to be replaced, from the previous table. The 'SPLOST Percentage' is the percentage of the total countywide residential population that represents accumulated new growth for each designated year, taken from the Cost Adjustments and Credits chapter.

The 'Contribution from New Growth' column shows the cost of the replacement materials multiplied by the SPLOST percentage each year. (Residential population is used because the impact fee for library services will only be levied against residential growth.)

Table 17: New Growth Contribution from SPLOST Taxes

Year	Annual Funding Required (NPV)	SPLOST Percentage	Contribution from New Growth
2018	\$ 262.92	3.52%	\$ 9.25
2019	\$ 284.83	6.89%	\$ 19.61
2020	\$ 284.83	10.11%	\$ 28.79
2021	\$ 284.83	13.19%	\$ 37.58
2022	\$ 306.74	16.14%	\$ 49.52
2023	\$ 306.74	18.97%	\$ 58.18
2024	\$ 306.74	21.67%	\$ 66.46
2025	\$ 328.65	24.25%	\$ 79.69
2026	\$ 328.65	26.71%	\$ 87.80
2027	\$ 350.56	29.07%	\$ 101.92
2028	\$ 350.56	31.33%	\$ 109.84
2029	\$ 372.47	33.49%	\$ 124.74
2030	\$ 372.47	35.56%	\$ 132.44
2031	\$ 372.47	37.53%	\$ 139.80
2032	\$ 394.38	39.42%	\$ 155.48
2033	\$ 394.38	41.23%	\$ 162.62
2034	\$ 416.29	42.97%	\$ 178.88
2035	\$ 416.29	44.63%	\$ 185.81
2036	\$ 438.20	46.23%	\$ 202.56
2037	\$ 460.11	47.75%	\$ 219.71
2038	\$ 482.02	49.22%	\$ 237.23
2039	\$ 482.02	50.62%	\$ 243.99
2040	\$ 503.93	51.96%	\$ 261.86
Total New Residential Contribution			\$ 2,893.75

■ **Net Impact Cost Calculation**

Table 18: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Library Construction	\$ 8,815,809.18
+ Eligible Cost of New Materials	\$ 1,846,504.04
minus Credit for SPLOST Contributions	\$ (2,893.75)
minus Impact Fee Fund Balance	\$ (5,631.83)
= Net Eligible Library Project Costs	\$ 10,653,787.64
÷ Housing Unit Increase (2017-2040)	19,675
= Net Impact Cost per Housing Unit	\$ 541.49

Note that an administration fee and a fee for preparation of the CIE is added to the net cost figure to produce the gross fee, which is shown on the Maximum Impact Fee Schedule.

As noted, Library impact fees are collected from residential development only.

In calculating the net impact cost, the credit for future sales tax contributions (from Table 17) is subtracted from the total impact fee eligible cost, as discussed above. This figure is further reduced to the extent that previously collected Library impact fees are on hand, to produce a net impact-fee-eligible cost amount. This is shown on Table 18.

Using the net eligible cost figure, the net impact cost per housing unit is calculated, based on the increase in dwelling units between 2017 and 2040.

Impact Fee Schedule

Table 18, therefore, presents the maximum net impact fee that could be charged in Dawson County for the library service category, based on the calculations carried out in this chapter.

The net impact fee per housing unit is transferred to Table 19: Maximum Impact Fee Schedule - Library Services below. The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on Table 19 are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.

Table 19: Maximum Impact Fee Schedule - Library Services

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Administration (3%)	CIE Preparation	Total Impact Fee
Net Fee per Housing Unit:				\$ 541.49			
Residential (200-299)							
210	Single-Family Detached Housing	n/a	per dwelling	\$ 541.49	\$ 16.24	\$ 1.11	\$ 558.84
220	Apartment	n/a	per dwelling	\$ 541.49	\$ 16.24	\$ 1.11	\$ 558.84
230	Residential Condominium/Townhouse	n/a	per dwelling	\$ 541.49	\$ 16.24	\$ 1.11	\$ 558.84

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual, by the Institute of Transportation Engineers, 9th Edition.
n/a - not applicable. Fee applies only to residential land uses.

Parks and Recreation Facilities

■ Introduction

Public recreational opportunities are available in Dawson County through a number of parks facilities and programs operated by the County. 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. The County maintains and operates four parks.

Rock Creek Sports Complex



River Park



Veterans Memorial Park



War Hill Park



■ Service 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 Dawson County resident can come. 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.

■ Level of Service

The Level of Service (LOS) that the County’s parks and recreation components provide is viewed from two perspectives: the LOS that is provided by the current facilities to the current population, and the LOS adopted as part of the County’s Recreation Master Plan.

Table 20: Current Inventory of Parks and Recreation Components

Facility	Park Acreage	Recreation Component	Current Inventory
Rock Creek Park	50.8	Total Park Acres	202.9
Veterans Memorial Park	40.8	Baseball/Softball Fields	15
River Park	3.3	Basketball Courts (outdoor)	2
War Hill Park	108.0	Multi-Purpose Fields	4
Total Acres	202.9	Picnic Pavilions	4
		Playgrounds	3
		Restroom/Concession	3
		Swimming Pools	1
		Tennis Courts	6
		Buildings:*	
		Gymnasium	17,000
		Maintenance Sheds	4,200
		Office/Concession	2,500
		Recreation Center	36,000
		Maintenance Yards**	0.25
		Walking Trails***	1.90
		Parking Spaces	1,255

Footnotes:

* Floor area in square feet. Includes 1 indoor regulation basketball court at the Veterans Memorial Park gym and 2 at the Rock Creek Recreation Center.

** Total acres for 2 yards.

*** Trail miles.

Current Level of Service

Table 21 below provides the current Level of Service in park acreage and facilities per population, converts this to the Level of Service per the number of housing units occupied by that population, and then expresses the Level of Service per housing unit (since impact fees are assessed per housing unit when building permits are issued, not population).

For all facilities, the current Level of Service standards are expressed in terms of the number of people each recreation component serves.

To determine the current LOS, the number of people served by each component is calculated using the current inventory for the component divided into the current population. These LOS 'per population' standards are then re-calculated as the number of housing units served by each component based on the county's number of people living in an average household (the average household size). Since impact fees are assessed at the time a building permit is issued (and the impact fee will be applied only to residential uses), the LOS then must be converted to a 'per housing unit' basis.

Table 21 shows how the current Level of Service for each recreation component is converted to a 'per housing unit' basis. To do this, the current LOS shown in the middle columns of 1 per a 'certain number of' housing units for each component is converted to the LOS per housing unit by dividing the number into '1', which produces the number of components serving one housing unit'.

Table 21: Current Level of Service Calculations

Component Type	Current Level of Service*	Level of Service per "X" Housing Units**	Level of Service per Each Housing Unit***
Total Park Acres	1 per 122 population =	1 per 56 Housing Units =	0.017857 for each Housing Unit
Baseball/Softball Fields	1 per 1,656 population =	1 per 761 Housing Units =	0.001314 for each Housing Unit
Basketball Courts (outdoor)	1 per 12,421 population =	1 per 5,706 Housing Units =	0.000175 for each Housing Unit
Multi-Purpose Fields	1 per 6,210 population =	1 per 2,853 Housing Units =	0.000351 for each Housing Unit
Picnic Pavilions	1 per 6,210 population =	1 per 2,853 Housing Units =	0.000351 for each Housing Unit
Playgrounds	1 per 8,280 population =	1 per 3,804 Housing Units =	0.000263 for each Housing Unit
Swimming Pools	1 per 24,841 population =	1 per 11,411 Housing Units =	0.000088 for each Housing Unit
Tennis Courts	1 per 4,140 population =	1 per 1,902 Housing Units =	0.000526 for each Housing Unit
Buildings:			
Gymnasium	1 sq ft per 1.461 population =	1 sq ft per 0.671 Housing Units =	1.489791 for each Housing Unit
Maintenance Sheds	1 sq ft per 5.915 population =	1 sq ft per 2.717 Housing Units =	0.368066 for each Housing Unit
Office/Concession	1 sq ft per 9.936 population =	1 sq ft per 4.564 Housing Units =	0.219087 for each Housing Unit
Recreation Center	1 sq ft per 0.690 population =	1 sq ft per 0.317 Housing Units =	3.154851 for each Housing Unit
Restroom/Concession	1 per 8,280 population =	1 per 3,804 Housing Units =	0.000263 for each Housing Unit
Maintenance Yard acres	1 acre per 99,364 population =	1 acre per 45,644 Housing Units =	0.000022 for each Housing Unit
Walking Trail miles	1 mile per 13,074 population =	1 mile per 6,006 Housing Units =	0.000167 for each Housing Unit
Parking Spaces	1 space per 19.794 population =	1 space per 9.092 Housing Units =	0.109982 for each Housing Unit

* LOS is based on the current inventory divided by the current population.

** Converted using average population per housing unit in 2017.

*** "1" divided by the number of housing units for each component under 'Level of Service per "X" Housing Units' column.

By way of example, the current LOS for basketball courts is 1 court per 4,968 people. That number—4,968—is divided by the 2017 average household size to convert 'people' into 'housing units'. The result is the converted standard of 1 court per 2,282 housing units. By dividing the component (1) by the number of housing units it serves results in the portion of a basketball court that serves 1 housing unit (0.000436).

Master Plan Level of Service

In 2012 the County adopted a Master Plan for all recreation facilities operated by the County. Those LOS standards are shown in Table 22. By-and-large, the current LOS standards compare generally well to the adopted LOS standards, with some exceptions (such as baseball and softball fields, which far outnumber the adopted standard). In many cases, types of recreation components

Parks and Recreation Facilities

are not the same between the current inventory and the Master Plan facilities. In particular, adopted standards for various building types cannot be compared to the current LOS standards.

Table 22: Adopted Level of Service Calculations

Component Type	Adopted Level of Service*		Level of Service per "X" Housing Units**		Level of Service per Each Housing Unit***
Total Park Acres	1 per	100 population =	1 per	46 Housing Units =	0.021739 for each Housing Unit
Baseball/Softball Fields	1 per	5,000 population =	1 per	2,297 Housing Units =	0.000435 for each Housing Unit
Basketball Courts	1 per	8,000 population =	1 per	3,675 Housing Units =	0.000272 for each Housing Unit
Football Fields	1 per	20,000 population =	1 per	9,187 Housing Units =	0.000109 for each Housing Unit
Picnic Pavilions	1 per	5,000 population =	1 per	2,297 Housing Units =	0.000435 for each Housing Unit
Playgrounds	1 per	5,000 population =	1 per	2,297 Housing Units =	0.000435 for each Housing Unit
Soccer Fields	1 per	5,000 population =	1 per	2,297 Housing Units =	0.000435 for each Housing Unit
Spraygrounds	1 per	20,000 population =	1 per	9,187 Housing Units =	0.000109 for each Housing Unit
Swimming Pools	1 per	20,000 population =	1 per	9,187 Housing Units =	0.000109 for each Housing Unit
Tennis Courts	1 per	3,500 population =	1 per	1,608 Housing Units =	0.000622 for each Housing Unit
Volleyball Courts	1 per	8,000 population =	1 per	3,675 Housing Units =	0.000272 for each Housing Unit
Buildings:					
Community/Cultural Ctrs	1 per	20,000 population =	1 per	9,187 Housing Units =	0.000109 for each Housing Unit
Maintenance Facilities	1	per park =	1 per	2,853 Housing Units =	0.000351 for each Housing Unit
Restroom/Concession	1	per 4 fields =	1 per	2402 Housing Units =	0.000416 for each Housing Unit
Recreation Center	1 per	10,000 population =	1 per	4,594 Housing Units =	0.000218 for each Housing Unit
Walking/jogging Trails	1	per park =	1 per	2,853 Housing Units =	0.000351 for each Housing Unit
Multi-Purpose Trail System	1 per	20,000 population =	1 per	9,187 Housing Units =	0.000109 for each Housing Unit
Parking	75	per field =	1 per	8 Housing Units =	0.124880 for each Housing Unit

* Dawson County *System-Wide Recreation Master Plan: 2012-2017*. Adopted February 2012.

Impact Fee LOS Standards

As will be seen below, the impact fee calculations use a combination of LOS standards reflecting current conditions and Master Plan standards where applicable, relevant and useful to the calculations.

First priority is given to the LOS standards adopted in the Master Plan, where those standards relate to actual facilities in the inventory and are based on population. Where an existing category (such as multi-purpose fields) has no comparable component in the Master Plan, the LOS for the current facilities is used. In the case of buildings, the categories between the Plan and actual facilities do not match, and/or the LOS standard differs as to its basis (floor area per population versus number per park). The same is true for maintenance sheds and maintenance yards versus 'maintenance facilities', and parking spaces. Lastly, the LOS for a 'multi-purpose trail system' is not quantified in terms of actual length; establishing an appropriate LOS in the future awaits a trail plan that will quantify this quantifiably.

The standards used in this Methodology Report provide greater clarity to future parks and recreation component development in terms of the County's current activities and planned improvements.

■ **Forecasts for Service Area**

Future Demand

As discussed above, the Level of Service standards used in this Report are an amalgam of standards established in the County’s *Systemwide Recreation Master Plan* (by preference) and current LOS standards in those cases where the Master Plan does not quantify future improvements in a useful way. The relevant LOS standards are shown on Table 23.

The table below applies the relevant Level of Service calculations to determine the facilities needed to meet the demand created by the existing residents of the county as well as the future demand for park lands and recreation components that will be generated by new growth and development.

Table 23: Existing and Future Demand (Parks)

Component Type	LOS per Housing Unit*	Existing Demand (2017)*	New Growth Demand (2017-40)**
Total Park Acres	0.021739	248.07	427.72
Baseball/Softball Fields	0.000435	4.97	8.57
Basketball Courts	0.000272	3.11	5.35
<i>Multi-Purpose Fields</i>	0.000351	4.00	6.90
Picnic Pavilions	0.000435	4.97	8.57
Playgrounds	0.000435	4.97	8.57
Swimming Pools	0.000109	1.24	2.14
Tennis Courts	0.000622	7.10	12.24
Buildings:			
<i>Gymnasium (sf)</i>	1.489791	17,000	29,312
<i>Maintenance Sheds (sf)</i>	0.368066	4,200	7,242
<i>Office/Concession (sf)</i>	0.219087	2,500	4,311
<i>Recreation Center (sf)</i>	3.154851	36,000	62,072
<i>Restroom/Concession (#)</i>	0.000263	3.00	5.17
<i>Maintenance Yard (acres)</i>	0.000022	0.25	0.43
<i>Walking Trails (miles)</i>	0.000167	1.90	3.28
<i>Parking (spaces)</i>	0.109982	1,255	2,164

* 2017 Housing Units = 11,411

** New Units (2017-2040) = 19,675

Notes:

All LOS figures from *Systemwide Recreation Master Plan* except those in italics, which are current LOS figures.

Multi-Purpose fields serve as football and soccer fields. Basketball courts double as volleyball courts.

Multi-Purpose Trail System not quantified, pending preparation of a trail system plan.

The current number of housing units (11,411) is multiplied by the LOS standard to determine the existing demand of today’s population. Since existing demand is used in the calculation of a few of

Parks and Recreation Facilities

the LOS standards, some of the existing demand figures on Table 23 are the same as the 'current inventory' figures on Table 20; these facilities are those shown on Table 23 in italics.

The increase in housing units between 2017 and 2040 (19,675; see Table 3) is multiplied by the same LOS to produce the future demand created by future growth.

Impact Fee Eligibility

New recreation components are eligible for impact fee funding only to the extent that the improvements are needed to specifically serve new growth and development, and only at the Level of Service applicable countywide. Table 24 shows the number of new recreation components that are needed to satisfy needs of the county's future residents, and the extent to which fulfillment of those needs will serve future growth demand.

The table begins with the current inventory of recreation components, and the 'existing demand' for those components to meet the needs of the current (2017) population based on the applicable Level of Service standards (shown on Table 23).

Table 24: Future Park Facility Impact Fee Eligibility

Component Type	Current Inventory	Existing Demand	Excess or (Shortfall)	New Growth Demand	Net Total Needed	Total Needed*	% Impact Fee Eligible
Total Park Acres	202.94	248.07	(45.13)	427.72	472.84	472.84	90.46%
Baseball/Softball Fields	15	4.97	10.03	8.57	(1.47)	-	
Basketball Courts (outdoor)	2	3.11	(1.11)	5.35	6.46	7.00	92.27%
Multi-Purpose Fields	4	4.00	0.00	6.90	6.90	7.00	98.52%
Picnic Pavilions	4	4.97	(0.97)	8.57	9.53	10.00	85.66%
Playgrounds	3	4.97	(1.97)	8.57	10.53	11.00	77.87%
Swimming Pools	1	1.24	(0.24)	2.14	2.38	3.00	71.39%
Tennis Courts	6	7.10	(1.10)	12.24	13.33	14.00	87.40%
Buildings:							
Gymnasium (sf)	17,000	17,000	0	29,312	29,312	29,312	100.00%
Maintenance Sheds (sf)	4,200	4,200	0	7,242	7,242	7,242	100.00%
Office/Concession (sf)	2,500	2,500	0	4,311	4,311	4,311	100.00%
Recreation Center (sf)	36,000	36,000	0	62,072	62,072	62,072	100.00%
Restroom/Concession (#)	3	3	0	5.17	5.17	6.00	86.20%
Maintenance Yard (acres)	0.25	0	0	0.43	0.43	0.43	100.00%
Walking Trails (miles)	1.9	1.9	0	3.28	3.28	3.28	100.00%
Parking (spaces)	1,255	1,255	0	2,164	2,164	2,164	100.00%

* For recreation components that can only be built in whole numbers: 'Net Total Needed' rounded up to next whole number.

For park acres, building floor areas, maintenance yard acres, walking trails, and parking spaces, actual number shown.

The 'Excess or (Shortfall)' column compares the existing demand to the current inventory for each recreation component. If an 'excess' were to exist, that would mean that more components (or portions of components) exist than are needed to meet the demands of the current population, and those 'excesses' would create capacity to meet the recreational needs of future growth. This is the case for two components in Dawson County—baseball/softball fields and basketball courts.

Conversely, a 'shortfall' indicates that there are not enough components (or portions of components) to meet the recreational needs of the current population based on the Level of Service standard (e.g., park acres, playgrounds, etc.).

The column on Table 24, labeled 'New Growth Demand', shows the total demand for recreation components specifically to meet future growth needs (from Table 23), and the 'Net Total Needed' column shows all existing and future needs combined. The current 'shortfall' in park acres, playgrounds and several other components, is added to new growth's facility needs to bring the current population up to the current Level of Service required to be available to all—both current and future residents.

For many components, the 'Total Needed' column is rounded up to whole numbers. This is simply because the County cannot build a portion of a facility; it must build an entire facility. As a result, the '% Impact Fee Eligible' column may reflect a percentage less than 100%.

For example, existing residents suffer a 'shortfall' in playgrounds based on the LOS standard. New growth mathematically demands 8.57 new playgrounds; together, 10.53 playgrounds are needed to bring the current residents and future residents up to the same Level of Service. The County cannot build a portion of a playground; it must build an entire playground for it to be usable. Thus 11 playgrounds need to be added, and the portion of the 11 new playgrounds that is impact fee eligible (8.57) results in the percentage that is impact fee eligible (77.87%); 17.89% of the total goes to satisfy existing demand, and the remainder (4.24%) is excess capacity available to serve new growth beyond the current planning horizon. As such, the excess capacity could be recouped through impact fees at that time, but cannot be charged to new growth between now and 2040.

The outlier is baseball/softball fields. The 15 existing fields in the inventory provides an 'excess capacity' of about ten fields using the LOS standard adopted in the Master Plan. This 'excess capacity' exceeds the 'raw' demand created by new growth (8.57 fields). As a result, no additional fields will be needed in the foreseeable future.

Future Costs

Table 25 is a listing of the future capital project costs to provide the additional recreation components needed to attain or address the applicable Level of Service standards.

Costs are based on cost estimates provided in the *Systemwide Recreation Master Plan* for all recreation components except buildings. For new building construction, the actual amount spent by the County on each such facility in the past was raised to 2012 dollars using the Building Construction Index (BCI) from the actual year of each expenditure. All of these 2012 figures in the 'Net Cost per Unit' column are then increased to the gross cost to account for a contingency (10%) and professional services (7%)—a figure also taken from the Master Plan.

The cost estimates provided in the Master Plan were developed for the 2012 report; these are increased to current (2017) figures using the CPI inflation rate. In similar fashion, the building construction costs calculated in 2012 equivalent dollars are increased to 2017 values using the BCI inflation rate.

The 2017 figures in the 'Total Needed' column are drawn from the 'Total Needed' column in Table 24. These totals, multiplied by the 2017 per unit costs, establish the total cost in current dollars for each recreation component. These 'Total Cost (2017)' figures on the Table are converted to 'New Growth Share' dollars based on the percentage that each improvement is impact fee eligible (also from Table 24).

The calculation of Net Present Value is explained following the table.

Table 25: Future Costs to Meet Future Demand for Parks and Recreation

Component Type	2012 Cost Estimates		Current (2017) Cost Estimates			Percent Impact Fee Eligible	New Growth Share	2030 Net Present Value***
	Net Cost per Unit*	Gross Cost per Unit**	Per Unit Cost (2017)	Total Needed	Total Cost (2017)			
Park Acres****	\$ 18,000	\$ 21,060	\$ 22,665	472.84	\$ 10,716,978	90.46%	\$ 9,694,215	\$ 10,997,627
Baseball/Softball Fields	\$ 250,000	\$ 292,500	\$ 345,044	-	\$ -		\$ -	\$ -
Basketball Courts (outdoor)	\$ 50,000	\$ 58,500	\$ 69,009	7	\$ 483,063	92.27%	\$ 445,714	\$ 641,865
Multi-Purpose Fields	\$ 150,000	\$ 175,500	\$ 207,026	7	\$ 1,449,182	98.52%	\$ 1,427,703	\$ 2,056,012
Picnic Pavilions	\$ 50,000	\$ 58,500	\$ 69,009	10	\$ 690,090	85.66%	\$ 591,098	\$ 851,231
Playgrounds	\$ 75,000	\$ 87,750	\$ 103,513	11	\$ 1,138,643	77.87%	\$ 886,643	\$ 1,276,840
Aquatic Center (each)	\$ 11,000,000	\$ 12,870,000	\$ 13,774,166	1	\$ 13,774,166	71.39%	\$ 9,832,978	\$ 10,994,914
Tennis Courts	\$ 75,000	\$ 87,750	\$ 103,513	14	\$ 1,449,182	87.40%	\$ 1,266,554	\$ 1,823,943
Buildings:								
Gymnasium (sf)	\$ 113	\$ 132	\$ 141	29,312	\$ 4,132,992	100.00%	\$ 4,132,992	\$ 4,621,376
Maintenance Sheds (sf)	\$ 75	\$ 87	\$ 93	7,242	\$ 673,506	100.00%	\$ 673,506	\$ 753,092
Office/Concession (sf)	\$ 147	\$ 172	\$ 184	4,311	\$ 793,224	100.00%	\$ 793,224	\$ 886,957
Recreation Center (sf)	\$ 113	\$ 132	\$ 141	62,072	\$ 8,752,152	100.00%	\$ 8,752,152	\$ 9,786,370
Restroom/Concession (#)	\$ 200,000	\$ 234,000	\$ 250,439	6	\$ 1,502,634	86.20%	\$ 1,295,317	\$ 1,448,381
Maintenance Yard (acres)	\$ 18,000	\$ 21,060	\$ 22,665	0.43	\$ 9,770	100.00%	\$ 9,770	\$ 11,084
Walking Trails (miles)	\$ 158,400	\$ 185,328	\$ 218,620	3.28	\$ 716,175	100.00%	\$ 716,175	\$ 1,031,352
Parking (spaces)	\$ 1,600	\$ 1,872	\$ 2,208	2,164	\$ 4,778,112	100.00%	\$ 4,778,112	\$ 6,880,882
				Total	\$ 51,059,869		\$ 45,296,153	\$ 54,061,927

* Cost figures drawn from *Systemwide Recreation Master Plan* (2012 estimates) for all component types except buildings. Per square foot costs for buildings derived from actual costs from the Fixed Assets listing, raised to 2012 equivalent costs.

** Includes contingency at 10% and planning/architectural/engineering/legal services at 7%.

*** Actual construction dates will vary. NPV based on CPI, CCI or BCI as appropriate, in an average construction year of 2030.

**** Cost per park or maintenance yard acre includes land acquisition and site preparation.

Note: All cost figures shown rounded to nearest whole dollar.

The Net Present Value of new growth’s share of the cost for each component is calculated as follows:

Since the annual ‘pace’ of component construction over the 2017-2040 period is not known, an ‘average’ year of 2030 is used for Net Present Value calculations—some improvements will occur earlier for less money, and some later at greater cost. All will average out.

To calculate the Net Present Value (NPV) of the impact fee eligible cost estimate for the construction of the recreation components, the NPVs are calculated by increasing the current (2017) estimated costs using Engineering News Record’s (ENR) 10-year average building cost inflation (BCI) rate for buildings (such as gymnasiums) and the 10-year average CPI rate for all other projects. All project costs are then reduced to current NPV dollars using the Net Discount Rate.

■ Credit Calculation

There is a credit calculation for this public facility category for future SPLOST sales tax contributions from new residents. As indicated previously, financing through future SPLOST programs is assumed for the non-eligible impact fee project costs.

Table 26 shows the anticipated sales tax contribution from new residential growth towards the non-eligible costs for the new recreation components. The sales tax information is taken from the Cost Adjustments and Credits chapter. The funding requirement for the recreation components is the portion of those capital projects that are not impact fee eligible.

Table 26: New Growth Contribution from SPLOST Taxes

Year	Annual Funding Required (NPV)	SPLOST Percentage	Contribution from New Growth
2018		3.52%	\$ -
2019		6.89%	\$ -
2020		10.11%	\$ -
2021		13.19%	\$ -
2022		16.14%	\$ -
2023		18.97%	\$ -
2024		21.67%	\$ -
2025		24.25%	\$ -
2026		26.71%	\$ -
2027		29.07%	\$ -
2028		31.33%	\$ -
2029		33.49%	\$ -
2030	\$ 6,652,174.13	35.56%	\$ 2,365,276.15
2031		37.53%	\$ -
2032		39.42%	\$ -
2033		41.23%	\$ -
2034		42.97%	\$ -
2035		44.63%	\$ -
2036		46.23%	\$ -
2037		47.75%	\$ -
2038		49.22%	\$ -
2039		50.62%	\$ -
2040		51.96%	\$ -
Total New Residential Contribution			\$ 2,365,276.15

The 'Annual Funding Required (NPV)' column shows the cost (inflated to 2030) of the non-eligible capital improvements, determined from Table 25. The 'SPLOST percentage' is the percentage of the total countywide residential population that represents accumulated new growth for each designated year, taken from the Cost Adjustments and Credits chapter.

The amount of the non-eligible portion of the new recreation components multiplied by the SPLOST percentage for that year produces the figures in the 'Contribution from New Growth' column. (Residential population is used because the Parks & Recreation impact fee will only be levied against residential growth.)

■ Net Impact Cost Calculation

In calculating the net impact cost, the credit for future sales tax contributions (from Table 26) is subtracted from the total impact fee eligible cost, as discussed above.

Table 27: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Parks & Rec Projects	\$ 54,061,926.61
minus Credit for SPLOST Contributions	\$ (2,365,276.15)
minus Impact Fee Fund Balance	\$ (68,292.70)
= Net Eligible Parks & Rec Project Costs	\$ 51,628,357.76
÷ Housing Unit Increase (2017-2040)	19,675
= Net Impact Cost per Housing Unit	\$ 2,624.06

Note that an administration fee and a fee for preparation of the CIE is added to the net cost figure to produce the gross fee, which is shown on the Maximum Impact Fee Schedule.

This figure is further reduced to the extent that previously collected Parks & Recreation impact fees are on hand, to produce a net impact fee eligible cost amount. This is shown on Table 27.

Using the net eligible cost figure, the net impact cost per housing unit is calculated, based on the increase in housing units between 2017 and 2040.

■ Impact Fee Schedule—Parks & Recreation

The maximum net impact fee that could be charged in Dawson County for the Parks & Recreation facility category, based on the calculations carried out in this chapter, is shown on Table 27.

The ‘net impact cost per housing unit’ is transferred to Table 28: Maximum Impact Fee Schedule - Parks & Recreation.

The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on the following table are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.

Table 28: Maximum Impact Fee Schedule - Parks & Recreation

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Net Fee per Housing Unit:				\$ 2,624.06			
<i>Residential (200-299)</i>							
210	Single-Family Detached Housing	n/a	per dwelling	\$ 2,624.06	\$ 78.72	\$ 5.36	\$ 2,708.14
220	Apartment	n/a	per dwelling	\$ 2,624.06	\$ 78.72	\$ 5.36	\$ 2,708.14
230	Residential Condominium/Townhouse	n/a	per dwelling	\$ 2,624.06	\$ 78.72	\$ 5.36	\$ 2,708.14

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual, by the Institute of Transportation Engineers, 9th Edition.
 n/a - not applicable. Fee applies only to residential land uses.

Fire Protection

■ Introduction

Fire protection services are provided to the entire county through the Dawson County Emergency Services Department. The capital value of the department's services is based upon fire stations, administrative office space, and apparatus having a life of 10 years or more.

The Emergency Services department provides service throughout Dawson County, including the City of Dawsonville, which overall totals 211 square miles of coverage area and 50 miles of shoreline on Lake Sydney Lanier. Services are provided through three operating divisions: Fire/Rescue, the Emergency Management Agency, and Emergency Medical Services. Much of the data in this chapter is drawn from the *Fire Services Assessment* prepared by the Georgia Mountains Regional Commission published in November, 2016. As a convention, the term 'fire protection services' is



used in this chapter to apply to all fire and EMS services provided by the Emergency Services Department. (The space needs of the Emergency Operations Agency are addressed in the Emergency/911 chapter.)

■ Service Area

Fire protection operates as a coordinated system, with each 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. Since the stations would continue to operate as 'backups' to the other stations, everyone in the county would benefit by the construction of the new station since it would reduce the 'backup' times the station nearest to them would be less available. For these reasons the entire county is considered a single service area for the provision of fire protection and EMS services because all residents and employees within the county have equal access to the benefits of the program.

■ Level of Service

Current Inventory

Fire protection and emergency medical services are provided currently by eight stations with a combined square footage of 26,016, comprising 25 bays and utilizing a total of 29 heavy vehicles. In addition, the department

Fire Protection

maintains a facility, which includes a burn building, for training. Table 29 presents the 2017 inventory of facilities and impact fee eligible apparatus in the county.

Table 29: Current Capital Improvements

Stations			Vehicles*							
Facility	Floor Area (Sq Ft)	Bays	Engine	Tender	Tanker	Brush	Battalion	Medic	Squad	Total
Station 1 - Memory Lane	7,632	3	1	1		1	1	1		5
Station 2 - Liberty Drive	3,900	4	1	1				1	1	4
Station 3 - Harmony Church Rd	2,784	3	1	1				1		3
Station 4 - Emma Terrace	2,100	3	1	1						2
Station 5 - Kelly Bridge Road	1,800	3	1	1	1					3
Station 6 - Hubbard Road	3,800	4	1	1		1		1	1	5
Station 7 - Dawson Forest Road	2,000	3	2	1				1	1	5
Station 8 - Monument Road	2,000	2	1	1						2
Total Existing System**	26,016	25	9	8	1	2	1	5	3	29

* Vehicles having a service life of 10 years or more.

** In addition to the stations, the department operates a fire training facility, which includes a burn building.

The current capital improvements from Table 29 are translated into the current Level of Service (LOS) for fire protection and emergency medical services in Dawson County on Table 30.

Table 30: Level of Service Calculations - 2017

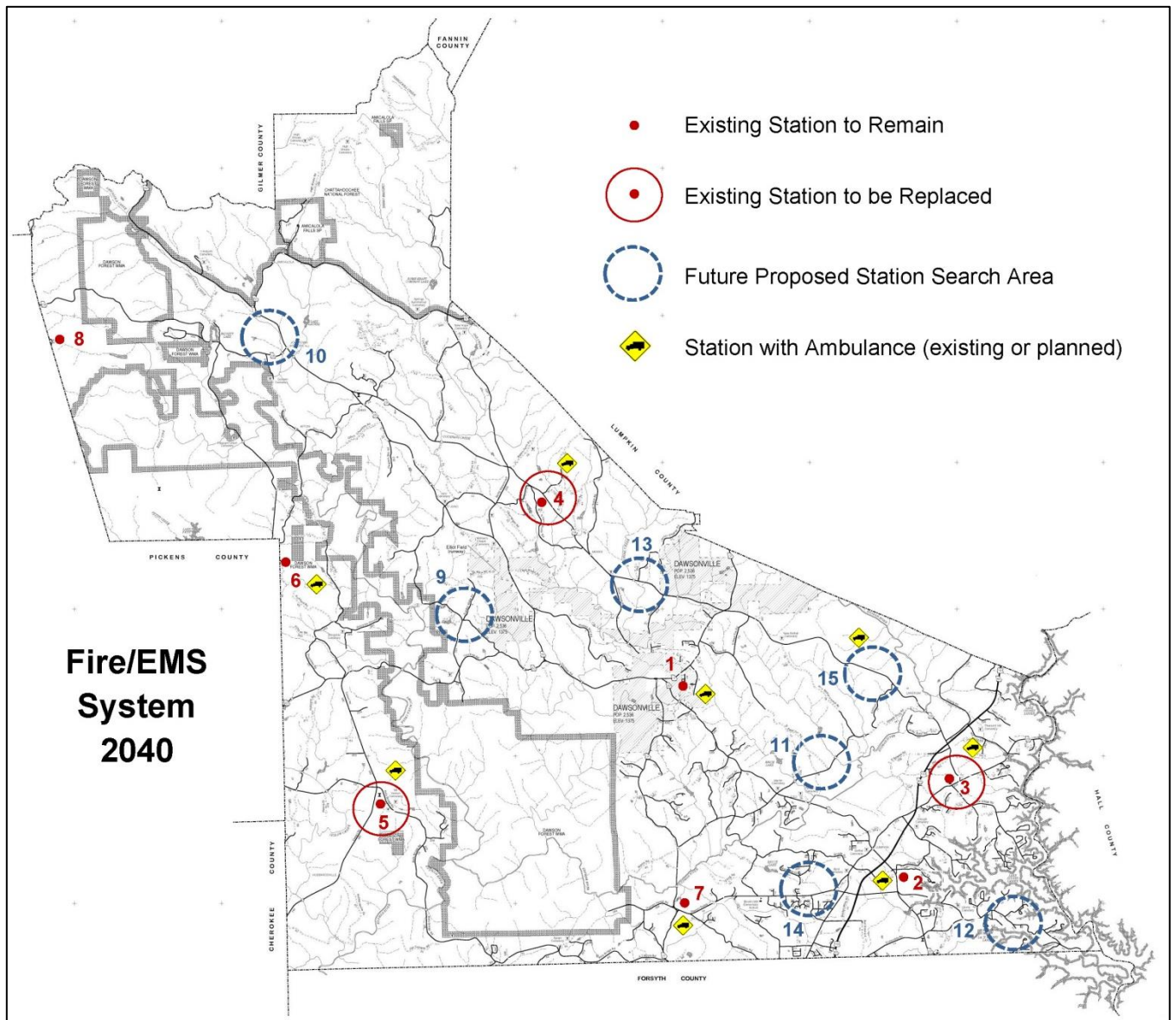
Facility	Current Service Population	Level of Service
Total Existing Floor Area	2017 Day-Night Population	Square Feet per 2017 Day-Night Population
26,016	35,131	0.740543
Total Existing Station Bays	2017 Day-Night Population	Bays per 2017 Day-Night Population
25	35,131	0.000712
Total Existing Vehicles	2017 Day-Night Population	Vehicles per 2017 Day-Night Population
29	35,131	0.000825

The current LOS is measured in terms of the number of vehicles (engines, tankers, medic units, etc.), and the number of square feet and vehicle bays in the fire stations, per day-night population in the service area. Day-night population is used as a measure in that fire protection services are available on a 24-hour basis, provided continuously to both residences and businesses throughout the county.

Future System

In order to adequately serve future growth and development in the county to 2040, a number of stations will need to be built and new vehicles purchased. Overall, future plans call for the replacement (and enlargement) of three aging and obsolete stations and the construction of seven new stations strategically located throughout the county. Importantly, the current Fire/EMS system of facilities has capacity available to accommodate a portion of future growth, which reduces the overall need for new facilities.

The map below conceptualizes the future planned Fire/EMS system as currently envisioned. It is important to bear in mind that future growth patterns could produce changes in the location of some stations or the order in which construction would need to occur.



A key factor in determining future station locations is consideration of achieving ISO standards with regard to response times and road miles to be travelled within each fire service district. As the

Fire Protection

county grows, population concentrations will increase in high-growth areas, new commercial buildings and multi-family complexes will be built, and inevitably traffic congestion will mount on major roads. As a result, 'densification' of fire service districts in the growing areas of the county—primarily the GA 400/Lake Area and the area extending from there to Dawsonville and beyond (as shown on the County's Comprehensive Plan map)—will be needed to maintain and possibly increase service and decrease response times. This would have the added benefit of potentially reducing fire insurance premiums as a result.

Future System Improvements

In summary, the future system is planned to include 15 existing and new stations (a net increase of 7), an expansion of the fire training center, and a net increase of 25 vehicles (for a total of 54), including 2 new ladder trucks and an increase of 3 new ambulances. As part of the planned improvements, three 3-bay existing obsolete stations are proposed to be replaced with modern, 4-bay facilities. The future system, as currently envisioned, is summarized on the table below.

Table 31: Future Fire/EMS System - 2040

Stations			New Bays Added**	Vehicles Added*				Year of Addition
Facility	Existing Bays	Existing Vehicles		Engine	Tender	Medic	Ladder	
Station 1 - Memory Lane	3	5					1	2020
Station 2 - Liberty Drive	4	4					1	2023
Replace Station 3 - Harmony Church Rd	3	3	1	1				2023
Replace Station 4 - Emma Terrace	3	2	1	1		1		2022
Replace Station 5 - Kelly Bridge Road	3	3	1			1		2020
Station 6 - Hubbard Road	4	5						
Station 7 - Dawson Forest Road	3	5						
Station 8 - Monument Road	2	2						
New Stations:								
Station 9 - Sweetwater Juno Road			3	2	1			2019
Station 10 - SR 183 Area			2	1	1			2021
Station 11 - Etowah River Road Area			3	2	1			2025
Station 12 - War Hill Park Rd Area			1	1				2028
Station 13 - SR 136 at Shoal Creek Area			3	2	1			2031
Station 14 - Dawson Forest at Red Rider Area			3	2	1			2034
Station 15 - SR 136 at Cothran Road Area			4	2	1	1		2037
Total Future System (2040)***	25	29	22	14	6	3	2	

* Excludes vehicles relocated from Stations 3, 4 and 5 when the stations are replaced. For all stations, types of vehicles may vary from the "standard complement" depending on the individual needs of each service area.

** Excludes replacement of 3 bays each at existing Stations 3, 4 and 5 when replacement stations built.

Note: New station search areas are approximate; specific station locations will reflect growth patterns and land availability, which may also affect the order of construction.

*** In addition to the stations, expansion of the training facility and burn building is proposed in 2024.

Using the figures from Table 31 for both the existing facilities and planned improvements, Table 32 shows the resulting LOS calculations for the 2040 system.

As can be seen on the table, the LOS standards for the future system are lower than for the current system, which is a result of taking advantage of the residual capacity in the existing system to provide service to at least a portion of anticipated growth. Applying the current LOS factors from Table 30 to all future growth, for instance, would have projected a future need for as many as 11 or 12 new stations, instead of 7, and 41 more vehicles, not 25.

Table 32: Future Level of Service Calculations - 2040

Facility	Future Service Population	Level of Service
Total Future Floor Area	2040 Day-Night Population	Square Feet per 2040 Day-Night Population
42,164	88,269	0.477676
Total Future Station Bays	2040 Day-Night Population	Bays per 2040 Day-Night Population
47	88,269	0.000532
Total Future Vehicles	2040 Day-Night Population	Vehicles per 2017 Day-Night Population
54	88,269	0.000612

■ Future Costs

There are three categories of future costs: those for facilities (new station construction and the training center), those for new vehicle purchases, and those for the Fire Hydrant Extension program.

As a prologue to the facility and vehicle system improvements, Table 33 shows the anticipated timing of the projects and expenditures. Timing for near-term system improvements has been determined using two factors: first, immediate needs identified from the County’s Capital Improvements Program (CIP) and to meet growing service demands in areas experiencing much of the recent increases in development; and second, to extend service to the far northern portion of the county not currently well-served.

Once the immediate needs of the system are addressed, additional project are related to future increases in the day-night population—correlating increases in service to the growing demands of future growth and development—as well as increasing service into pockets of areas less served than others.

As to the Fire Hydrant Extension Program, the schedule of hydrant installations is closely coordinated with the extension of and upgrades to major water lines in high-growth areas by the Etowah Water and Sewer Authority.

Table 33: Timing of Future Fire/EMS Facility Projects

Year	Day-Night Pop Increase over 2017	Incremental Demand		
		Station Number	New Bays Added*	New Vehicles
2017	35,131			
2018	1,580			
2019	3,207	9	3	3
2020	4,892	5**	1	2
2021	6,634	10	2	2
2022	8,441	4	1	2
2023	10,310	3***	1	2
2024	12,245			
2025	14,251	11	3	3
2026	16,324			
2027	18,469			
2028	20,682	12	1	1
2029	22,969			
2030	25,325			
2031	27,755	13	3	3
2032	30,265			
2033	32,846			
2034	35,503	14	3	3
2035	38,237			
2036	41,055			
2037	43,951	15	4	4
2038	46,927			
2039	49,994			
2040	53,138			
Totals	53,138		22	25

* Excludes replacement of 3 bays each at existing Stations 3, 4 and 5 when replacement stations built.

** Includes one ladder truck for Station 1.

*** Includes one ladder truck for Station 2.

Facility Costs

The estimated costs of the facility projects scheduled on Table 33 for the stations are shown on Table 34. Costs shown in the 'Current (2017) Dollars' columns are based on the current gross per-bay cost of a standard three-bay fire station (\$460,000 in total impact fee eligible capital cost per bay), drawn from the *Fire Services Assessment* report prepared by the Georgia Mountains Regional Commission in 2016. Since the 'per bay' costs are determined by dividing the total cost of construction of a standard station by the number of resulting bays, the gross cost per bay therefore includes a portion of the cost of administrative and other space in a standard station.

The 2017 total dollar amounts are then converted to Net Present Value using ENR's 10-year average Building Construction Index (BCI) for the appropriate years. (NPV calculations are discussed fully in the Adjustments and Credits chapter).

The 'percent impact fee eligible' figures on Table 34 reflect the 3-bays each in Stations 3, 4 and 5 that are not impact fee eligible because they will be replaced by the new 4-bay stations.

Table 34: Impact Fee Costs - Facilities

Facility	Current (2017) Dollars			Future Cost		Impact Fee Eligible	
	Replaced Bays	New Bays Added	Total Cost	Year	Net Present Value	Percent Eligible	Eligible Cost
Station 9		\$ 1,380,000	\$ 1,380,000	2019	\$ 1,403,918	100%	\$ 1,403,918
New Station 5	\$ 1,380,000	\$ 460,000	\$ 1,840,000	2020	\$ 1,888,042	25%	\$ 472,011
Station 1		\$ 920,000	\$ 920,000	2021	\$ 952,167	100%	\$ 952,167
Station 10	\$ 1,380,000	\$ 460,000	\$ 1,840,000	2022	\$ 1,920,765	25%	\$ 480,191
New Station 4	\$ 1,380,000	\$ 460,000	\$ 1,840,000	2023	\$ 1,937,339	25%	\$ 484,335
New Station 3		\$ 1,380,000	\$ 1,380,000	2025	\$ 1,478,187	100%	\$ 1,478,187
Station 12		\$ 460,000	\$ 460,000	2028	\$ 505,594	100%	\$ 505,594
Station 13		\$ 1,380,000	\$ 1,380,000	2031	\$ 1,556,385	100%	\$ 1,556,385
Station 14		\$ 1,380,000	\$ 1,380,000	2034	\$ 1,597,022	100%	\$ 1,597,022
Station 15		\$ 1,840,000	\$ 1,840,000	2037	\$ 2,184,961	100%	\$ 2,184,961
Training Center		\$ 207,919	\$ 207,919	2024	\$ 220,807	100%	\$ 220,807
	\$ 4,140,000	\$10,327,919	\$ 14,467,919		\$ 15,645,187		\$ 11,335,578

Vehicle Costs

Vehicle costs are calculated in much the same way as the facility costs. The 2017 costs for a new engine, tender and medic vehicle (ambulance) are drawn from the *Fire Services Assessment* report. The current cost for a ladder truck is drawn from recent purchase history of other jurisdictions. The Net Present Value calculation, in this case, is based on the 10-year average CPI (as discussed in the Adjustments and Credits chapter). All vehicles are 100% impact fee eligible in that they add new capacity to serve future growth and development.

Table 35: Impact Fee Costs - Vehicles

Facility	Engine	Tender	Medic	Ladder	Total Cost (2017)	Year	Net Present Value
Station 9	\$ 800,000	\$ 300,000	\$ -	\$ -	\$ 1,100,000	2019	\$ 1,121,557
New Station 5	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000	2020	\$ 257,385
Station 1	\$ -	\$ -	\$ -	\$ 1,100,000	\$ 1,100,000	2020	\$ 1,132,493
Station 10	\$ 400,000	\$ 300,000	\$ -	\$ -	\$ 700,000	2021	\$ 727,705
New Station 4	\$ 400,000	\$ -	\$ 250,000	\$ -	\$ 650,000	2022	\$ 682,315
New Station 3	\$ 400,000	\$ -	\$ -	\$ -	\$ 400,000	2023	\$ 423,981
Station 2	\$ -	\$ -	\$ -	\$ 1,100,000	\$ 1,100,000	2023	\$ 1,165,947
Station 11	\$ 800,000	\$ 300,000	\$ -	\$ -	\$ 1,100,000	2025	\$ 1,188,796
Station 12	\$ 400,000	\$ -	\$ -	\$ -	\$ 400,000	2028	\$ 445,059
Station 13	\$ 800,000	\$ 300,000	\$ -	\$ -	\$ 1,100,000	2031	\$ 1,260,066
Station 14	\$ 800,000	\$ 300,000	\$ -	\$ -	\$ 1,100,000	2034	\$ 1,297,288
Station 15	\$ 800,000	\$ 300,000	\$ 250,000	\$ -	\$ 1,350,000	2037	\$ 1,639,157
					\$ 10,350,000		\$ 11,341,748

Fire Hydrant Extensions

The Etowah Water and Sewer Authority is in the process of executing a program of extending new major water mains and replacing some undersized distribution water mains in various parts of the county. All of these mains will provide increased pressures and flows that will now support fire hydrants. The County has undertaken a cooperative program of funding fire hydrants to be placed as these new mains are installed, thus bringing a considerable increase in firefighting capability to these currently unserved areas. Since these extensions will increase capacity for all properties in the water service areas, thus promoting new growth and development, the expenditures are 100% impact fee eligible.

The 15-year program is detailed on Table 36 as to the number of hydrants to be installed on an annual basis in coordination with the Authority’s scheduled extension and upgrade efforts.

Table 36: Fire Hydrant Extension Program

Year	Number of Hydrants	Cost (2017 \$)	Cost (NPV)
2017	3	\$ 11,895	\$ 11,895
2018	14	\$ 55,510	\$ 57,089
2019	11	\$ 43,615	\$ 46,132
2020	12	\$ 47,580	\$ 51,758
2021	11	\$ 43,615	\$ 48,794
2022	12	\$ 47,580	\$ 54,745
2023	18	\$ 71,370	\$ 84,454
2024	37	\$ 146,705	\$ 178,538
2025	22	\$ 87,230	\$ 109,178
2026	8	\$ 31,720	\$ 40,831
2027	10	\$ 39,650	\$ 52,490
2028		\$ -	\$ -
2029	18	\$ 71,370	\$ 99,936
2030		\$ -	\$ -
2031	12	\$ 47,580	\$ 70,469
2032	21	\$ 83,265	\$ 126,829
Total	209	\$ 828,685	\$ 1,033,137

The 2017 cost shown on the table is the average cost to add an elbow connection and a standard hydrant to a main as it is installed. The Net Present Value is the current cost inflated to each future year using the ENR’s Construction Cost Index (CCI), reduced by the discount rate to 2017 equivalent dollars.

Average Hydrant Cost = \$ 3,965.00

■ Credit Calculation

There is a credit calculation for this public facility category for future SPLOST sales tax contributions from new residents and employees. As indicated previously, financing through future SPLOST programs is assumed for the non-eligible impact fee project costs for the purpose of credit calculations.

Table 37 shows the anticipated sales tax contribution from new residential and employment growth towards the non-eligible costs for the new Fire/EMS facility components. The ‘Annual Funding Required (NPV)’ column shows the cost (inflated to the appropriate year of expenditure) of the portions of the three stations that are to be replaced—Stations 3, 4 and 5—that are not impact fee eligible (in these cases, the gross cost of three of the four new bays to be constructed).

There are no credits for expenditures for the additional vehicles or the new fire hydrants because these system improvements are 100% impact fee eligible.

The sales tax information in the 'SPLOST Percentage' column is taken from the Cost Adjustments and Credits chapter. It is the projected percentage of the SPLOST collections each year that is expected to be generated specifically from new growth and development.

The amount of the non-eligible portion of the new Fire/EMS facility components multiplied by the SPLOST percentage for that year produces the figure in the 'Contribution from New Growth' column.

Table 37: New Growth Contribution from SPLOST Taxes

Year	Annual Funding Required (NPV)	SPLOST Percentage	Contribution from New Growth
2018		4.30%	\$ -
2019		8.37%	\$ -
2020	\$ 1,416,031.18	12.22%	\$ 173,081.09
2021		15.88%	\$ -
2022	\$ 1,440,574.18	19.37%	\$ 279,075.71
2023	\$ 1,453,003.74	22.69%	\$ 329,668.55
2024		25.85%	\$ -
2025		28.86%	\$ -
2026		31.72%	\$ -
2027		34.46%	\$ -
2028		37.06%	\$ -
2029		39.53%	\$ -
2030		41.89%	\$ -
2031		44.14%	\$ -
2032		46.28%	\$ -
2033		48.32%	\$ -
2034		50.26%	\$ -
2035		52.12%	\$ -
2036		53.89%	\$ -
2037		55.58%	\$ -
2038		57.19%	\$ -
2039		58.73%	\$ -
2040		60.20%	\$ -
Total New Growth Contribution			\$ 781,825.35

■ Net Impact Cost Calculation

The net impact cost per day-night population is calculated in Table 38.

The total cost figures are reduced by the credit for SPLOST contributions (from Table 37) and to the extent that previously collected Fire Protection impact fees are on hand (from Table 8), to produce a 'net eligible project cost' amount. This figure, divided by the future increase in day-night population, results in a 'net impact cost per person', which will be used to calculate impact fees for all nonresidential land uses.

Table 38: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Fire/EMS Facilities	\$ 11,335,578.00
Eligible Cost of Fire/EMS Vehicles	\$ 11,341,748.26
Eligible Cost of Fire Hydrant Program	\$ 1,033,136.91
minus Credit for SPLOST Contributions	\$ (781,825.35)
minus Impact Fee Fund Balance	\$ (3,237.41)
= Total Net Eligible Emergency Mgt Project Costs	\$ 22,925,400.41
÷ Day/Night Population Increase (2017-2040)	53,138
= Net Impact Cost per Person	\$ 431.43

Note that an administration fee and a fee for preparation of the CIE is added to the net cost figure to produce the gross fee, which is shown on the Maximum Impact Fee Schedule.

A final calculation is necessary in order to fairly distribute the portion of project costs that are attributable to residential growth. Impact fees for residential land uses are assessed not on the basis of family sizes but when building permits are issued. The per-person cost therefore does not apply.

Under the methodology followed here, this is only required in public facility categories that serve both residential and non-residential populations. (Dwelling units alone are already the Level of Service unit of measure for the Library Services and Parks & Recreation categories.)

Table 39: Calculation of Net Housing Unit Fee

Factor	Data
Residential Population Increase (2017-2040)	45,868
÷ Day/Night Population Increase (2017-2040)	53,138
= Residential Increase as % of Total Increase	86.319%
Total Net Eligible Emergency Mgt Project Costs	\$ 22,925,400.41
× % Cost Attributable to New Residential Growth =	\$ 19,788,894.31
÷ New Housing Units in Service Area (2017-2040)	19,675
= Net Impact Cost per Housing Unit	\$ 1,005.79

The portion of project costs that is attributable to new residential growth is calculated based on the percentage of the total day-night population increase that is comprised of new residents. This percentage is then applied to the 'total net eligible project costs' figure to produce a 'cost attributable to new residential growth' figure. Finally, the 'cost attributable to new residential growth' is divided by the number of new housing units projected to 2040 to produce a 'net impact cost per housing unit'.

■ **Impact Fee Schedule—Fire Protection**

The maximum net impact fees that could be charged in Dawson County for the Fire Protection category, based on the calculations carried out in this chapter, are shown on Table 38 and Table 39.

The net impact fees per person and per housing unit are transferred to Table 40.

The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on the following table are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.



Table 40: Maximum Impact Fee Schedule - Fire Protection

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Net Fee per Day/Night Person (Employee):				\$ 431.4314			
Residential (200-299)							
210	Single-Family Detached Housing	n/a	per dwelling	\$ 1,005.79	\$ 30.17	\$ 2.05	\$ 1,038.01
220	Apartment	n/a	per dwelling	\$ 1,005.79	\$ 30.17	\$ 2.05	\$ 1,038.01
230	Residential Condominium/Townhouse	n/a	per dwelling	\$ 1,005.79	\$ 30.17	\$ 2.05	\$ 1,038.01
Port and Terminal (000-099)							
030	Intermodal Truck Terminal	0.001415	per square foot	\$ 0.6104	\$ 0.0183	\$ 0.0012	\$ 0.6299
Industrial/Agricultural (100-199)							
110	General Light Industrial	0.002308	per square foot	\$ 0.9957	\$ 0.0299	\$ 0.0020	\$ 1.0276
120	General Heavy Industrial	0.001829	per square foot	\$ 0.7892	\$ 0.0237	\$ 0.0016	\$ 0.8145
140	Manufacturing	0.001793	per square foot	\$ 0.7737	\$ 0.0232	\$ 0.0016	\$ 0.7985
150	Warehousing	0.000915	per square foot	\$ 0.3948	\$ 0.0118	\$ 0.0008	\$ 0.4074
151	Mini-Warehouse	0.000077	per square foot	\$ 0.0332	\$ 0.0010	\$ 0.0001	\$ 0.0343
152	High-Cube Warehouse	0.000076	per square foot	\$ 0.0327	\$ 0.0010	\$ 0.0001	\$ 0.0338
Lodging (300-399)							
310	Hotel or Conference Motel	0.569735	per room	\$ 245.8016	\$ 7.3740	\$ 0.5018	\$ 253.6774
311	All Suites Hotel	0.500000	per room	\$ 215.7157	\$ 6.4715	\$ 0.4404	\$ 222.6276
320	Motel	0.439500	per room	\$ 189.6143	\$ 5.6884	\$ 0.3871	\$ 195.6898
Recreational (400-499)							
430	Golf Course	0.245614	per acre	\$ 105.9656	\$ 3.1790	\$ 0.2163	\$ 109.3609
437	Bowling Alley	0.001000	per square foot	\$ 0.4314	\$ 0.0129	\$ 0.0009	\$ 0.4452
443	Movie Theater	0.001470	per square foot	\$ 0.6340	\$ 0.0190	\$ 0.0013	\$ 0.6543
460	Arena	3.333000	per acre	\$1,437.9608	\$ 43.1388	\$ 2.9357	\$ 1,484.0353
480	Amusement Park	9.094838	per acre	\$3,923.7984	\$ 117.7140	\$ 8.0107	\$ 4,049.5231
490	Tennis Courts	0.243888	per acre	\$ 105.2209	\$ 3.1566	\$ 0.2148	\$ 108.5923
491	Racquet/Tennis Club	0.000307	per square foot	\$ 0.1324	\$ 0.0040	\$ 0.0003	\$ 0.1367
492	Health/Fitness Center	0.000705	per square foot	\$ 0.3042	\$ 0.0091	\$ 0.0006	\$ 0.3139
495	Recreational Community Center	0.001241	per square foot	\$ 0.5354	\$ 0.0161	\$ 0.0011	\$ 0.5526

Maximum Impact Fee Schedule - Fire Protection continued

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis-tration (3%)	CIE Preparation	Total Impact Fee
<i>Institutional (500-599)</i>							
520	Private Elementary School	0.000982	per square foot	\$ 0.4237	\$ 0.0127	\$ 0.0009	\$ 0.4373
530	Private High School	0.000653	per square foot	\$ 0.2817	\$ 0.0085	\$ 0.0006	\$ 0.2908
560	Church/Place of Worship	0.000347	per square foot	\$ 0.1498	\$ 0.0045	\$ 0.0003	\$ 0.1546
565	Day Care Center	0.002818	per square foot	\$ 1.2156	\$ 0.0365	\$ 0.0025	\$ 1.2546
566	Cemetery	0.081425	per acre	\$ 35.1295	\$ 1.0539	\$ 0.0717	\$ 36.2551
<i>Medical (600-699)</i>							
610	Hospital	0.002938	per square foot	\$ 1.2674	\$ 0.0380	\$ 0.0026	\$ 1.3080
620	Nursing Home	0.002331	per square foot	\$ 1.0058	\$ 0.0302	\$ 0.0021	\$ 1.0381
630	Clinic	0.003926	per square foot	\$ 1.6939	\$ 0.0508	\$ 0.0035	\$ 1.7482
<i>Office (700-799)</i>							
710	General Office Building	0.003322	per square foot	\$ 1.4333	\$ 0.0430	\$ 0.0029	\$ 1.4792
714	Corporate Headquarters Building	0.003425	per square foot	\$ 1.4776	\$ 0.0443	\$ 0.0030	\$ 1.5249
715	Single-Tenant Office Building	0.003149	per square foot	\$ 1.3584	\$ 0.0408	\$ 0.0028	\$ 1.4020
720	Medical-Dental Office Building	0.004055	per square foot	\$ 1.7495	\$ 0.0525	\$ 0.0036	\$ 1.8056
760	Research and Development Center	0.002928	per square foot	\$ 1.2631	\$ 0.0379	\$ 0.0026	\$ 1.3036
770	Business Park	0.003079	per square foot	\$ 1.3285	\$ 0.0399	\$ 0.0027	\$ 1.3711
<i>Retail (800-899)</i>							
812	Building Materials and Lumber Store	0.001406	per square foot	\$ 0.6066	\$ 0.0182	\$ 0.0012	\$ 0.6260
813	Free-Standing Discount Superstore	0.000960	per square foot	\$ 0.4142	\$ 0.0124	\$ 0.0008	\$ 0.4274
814	Variety Store	0.000960	per square foot	\$ 0.4142	\$ 0.0124	\$ 0.0008	\$ 0.4274
815	Free-Standing Discount Store	0.001985	per square foot	\$ 0.8563	\$ 0.0257	\$ 0.0017	\$ 0.8837
816	Hardware/Paint Store	0.000964	per square foot	\$ 0.4159	\$ 0.0125	\$ 0.0008	\$ 0.4292
817	Nursery (Garden Center)	0.003120	per square foot	\$ 1.3459	\$ 0.0404	\$ 0.0027	\$ 1.3890
818	Nursery (Wholesale)	0.001667	per square foot	\$ 0.7191	\$ 0.0216	\$ 0.0015	\$ 0.7422
820	Shopping Center	0.001670	per square foot	\$ 0.7205	\$ 0.0216	\$ 0.0015	\$ 0.7436
823	Factory Outlet Center	0.001670	per square foot	\$ 0.7205	\$ 0.0216	\$ 0.0015	\$ 0.7436
826	Specialty Retail Center	0.001982	per square foot	\$ 0.8551	\$ 0.0257	\$ 0.0017	\$ 0.8825
841	Automobile Sales	0.001528	per square foot	\$ 0.6592	\$ 0.0198	\$ 0.0013	\$ 0.6803

Fire Protection

Maximum Impact Fee Schedule - Fire Protection continued

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis-tration (3%)	CIE Preparation	Total Impact Fee
Retail Continued							
843	Auto Parts Store	0.000960	per square foot	\$ 0.4142	\$ 0.0124	\$ 0.0008	\$ 0.4274
848	Tire Store	0.001280	per square foot	\$ 0.5522	\$ 0.0166	\$ 0.0011	\$ 0.5699
849	Tire Superstore	0.001280	per square foot	\$ 0.5522	\$ 0.0166	\$ 0.0011	\$ 0.5699
850	Supermarket	0.001164	per square foot	\$ 0.5023	\$ 0.0151	\$ 0.0010	\$ 0.5184
851	Convenience Market (Open 24 Hours)	0.001800	per square foot	\$ 0.7766	\$ 0.0233	\$ 0.0016	\$ 0.8015
853	Convenience Market w/Gasoline Pumps	0.001800	per square foot	\$ 0.7766	\$ 0.0233	\$ 0.0016	\$ 0.8015
854	Discount Supermarket	0.002251	per square foot	\$ 0.9713	\$ 0.0291	\$ 0.0020	\$ 1.0024
860	Wholesale Market	0.000820	per square foot	\$ 0.3537	\$ 0.0106	\$ 0.0007	\$ 0.3650
857	Discount Club	0.001298	per square foot	\$ 0.5599	\$ 0.0168	\$ 0.0011	\$ 0.5778
862	Home Improvement Superstore	0.000960	per square foot	\$ 0.4142	\$ 0.0124	\$ 0.0008	\$ 0.4274
863	Electronics Superstore	0.000960	per square foot	\$ 0.4142	\$ 0.0124	\$ 0.0008	\$ 0.4274
876	Apparel Store	0.001670	per square foot	\$ 0.7205	\$ 0.0216	\$ 0.0015	\$ 0.7436
875	Department Store	0.001980	per square foot	\$ 0.8542	\$ 0.0256	\$ 0.0017	\$ 0.8815
880	Pharmacy/Drugstore	0.001670	per square foot	\$ 0.7205	\$ 0.0216	\$ 0.0015	\$ 0.7436
890	Furniture Store	0.000415	per square foot	\$ 0.1791	\$ 0.0054	\$ 0.0004	\$ 0.1849
Services (900-999)							
912	Drive-in Bank	0.004788	per square foot	\$ 2.0658	\$ 0.0620	\$ 0.0042	\$ 2.1320
931	Quality Restaurant	0.007460	per square foot	\$ 3.2185	\$ 0.0966	\$ 0.0066	\$ 3.3217
932	High-Turnover (Sit-Down) Restaurant	0.007460	per square foot	\$ 3.2185	\$ 0.0966	\$ 0.0066	\$ 3.3217
934	Fast-Food Restaurant	0.010900	per square foot	\$ 4.7026	\$ 0.1411	\$ 0.0096	\$ 4.8533
941	Quick Lubrication Vehicle Shop	2.100000	per service bay	\$ 906.0059	\$ 27.1802	\$ 1.8497	\$ 935.0358
944	Gasoline/Service Station	0.160000	per pump	\$ 69.0290	\$ 2.0709	\$ 0.1409	\$ 71.2408
945	Gasoline Station w/Convenience Market	0.000216	per pump	\$ 0.0932	\$ 0.0028	\$ 0.0002	\$ 0.0962
947	Self-Service Car Wash	0.200000	per stall	\$ 86.2863	\$ 2.5886	\$ 0.1762	\$ 89.0511

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual, by the Institute of Transportation Engineers, 9th Edition.
n/a - not applicable. Fee taken from the *Calculation of Housing Unit Fee* table.

Emergency/911

■ Introduction

This chapter combines the services provided by the Emergency Management Agency, a division of the Dawson County Emergency Management Department, and the 911 Emergency Communications Center operated and administered by the Dawson County Sheriff's Office. These two operations, currently located in separate facilities, are anticipated to be located in a new facility. This new Emergency Operations Center/911 Center (referred to in this chapter as the 'EOC/911 Center') is included in the County's 2018 Capital Budget for construction in FY 2021. The emergency operations will continue to be administered by the Emergency Management department, and the 911 communications will continue to be operated under the Sheriff's Office.



■ Service Area

Emergency Management services and 911 communications are provided throughout the county, including within the City of Dawsonville, on an equal-service basis. The entire county, therefore, is considered the service area for practical and impact fee purposes.

■ Level of Service

The Dawson County Emergency Management Agency provides a comprehensive and aggressive all-hazards approach to homeland security and disaster initiatives, mitigation, preparedness, response, recovery and special events, and prepares and maintains the countywide Hazard Mitigation Plan, meeting Federal Emergency Management Agency requirements. The purpose is to protect life and property and to prevent and/or reduce the negative impact of natural and man-made events in Dawson County. In addition to the EMA's readiness to coordinate the appropriate response to severe natural and other disasters in the county, the Agency maintains the County's weather siren system, provides a telephone warning alert system and provides training in basic disaster response skills to citizens and neighborhood representatives.

The Dawson County Sheriff's Office Communication Division operates the E-911 system, which is responsible for receiving and dispatching emergency and non-emergency calls for service. The center dispatches for the Dawson County Sheriff's Office and Dawson County Emergency Services Department, including fire, medical and natural disaster calls. The number of calls has increased every year—to a current average of 436 calls a day handled by two communications officers and a communications supervisor each shift.

The 911 emergency communications operations are currently housed in a 500 square foot space, which it is quickly out-growing. The Emergency Management Agency operates out of the Emergency Management Services Department's administrative space in Fire Station 1, but currently has no separately identifiable floor area dedicated solely to that function.

These two operations are planned to be relocated to a new 4,500 square foot facility—the EOC/911 Center. Table 41 on the next page shows the floor area currently occupied by the 911 Center and the floor area of the planned EOC/911 Center.

Table 41: Current and Planned Inventory of Facilities

Facility	Floor Area (Square Feet)
Existing Dawson County E-911 Center	500
Future Dawson County EOC/911 Center	4,500

Table 42 shows the Level of Service (LOS) calculation for both the current (911) space and the planned new EOC/911 Center.

Table 42: Level of Service Calculation

Facility	Service Population	Level of Service
Current Square Feet	Current Day-Night Population	SF/Day-Night Population
500	35,131	0.0142
Future Square Feet	Future Day-Night Population	SF/Day-Night Population
4,500	88,269	0.0510

■ **Forecasts for Service Area**

Future Demand

As discussed, the County plans to relocate both the 911 emergency communications operation and the Emergency Management Agency operations to a new facility, which will provide new or expanded space for both operations. The new facility will serve the countywide future day-night population at the LOS standard shown on Table 42. This LOS, applied to the increase in the day-night population expected between 2017 and 2040, indicates that new growth’s ‘share’ of the project amounts to 2,709 square feet of the new facility (60.2% of the total; see Table 43). The other 1,791 square feet represents the replacement of the current 500 square foot 911 center (the cost of which is not impact fee eligible) and the increase in service afforded the existing residents and businesses in the county through expansion of the 911 operations area and the creation of the Emergency Management Agency operations center within the new facility.

Table 43: Future Demand Calculation

Level of Service	Service Population Growth	New Growth Demand
SF/Day-Night Population	Day-Night Pop Increase (2017-40)	New Square Feet Demanded
0.0510	53,138	2,709
Total Square Feet Proposed =		4,500
Percent for New Growth =		60.2%

Future Cost

The cost of construction for the new EOC/911 Center is estimated (in current dollars) using the per-square-foot average cost for such a building taken from a 2017 costbook published by the nationally recognized BNI Publications and available through Engineering News Record. Table 44 shows the application of this cost (\$200.60) times the planned 4,500 square feet, for a total \$902,700. Since only 60.2% of the cost is impact fee eligible, new growth's share of the total cost, in current (2017) dollars is a little over \$543,400. This amount is inflated to the anticipated construction year of 2021 using the ENR's Building Construction Index (BCI) and reduced to Net Present Value using the Net Discount Rate, to a little over \$562,400.

Table 44: Project Cost to Meet Future Demand

Year	Capital Improvement	Square Feet	Cost*	% for New Growth	New Growth Cost (2017)	Net Present Value
2021	New EOC/911 Center	4,500	\$ 902,700.00	60.20%	\$ 543,425.40	\$ 562,425.62

*Based on an average construction cost of \$200.60 per square foot. Source: *Green Building Square Foot Costbook*, 2017 Edition, BNI Publications, excluding site work.

■ Credit

A credit for future SPLOST sales tax contributions from new residents and employees accrues to this public facility category. As indicated previously, financing through future SPLOST programs is assumed for the non-eligible impact fee project costs.

Table 45 shows the anticipated sales tax contribution from new residential and employment growth towards the non-eligible costs for the new EOC/911 Center. The sales tax information is taken from the Cost Adjustments and Credits chapter. The funding requirement for the EOC/911 Center is the portion of the construction cost that is not impact fee eligible, discussed above.

The 'Annual Funding Required (NPV)' column shows the cost (inflated to the construction year of 2012) of the non-eligible capital improvements. The 'SPLOST percentage' is the percentage of the total countywide day-night population that represents accumulated new growth for each designated year, taken from the Cost Adjustments and Credits chapter.

The amount of the non-eligible portion of the new facility multiplied by the SPLOST percentage for that year produces the figure in the 'Contribution from New Growth' column.

Table 45: New Growth Contribution from SPLOST Taxes

Year	Annual Funding Required (NPV)	SPLOST Percentage	Contribution from New Growth
2018		4.30%	\$ -
2019		8.37%	\$ -
2020		12.22%	\$ -
2021	\$ 371,836.21	15.88%	\$ 59,062.88
2022		19.37%	\$ -
2023		22.69%	\$ -
2024		25.85%	\$ -
2025		28.86%	\$ -
2026		31.72%	\$ -
2027		34.46%	\$ -
2028		37.06%	\$ -
2029		39.53%	\$ -
2030		41.89%	\$ -
2031		44.14%	\$ -
2032		46.28%	\$ -
2033		48.32%	\$ -
2034		50.26%	\$ -
2035		52.12%	\$ -
2036		53.89%	\$ -
2037		55.58%	\$ -
2038		57.19%	\$ -
2039		58.73%	\$ -
2040		60.20%	\$ -
Total New Growth Contribution			\$ 59,062.88

■ Net Impact Cost Calculation

The net impact cost per day-night population is calculated in Table 46. The total cost figure is reduced by the credit for SPLOST contributions (from Table 45), to produce a 'net eligible project cost' amount. (There are no impact fee funds on hand for this public facility category.) This figure, divided by the future increase in day-night population, results in a 'net impact cost per person', which will be used to calculate impact fees for all nonresidential land uses.

Table 46: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Emergency/911 Projects	\$ 562,425.62
minus Credit for SPLOST Contributions	\$ (59,062.88)
minus Impact Fee Fund Balance	\$ -
= Total Net Eligible Emergency/911 Project Costs	\$ 503,362.73
÷ Day/Night Population Increase (2017-2040)	53,138
= Net Impact Cost per Person	\$ 9.47

Note that an administration fee and a fee for preparation of the CIE is added to the net cost figure to produce the gross fee, which is shown on the Maximum Impact Fee Schedule.

A final calculation is necessary in order to fairly distribute the portion of project costs that are attributable to residential growth. Impact fees for residential land uses are assessed not on the basis of family sizes but when building permits are issued. The per-person cost therefore does not apply.

This calculation is shown on Table 47.

The portion of project costs that is attributable to new residential growth is calculated based on the percentage of the total day-night population increase that is comprised of new residents. This percentage is then applied to the 'total net eligible project costs' figure to produce a 'cost attributable to new residential growth' figure. Finally, the 'cost attributable to new residential growth' is divided by the number of new housing units projected to 2040 to produce a 'net impact cost per housing unit'.

Table 47: Calculation of Net Housing Unit Fee

Factor	Data
Residential Population Increase (2017-2040)	45,868
÷ Day/Night Population Increase (2017-2040)	53,138
= Residential Increase as % of Total Increase	86.319%
Total Net Eligible Emergency/911 Project Costs	\$ 503,362.73
× % Cost Attributable to New Residential Growth =	\$ 434,495.88
÷ New Housing Units in Service Area (2017-2040)	19,675
= Net Impact Cost per Housing Unit	\$ 22.08

■ **Impact Fee Schedule—Emergency/911**

The maximum net impact fees that could be charged in Dawson County for the Emergency/911 category, based on the calculations carried out in this chapter, are shown on Table 46 and Table 47. The net impact fees per person and per housing unit are transferred to Table 48: Maximum Impact Fee Schedule - Emergency/911 that follows.

The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on the following table are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.

Table 48: Maximum Impact Fee Schedule - Emergency/911

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis-tration (3%)	CIE Preparation	Total Impact Fee
Net Fee per Day/Night Person (Employee):				\$ 9.4727			
Residential (200-299)							
210	Single-Family Detached Housing	n/a	per dwelling	\$ 22.08	\$ 0.66	\$ 0.05	\$ 22.79
220	Apartment	n/a	per dwelling	\$ 22.08	\$ 0.66	\$ 0.05	\$ 22.79
230	Residential Condominium/Townhouse	n/a	per dwelling	\$ 22.08	\$ 0.66	\$ 0.05	\$ 22.79
Port and Terminal (000-099)							
030	Intermodal Truck Terminal	0.001415	per square foot	\$ 0.0134	\$ 0.0004	\$ -	\$ 0.0138
Industrial/Agricultural (100-199)							
110	General Light Industrial	0.002308	per square foot	\$ 0.0219	\$ 0.0007	\$ -	\$ 0.0226
120	General Heavy Industrial	0.001829	per square foot	\$ 0.0173	\$ 0.0005	\$ -	\$ 0.0178
140	Manufacturing	0.001793	per square foot	\$ 0.0170	\$ 0.0005	\$ -	\$ 0.0175
150	Warehousing	0.000915	per square foot	\$ 0.0087	\$ 0.0003	\$ -	\$ 0.0090
151	Mini-Warehouse	0.000077	per square foot	\$ 0.0007	\$ -	\$ -	\$ 0.0007
152	High-Cube Warehouse	0.000076	per square foot	\$ 0.0007	\$ -	\$ -	\$ 0.0007
Lodging (300-399)							
310	Hotel	0.569735	per room	\$ 5.3970	\$ 0.1619	\$ 0.0110	\$ 5.5699
311	All Suites Hotel	0.500000	per room	\$ 4.7364	\$ 0.1421	\$ 0.0097	\$ 4.8882
320	Motel	0.439500	per room	\$ 4.1633	\$ 0.1249	\$ 0.0085	\$ 4.2967
Recreational (400-499)							
430	Golf Course	0.245614	per acre	\$ 2.3266	\$ 0.0698	\$ 0.0047	\$ 2.4011
437	Bowling Alley	0.001000	per square foot	\$ 0.0095	\$ 0.0003	\$ -	\$ 0.0098
443	Movie Theater	0.001470	per square foot	\$ 0.0139	\$ 0.0004	\$ -	\$ 0.0143
460	Arena	3.333000	per acre	\$ 31.5727	\$ 0.9472	\$ 0.0645	\$ 32.5844
480	Amusement Park	9.094838	per acre	\$ 86.1531	\$ 2.5846	\$ 0.1759	\$ 88.9136
490	Tennis Courts	0.243888	per acre	\$ 2.3103	\$ 0.0693	\$ 0.0047	\$ 2.3843
491	Racquet/Tennis Club	0.000307	per square foot	\$ 0.0029	\$ 0.0001	\$ -	\$ 0.0030
492	Health/Fitness Center	0.000705	per square foot	\$ 0.0067	\$ 0.0002	\$ -	\$ 0.0069
495	Recreational Community Center	0.001241	per square foot	\$ 0.0118	\$ 0.0004	\$ -	\$ 0.0122

Emergency/911

Maximum Impact Fee Schedule - Emergency/911 continued

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
<i>Institutional (500-599)</i>							
520	Private Elementary School	0.000982	per square foot	\$ 0.0093	\$ 0.0003	\$ -	\$ 0.0096
530	Private High School	0.000653	per square foot	\$ 0.0062	\$ 0.0002	\$ -	\$ 0.0064
560	Church/Place of Worship	0.000347	per square foot	\$ 0.0033	\$ 0.0001	\$ -	\$ 0.0034
565	Day Care Center	0.002818	per square foot	\$ 0.0267	\$ 0.0008	\$ 0.0001	\$ 0.0276
566	Cemetery	0.081425	per acre	\$ 0.7713	\$ 0.0231	\$ 0.0016	\$ 0.7960
<i>Medical (600-699)</i>							
610	Hospital	0.002938	per square foot	\$ 0.0278	\$ 0.0008	\$ 0.0001	\$ 0.0287
620	Nursing Home	0.002331	per square foot	\$ 0.0221	\$ 0.0007	\$ -	\$ 0.0228
630	Clinic	0.003926	per square foot	\$ 0.0372	\$ 0.0011	\$ 0.0001	\$ 0.0384
<i>Office (700-799)</i>							
710	General Office Building	0.003322	per square foot	\$ 0.0315	\$ 0.0009	\$ 0.0001	\$ 0.0325
714	Corporate Headquarters Building	0.003425	per square foot	\$ 0.0324	\$ 0.0010	\$ 0.0001	\$ 0.0335
715	Single-Tenant Office Building	0.003149	per square foot	\$ 0.0298	\$ 0.0009	\$ 0.0001	\$ 0.0308
720	Medical-Dental Office Building	0.004055	per square foot	\$ 0.0384	\$ 0.0012	\$ 0.0001	\$ 0.0397
760	Research and Development Center	0.002928	per square foot	\$ 0.0277	\$ 0.0008	\$ 0.0001	\$ 0.0286
770	Business Park	0.003079	per square foot	\$ 0.0292	\$ 0.0009	\$ 0.0001	\$ 0.0302
<i>Retail (800-899)</i>							
812	Building Materials and Lumber Store	0.001406	per square foot	\$ 0.0133	\$ 0.0004	\$ -	\$ 0.0137
813	Free-Standing Discount Superstore	0.000960	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
814	Variety Store	0.000960	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
815	Free-Standing Discount Store	0.001985	per square foot	\$ 0.0188	\$ 0.0006	\$ -	\$ 0.0194
816	Hardware/Paint Store	0.000964	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
817	Nursery (Garden Center)	0.003120	per square foot	\$ 0.0296	\$ 0.0009	\$ 0.0001	\$ 0.0306
818	Nursery (Wholesale)	0.001667	per square foot	\$ 0.0158	\$ 0.0005	\$ -	\$ 0.0163
820	Shopping Center	0.001670	per square foot	\$ 0.0158	\$ 0.0005	\$ -	\$ 0.0163
823	Factory Outlet Center	0.001670	per square foot	\$ 0.0158	\$ 0.0005	\$ -	\$ 0.0163
826	Specialty Retail Center	0.001982	per square foot	\$ 0.0188	\$ 0.0006	\$ -	\$ 0.0194
841	Automobile Sales	0.001528	per square foot	\$ 0.0145	\$ 0.0004	\$ -	\$ 0.0149

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Retail Continued							
843	Auto Parts Store	0.000960	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
848	Tire Store	0.001280	per square foot	\$ 0.0121	\$ 0.0004	\$ -	\$ 0.0125
849	Tire Superstore	0.001280	per square foot	\$ 0.0121	\$ 0.0004	\$ -	\$ 0.0125
850	Supermarket	0.001164	per square foot	\$ 0.0110	\$ 0.0003	\$ -	\$ 0.0113
851	Convenience Market (Open 24 Hours)	0.001800	per square foot	\$ 0.0171	\$ 0.0005	\$ -	\$ 0.0176
853	Convenience Market w/Gasoline Pumps	0.001800	per square foot	\$ 0.0171	\$ 0.0005	\$ -	\$ 0.0176
854	Discount Supermarket	0.002251	per square foot	\$ 0.0213	\$ 0.0006	\$ -	\$ 0.0219
860	Wholesale Market	0.000820	per square foot	\$ 0.0078	\$ 0.0002	\$ -	\$ 0.0080
857	Discount Club	0.001298	per square foot	\$ 0.0123	\$ 0.0004	\$ -	\$ 0.0127
862	Home Improvement Superstore	0.000960	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
863	Electronics Superstore	0.000960	per square foot	\$ 0.0091	\$ 0.0003	\$ -	\$ 0.0094
876	Apparel Store	0.001670	per square foot	\$ 0.0158	\$ 0.0005	\$ -	\$ 0.0163
875	Department Store	0.001980	per square foot	\$ 0.0188	\$ 0.0006	\$ -	\$ 0.0194
880	Pharmacy/Drugstore	0.001670	per square foot	\$ 0.0158	\$ 0.0005	\$ -	\$ 0.0163
890	Furniture Store	0.000415	per square foot	\$ 0.0039	\$ 0.0001	\$ -	\$ 0.0040
Services (900-999)							
912	Drive-in Bank	0.004788	per square foot	\$ 0.0454	\$ 0.0014	\$ 0.0001	\$ 0.0469
931	Quality Restaurant	0.007460	per square foot	\$ 0.0707	\$ 0.0021	\$ 0.0001	\$ 0.0729
932	High-Turnover (Sit-Down) Restauant	0.007460	per square foot	\$ 0.0707	\$ 0.0021	\$ 0.0001	\$ 0.0729
934	Fast-Food Restaurant	0.010900	per square foot	\$ 0.1033	\$ 0.0031	\$ 0.0002	\$ 0.1066
941	Quick Lubrication Vehicle Shop	2.100000	per service bay	\$ 19.8928	\$ 0.5968	\$ 0.0406	\$ 20.5302
944	Gasoline/Service Station	0.160000	per pump	\$ 1.5156	\$ 0.0455	\$ 0.0031	\$ 1.5642
945	Gasoline Station w/Convenience Market	0.000216	per pump	\$ 0.0020	\$ 0.0001	\$ -	\$ 0.0021
947	Self-Service Car Wash	0.200000	per stall	\$ 1.8945	\$ 0.0568	\$ 0.0039	\$ 1.9552

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual, by the Institute of Transportation Engineers, 9th Edition.
n/a - not applicable. Fee taken from the *Calculation of Housing Unit Fee* table.

Maximum Impact Fee Schedule - Emergency/911 continued

Law Enforcement

■ Introduction

The Dawson County Sheriff's Office provides law enforcement services throughout Dawson County, which includes operation of the County detention facilities. The detention facilities and all law enforcement activities are administered from the Law Enforcement Center in Dawsonville; a precinct station is located in a different location than the Law Enforcement Center, but contains no detention facilities.

The Sheriff's Office provides 24-hour countywide land and marine patrol; serves arrest warrants and civil papers issued by the court; detains suspects and those sentenced to the county detention center; transports inmates locally and throughout the state; provides security to the courts and the governmental center, and during county government meetings; investigates crimes; and operates the 911 emergency communications center.

■ Service Area

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



■ Level of Service

For impact fee purposes, this chapter focuses on the Law Enforcement Center and the operations contained within it. The current year (2017) Level of Service is based on the inventory of the number of inmate beds in the facility and the overall floor area of the Law Enforcement Center. Statistics for the facility are shown in Table 49. Note that while the number of beds in the detention center is the LOS unit of measurement for this category, those beds can be converted into gross square feet representing the total square footage per inmate bed in the facility. This would appropriately represent both the floor area devoted to detention cells themselves and the floor area necessary to administer both the detention facility and the Sheriff Office's law enforcement activities in general.

Impact fees are based on increases in capacity to serve new growth and development in the county. Thus, utilization of the detention facility to specifically serve county residents and businesses is related directly to persons that have committed a crime in Dawson County punishable under Coun-

ty laws, and that are held in the jail at east overnight. Other detention activities, such as prisoners awaiting transfer to a State or federal facility, or housed under contract, while a legitimate law enforcement activity, are not occasioned by service directly provided to serve county residents and businesses.

Table 49: Inventory of Sheriff's Facilities

Facility	Square Feet	Beds*
County Sheriff's Headquarters and Jail	68,480	96

* Of the Detention Center's 192 beds, utilization by persons arrested, convicted or serving time for crimes committed in Dawson County is estimated at 50% on an average daily basis.

Current utilization limited to Dawson County growth demands only is estimated at 50% of the beds on an average daily basis. This percentage is applied to the Center's existing 192 beds and shown on Table 49.

As noted, the Level of Service for law enforcement services in Dawson County is measured in terms of beds per day-night population. Day-night population is used as a measure in that the Sheriff's Office provides its services on a 24-hour basis.

Table 50: Level of Service Calculation

Applicable Number of Beds	Current Day/Night Population	Beds per Day-Night Population
96	35,131	0.0027

The current LOS, shown in Table 50 is 0.0027 beds per day-night population, based on the Dawson County utilization of all beds available as discussed above.

■ **Forecasts for Service Area**

Future Demand

Table 51 presents the calculations carried out in order to determine the future service demand for detention facility beds in Dawson County. In this Table the current Level of Service from Table 50 is applied to future growth. The 'Day-Night Population Increase' figure is taken from the Day-Night Population table in the Future Growth appendix attached to this Report. The additional number of forecasted day-night population to the year 2040 is multiplied by the Level of Service to produce the future demand figure.

As discussed above, Dawson County utilization specifically for its residents and businesses leaves 96 beds available for non-county driven purposes. In effect, these beds represent a resource for increases in future county-driven utilization as the number of county residents and employees grows, along with the inevitable increase in crimes perpetrated within the county. While new growth will generate a total need for 145 beds to serve the needs of growth and development in Dawson County, the 'residual' 96 beds currently available for non-county use today are available to meet county-driven needs in the future. Thus space for a net of only 49 new beds will be required to meet needs by 2040. Utilization for non-county driven purposes are, of course, legitimate law

Law Enforcement

enforcement activities, and would generate a future need for a greater capacity than for county-only new growth demands. Regardless of the ultimate size of a future expansion of detention facility capacity, only the cost for the 49 beds for new growth would be impact fee eligible.

Table 51: Future Demand Calculation

Beds per Day-Night Population	Day-Night Pop Increase (2017-40)	New Beds Needed
0.0027	53,138	145
Less: Residual capacity in existing facility		(96)
Net new beds needed		49

A single future project is contemplated to meet future demand.

Table 52: Future Jail Expansion Projects

Year	Day-Night Pop Increase	Future Projects	Beds Added
2017	0		
2018	2,460		
2019	4,919		
2020	7,380		
2021	9,070		
2022	10,760		
2023	12,450		
2024	14,140		
2025	15,830		
2026	17,541		
2027	19,252		
2028	20,963		
2029	22,674		
2030	24,385	Expansion	49
2031	26,054		
2032	27,723		
2033	29,392		
2034	31,061		
2035	32,730		
2036	34,239		
2037	35,747		
2038	37,256		
2039	38,764		
2040	40,273		
		Total	49

A single future project is contemplated to meet future demand. Table 52 presents the future number of beds that will be needed to adequately serve future county-only growth, and 'schedules' the proposed facility expansion project at a point about midway in day-night population growth between now and the projection horizon (2040).

As noted above, a larger expansion of the Law Enforcement Center (or a stand-alone facility) would be justified and probable to cover all functions of the Sheriff's Office. However, whatever final form and size the new project takes, only the portion of the cost of the facility accommodating a total of 49 new beds could be funded with impact fees.

Future Costs

The future cost to provide the number of new beds demanded by new county growth by 2040 are shown in Table 53. As discussed above, a ‘bed’ can be expressed in terms of gross square feet in a facility based on the average calculated for the existing Law Enforcement Center—the existing floor area of the Center divided by the number of beds produces the gross square footage per inmate bed in the facility, including both the floor area devoted to detention cells themselves and the floor area necessary to administer both the detention facility and the Sheriff Office’s law enforcement activities in general.

The current total square feet of floor area in the Law Enforcement Center per inmate bed comes to 357 gross square feet per bed. This number, multiplied by the number of beds needed in the future indicates that 17,477 square feet of new floor area will be needed to meet detention and administrative activities of the Sheriff’s Office related directly to Dawson County growth and development.

The cost of construction the new law enforcement facility is estimated (in current dollars) using the per-square-foot average cost for construction of the current Law Enforcement Center which, in 2007, was \$19,433,679 (\$290.63 per square foot). Raised to 2017 dollars to account for inflation, the cost today would be \$387.82 per square foot. Table 53 shows the application of this 2017 cost times the needed 17,477 square feet, for a total of almost \$6.8 million. Since 100% of the cost is impact fee eligible, new growth’s share of the total cost, in current (2017) dollars is the same. This amount is inflated to the anticipated construction year of 2030 using the ENR’s Building Construction Index (BCI) and reduced to Net Present Value using the Net Discount Rate, to a little over \$8.03 million.

Table 53: Facility Costs to Meet Future Demand

Year	Capital Improvement	Square Feet	Cost*	% for New Growth	New Growth Cost (2017)	Net Present Value
2030	Expansion	17,477	\$ 6,777,933	100.00%	\$ 6,777,933	\$ 8,034,163

* Based on actual construction cost of County Detention Center at \$290.63 per square foot in 2007, at a NPV of \$387.82 in 2017 dollars.

■ Credit Calculation

Because the facilities projected for this public facility category are 100% impact fee eligible, there are no non-eligible costs that new growth would contribute to, and therefore no credit to off-set those contributions.

■ Net Impact Cost Calculation

In order to calculate the net impact cost per day-night population, the total project cost figure is reduced by the previously collected Law Enforcement impact fees that are on hand (from Table 8). Since there is no SPLOST contribution credit, this produces a ‘net eligible project cost’ amount, which is shown on Table 54. This figure, divided by the 2017-2040 future increase in day-night

population, results in a 'net impact cost per person', which will be used to calculate impact fees for all nonresidential land uses.

Table 54: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Law Enforcement Project	\$ 8,034,162.63
minus Credit for SPLOST Contributions	\$ -
minus Impact Fee Fund Balance	\$ (45,715.05)
= Total Net Eligible Law Enforcement Project Cost	\$ 7,988,447.58
÷ Day/Night Population Increase (2017-2040)	53,138
= Net Impact Cost per Person	\$ 150.33

Note that an administration fee and a fee for preparation of the CIE is added to the net cost figure to produce the gross fee, which is shown on the Maximum Impact Fee Schedule.

Residential land uses are assessed impact fees on a 'per housing unit' basis rather than a 'per person' basis. A calculation is therefore necessary in order to fairly distribute the portion of project costs that are attributable to residential growth, This is accomplished as shown on Table 55.

The portion of the project cost that is attributable to new residential growth is calculated based on the percentage of the total day-night population increase that is comprised of new residents. This percentage is then applied to the 'total net eligible project cost' figure to produce a 'cost attributable to new residential growth' figure. Finally, the 'cost attributable to new residential growth' is divided by the number of new housing units projected to 2040 to produce a 'net impact cost per housing unit'.

Table 55: Calculation of Net Housing Unit Fee

Factor	Data
Residential Population Increase (2017-2040)	45,868
÷ Day/Night Population Increase (2017-2040)	53,138
= Residential Increase as % of Total Increase	86.319%
Total Net Eligible Law Enforcement Project Cost	\$ 7,988,447.58
× % Cost Attributable to New Residential Growth =	\$ 6,895,519.47
÷ New Housing Units in Service Area (2017-2040)	19,675
= Net Impact Cost per Housing Unit	\$ 350.47

■ **Impact Fee Schedule—Law Enforcement**

The maximum net impact fees that could be charged in Dawson County for the Law Enforcement category, based on the calculations carried out in this chapter, are shown on Table 54 and Table 55.

The net impact fees per person and per housing unit are transferred to Table 56: Maximum Impact Fee Schedule - Law Enforcement .

The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on the following table are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.



Law Enforcement

Table 56: Maximum Impact Fee Schedule - Law Enforcement

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis-tration (3%)	CIE Preparation	Total Impact Fee
Net Fee per Day/Night Person (Employee):				\$ 150.3340			
Residential (200-299)							
210	Single-Family Detached Housing	n/a	per dwelling	\$ 350.47	\$ 10.51	\$ 0.72	\$ 361.70
220	Apartment	n/a	per dwelling	\$ 350.47	\$ 10.51	\$ 0.72	\$ 361.70
230	Residential Condominium/Townhouse	n/a	per dwelling	\$ 350.47	\$ 10.51	\$ 0.72	\$ 361.70
Port and Terminal (000-099)							
030	Intermodal Truck Terminal	0.001415	per square foot	\$ 0.2127	\$ 0.0064	\$ 0.0004	\$ 0.2195
Industrial/Agricultural (100-199)							
110	General Light Industrial	0.002308	per square foot	\$ 0.3470	\$ 0.0104	\$ 0.0007	\$ 0.3581
120	General Heavy Industrial	0.001829	per square foot	\$ 0.2750	\$ 0.0083	\$ 0.0006	\$ 0.2839
140	Manufacturing	0.001793	per square foot	\$ 0.2696	\$ 0.0081	\$ 0.0006	\$ 0.2783
150	Warehousing	0.000915	per square foot	\$ 0.1376	\$ 0.0041	\$ 0.0003	\$ 0.1420
151	Mini-Warehouse	0.000077	per square foot	\$ 0.0116	\$ 0.0003	\$ -	\$ 0.0119
152	High-Cube Warehouse	0.000076	per square foot	\$ 0.0114	\$ 0.0003	\$ -	\$ 0.0117
Lodging (300-399)							
310	Hotel	0.569735	per room	\$ 85.6505	\$ 2.5695	\$ 0.1749	\$ 88.3949
311	All Suites Hotel	0.500000	per room	\$ 75.1670	\$ 2.2550	\$ 0.1535	\$ 77.5755
320	Motel	0.439500	per room	\$ 66.0718	\$ 1.9822	\$ 0.1349	\$ 68.1889
Recreational (400-499)							
430	Golf Course	0.245614	per acre	\$ 36.9241	\$ 1.1077	\$ 0.0754	\$ 38.1072
437	Bowling Alley	0.001000	per square foot	\$ 0.1503	\$ 0.0045	\$ 0.0003	\$ 0.1551
443	Movie Theater	0.001470	per square foot	\$ 0.2209	\$ 0.0066	\$ 0.0005	\$ 0.2280
460	Arena	3.333000	per acre	\$ 501.0632	\$ 15.0319	\$ 1.0230	\$ 517.1181
480	Amusement Park	9.094838	per acre	\$ 1,367.2633	\$ 41.0179	\$ 2.7913	\$ 1,411.0725
490	Tennis Courts	0.243888	per acre	\$ 36.6646	\$ 1.0999	\$ 0.0749	\$ 37.8394
491	Racquet/Tennis Club	0.000307	per square foot	\$ 0.0461	\$ 0.0014	\$ 0.0001	\$ 0.0476
492	Health/Fitness Center	0.000705	per square foot	\$ 0.1060	\$ 0.0032	\$ 0.0002	\$ 0.1094
495	Recreational Community Center	0.001241	per square foot	\$ 0.1866	\$ 0.0056	\$ 0.0004	\$ 0.1926

Maximum Impact Fee Schedule - Law Enforcement continued

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis-tration (3%)	CIE Preparation	Total Impact Fee
<i>Institutional (500-599)</i>							
520	Private Elementary School	0.000982	per square foot	\$ 0.1477	\$ 0.0044	\$ 0.0003	\$ 0.1524
530	Private High School	0.000653	per square foot	\$ 0.0982	\$ 0.0029	\$ 0.0002	\$ 0.1013
560	Church/Place of Worship	0.000347	per square foot	\$ 0.0522	\$ 0.0016	\$ 0.0001	\$ 0.0539
565	Day Care Center	0.002818	per square foot	\$ 0.4236	\$ 0.0127	\$ 0.0009	\$ 0.4372
566	Cemetery	0.081425	per acre	\$ 12.2410	\$ 0.3672	\$ 0.0250	\$ 12.6332
<i>Medical (600-699)</i>							
610	Hospital	0.002938	per square foot	\$ 0.4416	\$ 0.0132	\$ 0.0009	\$ 0.4557
620	Nursing Home	0.002331	per square foot	\$ 0.3505	\$ 0.0105	\$ 0.0007	\$ 0.3617
630	Clinic	0.003926	per square foot	\$ 0.5903	\$ 0.0177	\$ 0.0012	\$ 0.6092
<i>Office (700-799)</i>							
710	General Office Building	0.003322	per square foot	\$ 0.4995	\$ 0.0150	\$ 0.0010	\$ 0.5155
714	Corporate Headquarters Building	0.003425	per square foot	\$ 0.5149	\$ 0.0154	\$ 0.0011	\$ 0.5314
715	Single-Tenant Office Building	0.003149	per square foot	\$ 0.4733	\$ 0.0142	\$ 0.0010	\$ 0.4885
720	Medical-Dental Office Building	0.004055	per square foot	\$ 0.6096	\$ 0.0183	\$ 0.0012	\$ 0.6291
760	Research and Development Center	0.002928	per square foot	\$ 0.4401	\$ 0.0132	\$ 0.0009	\$ 0.4542
770	Business Park	0.003079	per square foot	\$ 0.4629	\$ 0.0139	\$ 0.0009	\$ 0.4777
<i>Retail (800-899)</i>							
812	Building Materials and Lumber Store	0.001406	per square foot	\$ 0.2114	\$ 0.0063	\$ 0.0004	\$ 0.2181
813	Free-Standing Discount Superstore	0.000960	per square foot	\$ 0.1443	\$ 0.0043	\$ 0.0003	\$ 0.1489
814	Variety Store	0.000960	per square foot	\$ 0.1443	\$ 0.0043	\$ 0.0003	\$ 0.1489
815	Free-Standing Discount Store	0.001985	per square foot	\$ 0.2984	\$ 0.0090	\$ 0.0006	\$ 0.3080
816	Hardware/Paint Store	0.000964	per square foot	\$ 0.1449	\$ 0.0043	\$ 0.0003	\$ 0.1495
817	Nursery (Garden Center)	0.003120	per square foot	\$ 0.4690	\$ 0.0141	\$ 0.0010	\$ 0.4841
818	Nursery (Wholesale)	0.001667	per square foot	\$ 0.2506	\$ 0.0075	\$ 0.0005	\$ 0.2586
820	Shopping Center	0.001670	per square foot	\$ 0.2511	\$ 0.0075	\$ 0.0005	\$ 0.2591
823	Factory Outlet Center	0.001670	per square foot	\$ 0.2511	\$ 0.0075	\$ 0.0005	\$ 0.2591
826	Specialty Retail Center	0.001982	per square foot	\$ 0.2980	\$ 0.0089	\$ 0.0006	\$ 0.3075
841	Automobile Sales	0.001528	per square foot	\$ 0.2297	\$ 0.0069	\$ 0.0005	\$ 0.2371

Maximum Impact Fee Schedule - Law Enforcement continued

Law Enforcement

ITE Code	Land Use	Employees	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Retail Continued							
843	Auto Parts Store	0.000960	per square foot	\$ 0.1443	\$ 0.0043	\$ 0.0003	\$ 0.1489
848	Tire Store	0.001280	per square foot	\$ 0.1924	\$ 0.0058	\$ 0.0004	\$ 0.1986
849	Tire Superstore	0.001280	per square foot	\$ 0.1924	\$ 0.0058	\$ 0.0004	\$ 0.1986
850	Supermarket	0.001164	per square foot	\$ 0.1750	\$ 0.0053	\$ 0.0004	\$ 0.1807
851	Convenience Market (Open 24 Hours)	0.001800	per square foot	\$ 0.2706	\$ 0.0081	\$ 0.0006	\$ 0.2793
853	Convenience Market w/Gasoline Pumps	0.001800	per square foot	\$ 0.2706	\$ 0.0081	\$ 0.0006	\$ 0.2793
854	Discount Supermarket	0.002251	per square foot	\$ 0.3384	\$ 0.0102	\$ 0.0007	\$ 0.3493
860	Wholesale Market	0.000820	per square foot	\$ 0.1232	\$ 0.0037	\$ 0.0003	\$ 0.1272
857	Discount Club	0.001298	per square foot	\$ 0.1951	\$ 0.0059	\$ 0.0004	\$ 0.2014
862	Home Improvement Superstore	0.000960	per square foot	\$ 0.1443	\$ 0.0043	\$ 0.0003	\$ 0.1489
863	Electronics Superstore	0.000960	per square foot	\$ 0.1443	\$ 0.0043	\$ 0.0003	\$ 0.1489
876	Apparel Store	0.001670	per square foot	\$ 0.2511	\$ 0.0075	\$ 0.0005	\$ 0.2591
875	Department Store	0.001980	per square foot	\$ 0.2977	\$ 0.0089	\$ 0.0006	\$ 0.3072
880	Pharmacy/Drugstore	0.001670	per square foot	\$ 0.2511	\$ 0.0075	\$ 0.0005	\$ 0.2591
890	Furniture Store	0.000415	per square foot	\$ 0.0624	\$ 0.0019	\$ 0.0001	\$ 0.0644
Services (900-999)							
912	Drive-in Bank	0.004788	per square foot	\$ 0.7198	\$ 0.0216	\$ 0.0015	\$ 0.7429
931	Quality Restaurant	0.007460	per square foot	\$ 1.1215	\$ 0.0336	\$ 0.0023	\$ 1.1574
932	High-Turnover (Sit-Down) Restauant	0.007460	per square foot	\$ 1.1215	\$ 0.0336	\$ 0.0023	\$ 1.1574
934	Fast-Food Restaurant	0.010900	per square foot	\$ 1.6386	\$ 0.0492	\$ 0.0033	\$ 1.6911
941	Quick Lubrication Vehicle Shop	2.100000	per service bay	\$ 315.7014	\$ 9.4710	\$ 0.6445	\$ 325.8169
944	Gasoline/Service Station	0.160000	per pump	\$ 24.0534	\$ 0.7216	\$ 0.0491	\$ 24.8241
945	Gasoline Station w/Convenience Market	0.000216	per pump	\$ 0.0325	\$ 0.0010	\$ 0.0001	\$ 0.0336
947	Self-Service Car Wash	0.200000	per stall	\$ 30.0668	\$ 0.9020	\$ 0.0614	\$ 31.0302

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual, by the Institute of Transportation Engineers, 9th Edition.
n/a - not applicable. Fee taken from the *Calculation of Housing Unit Fee* table.

Road Improvements

■ Introduction

The information in this chapter is derived from road project information reflecting currently ongoing and proposed road projects.

■ 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 access to all properties within the county as part of the countywide network of principal streets and thoroughfares. All new development within the county will be served by this countywide network, such that improvements to any part of this network to relieve congestion or to otherwise improve capacity will positively affect capacity and reduce congestion throughout the county.

■ Level of Service Standards

Level of Service (LOS) 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.

■ Level of Service

The County has set its Level of Service for road improvements at LOS 'D', a level to which it will strive ultimately. However, interim road improvement projects that do not result in a LOS of 'D' will still provide traffic relief to current and future traffic alike, and are thus eligible for impact fee funding.

All road improvement projects benefit existing and future traffic proportionally to the extent that relief from over-capacity conditions eases traffic problems for everyone. For example, since new

Road Improvements

growth by 2040 will represent a certain portion of all 2040 traffic, new growth would be responsible for that portions' cost of the road improvements.

It is noted that the cost-impact of non-Dawson County generated traffic on the roads traversing the county (cross commutes) is off-set by state and federal assistance. The net cost of the road projects that accrues to Dawson County reasonably represents (i.e., is 'roughly proportional' to) the impact on the roads by Dawson County residents and businesses.

The basis for the road impact fee would therefore be Dawson County's cost for the improvements divided by all traffic in 2040 (existing today plus new growth)—i.e., the cost per trip—times the traffic generated by new growth alone. For an individual land use, the cost per trip (above) would be applied to the number of trips that will be generated by the new development when a building permit is issued, assuring that new growth would only pay its 'fair share' of the road improvements that serve it.

■ Forecasts for Service Area

Projects that provide road capacity that will serve new growth have been identified by the County and are shown on Table 57. This is not a list of all County road projects. These projects were selected for inclusion in the County's impact fee program because the specific improvements proposed will increase traffic capacity and reduce congestion to some extent, whether through road widening, improved intersection operations or upgraded signalization. In addition, the new fleet building will support the road construction projects and other operations of the Public Works Department.

Table 57: Road Projects and Estimated Costs

Project Description	Total County Cost*	Year of Completion	Net Present Value**
Dawson Forest Road	\$ 2,200,000.00	2016	\$ 2,139,139.00
Tanner Road	\$ 800,000.00	2017	\$ 800,000.00
Kelly Bridge Road	\$ 2,200,000.00	2017	\$ 2,200,000.00
Steve Tate Highway	\$ 1,270,000.00	2017	\$ 1,270,000.00
Public Works Fleet Building (New)	\$ 2,500,000.00	2018	\$ 2,571,127.92
Lumpkin Campground Road	\$ 4,000,000.00	2019	\$ 4,230,847.21
Red Rider Road	\$ 1,200,000.00	2019	\$ 1,269,254.16
Sweetwater Juno Road	\$ 1,300,000.00	2019	\$ 1,375,025.34
Couch Road	\$ 3,500,000.00	2020	\$ 3,807,317.28
Grant Road East	\$ 800,000.00	2020	\$ 870,243.95
Shoal Creek - Shoal Creek Road Bridge	\$ 2,500,000.00	2020	\$ 2,719,512.35
Amicalola River - Goshen Church Bridge	\$ 1,500,000.00	2021	\$ 1,678,131.39
Whitmire Drive West	\$ 800,000.00	2021	\$ 895,003.41
Total	\$ 23,770,000.00		\$ 24,930,598.61

* Total cost of project less grants or other non-County assistance.

** Net Present Value = current cost inflated to target year using the ENR Construction Cost Index, (CCI) reduced to NPV using the Discount Rate.

The cost figures shown in the 'Total County Cost' column of Table 57 are the current project cost figures. These figures are then calculated in Net Present Value (as discussed in the Cost Adjustments and Credits chapter) and shown in the last column, based on the year of project expenditure.

Eligible Costs

As discussed thoroughly in the *Trip Generation* section of the Appendix, new residential and non-residential growth and development will represent 53.03% of the traffic on Dawson County's road network in 2040. To that extent, new growth's fair share of the road project costs that are attributed to new growth are shown on the following table.

Table 58: Eligible Cost Calculations

Project*	Net Present Value	% Impact Fee Eligible**	New Growth Cost (NPV)
<i>Dawson Forest Road</i>	\$ 2,139,139.00	53.03%	\$ 1,134,467.98
<i>Tanner Road</i>	\$ 800,000.00	53.03%	\$ 424,270.88
<i>Kelly Bridge Road</i>	\$ 2,200,000.00	53.03%	\$ 1,166,744.91
<i>Steve Tate Highway</i>	\$ 1,270,000.00	53.03%	\$ 673,530.02
<i>Public Works Fleet Building (New)</i>	\$ 2,571,127.92	53.03%	\$ 1,363,568.37
Lumpkin Campground Road	\$ 4,230,847.21	53.03%	\$ 2,243,781.58
Red Rider Road	\$ 1,269,254.16	53.03%	\$ 673,134.47
Sweetwater Juno Road	\$ 1,375,025.34	53.03%	\$ 729,229.01
Couch Road	\$ 3,807,317.28	53.03%	\$ 2,019,167.31
Grant Road East	\$ 870,243.95	53.03%	\$ 461,523.96
Shoal Creek - Shoal Creek Road Bridge	\$ 2,719,512.35	53.03%	\$ 1,442,262.36
Amicalola River - Goshen Church Bridge	\$ 1,678,131.39	53.03%	\$ 889,977.85
Whitmire Drive West	\$ 895,003.41	53.03%	\$ 474,654.85
Total	\$ 24,930,598.61		\$ 13,221,658.70

* Projects shown in italics are included in the current SPLOST VI program.

** See the *Trip Generation* section in the Appendix. Actual % of trips: 53.0338598%

Credit Calculation

A credit is available for this public facility category for future SPLOST sales tax contributions from new residents and employees in the future. As indicated previously, financing through SPLOST programs is assumed for the non-eligible impact fee project costs.

Table 59 shows the anticipated sales tax contribution from new residential and employment growth towards the non-eligible costs for the road projects. The sales tax information is taken from the Cost Adjustments and Credits chapter. The funding requirement for the road projects is the portion of the construction cost that is not impact fee eligible, discussed above.

The 'Annual Funding Required (NPV)' column shows the cost (inflated to the construction year) of the non-eligible capital improvement costs. These figures include both projects that are included in the current SPLOST VI, as well as other projects that are not yet SPLOST funded.

Road Improvements

The projects that are in the current SPLOST VI program are highlighted in italics on Table 58. The first three years of this six-year program have already passed, and all of the SPLOST taxes have been derived from the current population and businesses so far. In the remaining three years, new growth and development will begin generating SPLOST taxes, for which a credit must be determined. Of the highlighted SPLOST VI projects, it is assumed that one-half of the average annual project costs have been funded during the three of six years that have passed, leaving the last three years to complete the funding of the projects. In Net Present Value, the projects total a little over \$2.1 million, for an average annual total of almost \$702,950. This amount is included in the 'Annual Funding Required' column for the years 2018-2020 on Table 59.

Table 59: New Growth Contribution from SPLOST Taxes

Year	Annual Funding Required (NPV)	SPLOST Percentage	Contribution from New Growth
2018*	\$ 702,947.45	4.30%	\$ 30,254.06
2019*	\$ 3,931,929.11	8.37%	\$ 328,908.57
2020*	\$ 4,177,067.40	12.22%	\$ 510,561.77
2021	\$ 1,208,502.10	15.88%	\$ 191,959.84
2022		19.37%	
2023		22.69%	
2024		25.85%	
2025		28.86%	
2026		31.72%	
2027		34.46%	
2028		37.06%	
2029		39.53%	
2030		41.89%	
2031		44.14%	
2032		46.28%	
2033		48.32%	
2034		50.26%	
2035		52.12%	
2036		53.89%	
2037		55.58%	
2038		57.19%	
2039		58.73%	
2040		60.20%	
Total New Growth Contribution			\$ 1,061,684.25

*Current SPLOST VI projects at 3 of 6 years (50%) financed, divided by 3 (i.e., remaining per year), plus other proposed projects..

In addition, the non-eligible portion of other road projects scheduled to be funded in 2019 and 2020 are added to the SPLOST VI annual amounts described above. It is assumed that these projects, in turn, will also receive funding in future SPLOSTs.

The 'SPLOST percentage' on Table 59 is the percentage of the total countywide day-night population that represents accumulated new growth for each designated year, taken from the Cost Adjustments and Credits chapter. The amount of the non-eligible portion of the new facility multiplied by the SPLOST percentage for that year produces the figures in the 'Contribution from New Growth' column.

■ Net Impact Cost Calculation

The net impact cost per primary trip end is calculated in Table 60.

The total cost figure is reduced by the credit for SPLOST contributions (from Table 59) and by the amount of previously collected Road Improvement impact fees that are on hand (from Table 8), to produce a 'net eligible project cost' amount. This figure, divided by the future increase in primary trip ends generated by new growth and development, results in a 'net impact cost per trip end', which will be used to calculate impact fees for all nonresidential land uses.

Table 60: Net Cost to Serve New Growth

Description	Total
Eligible Cost of Road Projects	\$ 13,221,658.70
minus Credit for Tax Contributions	\$ (1,061,684.25)
minus Impact Fee Fund Balance	\$ (1,215.49)
= Net Eligible Road Project Cost	\$ 12,158,758.96
÷ New Growth Primary Trip Ends*	230,351
= Net Impact Cost per Trip End	\$ 52.7837

* Primary trip ends attributed to new growth. See the *Trip Generation* section in the Appendix.

■ Fee Schedule

The maximum net impact fees that could be charged in Dawson County for the Road Improvements category, based on the calculations carried out in this chapter, are shown on Table 60. The net impact fees per trip end are transferred to Table 61: Maximum Impact Fee Schedule - Road Improvements.

The following are added to the net fee to produce the total maximum impact fee:

- An administrative fee (not to exceed 3%); and,
- A share of the cost of preparing the Capital Improvements Element (CIE).

The total impact fees on the following table are transferred to Table 2: Summary Maximum Impact Fee Schedule on page 11 of this report.

Road Improvements

Table 61: Maximum Impact Fee Schedule - Road Improvements

ITE Code	Land Use	Trip Ends*	% New Trips	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Net Cost per Trip End:					\$ 52.7837			
Residential (200-299)								
210	Single-Family Detached Housing	9.52	100%	per dwelling	\$ 502.5007	\$ 15.0750	\$ 2.48	\$ 520.0557
220	Apartment	6.65	100%	per dwelling	\$ 351.0115	\$ 10.5303	\$ 1.73	\$ 363.2718
230	Residential Condominium/Townhouse	5.81	100%	per dwelling	\$ 306.6732	\$ 9.2002	\$ 1.51	\$ 317.3834
Port and Terminal (000-099)								
030	Intermodal Truck Terminal	9.89	92%	per square foot	\$ 0.4803	\$ 0.0144	\$ -	\$ 0.4947
Industrial/Agricultural (100-199)								
110	General Light Industrial	6.97	92%	per square foot	\$ 0.3385	\$ 0.0102	\$ -	\$ 0.3487
120	General Heavy Industrial	1.50	92%	per square foot	\$ 0.0728	\$ 0.0022	\$ -	\$ 0.0750
140	Manufacturing	3.82	92%	per square foot	\$ 0.1855	\$ 0.0056	\$ -	\$ 0.1911
150	Warehousing	3.56	92%	per square foot	\$ 0.1729	\$ 0.0052	\$ -	\$ 0.1781
151	Mini-Warehouse	2.50	92%	per square foot	\$ 0.1214	\$ 0.0036	\$ -	\$ 0.1250
152	High-Cube Warehouse	1.68	92%	per square foot	\$ 0.0816	\$ 0.0024	\$ -	\$ 0.0840
Lodging (300-399)								
310	Hotel or Conference Motel	8.17	100%	per room	\$ 431.2427	\$ 12.9373	\$ 2.13	\$ 446.3100
311	All Suites Hotel	4.90	100%	per room	\$ 258.6401	\$ 7.7592	\$ 1.28	\$ 267.6793
320	Motel	5.63	100%	per room	\$ 297.1722	\$ 8.9152	\$ 1.47	\$ 307.5574
Recreational (400-499)								
430	Golf Course	5.04	85%	per acre	\$ 226.1253	\$ 6.7838	\$ 1.12	\$ 234.0291
437	Bowling Alley	33.33	85%	per square foot	\$ 1.4954	\$ 0.0449	\$ 0.01	\$ 1.5503
443	Movie Theater	78.06	85%	per square foot	\$ 3.5023	\$ 0.1051	\$ 0.02	\$ 3.6274
460	Arena	33.33	85%	per acre	\$1,495.3883	\$ 44.8616	\$ 7.38	\$ 1,547.6299
480	Amusement Park	75.76	85%	per acre	\$3,399.0584	\$ 101.9718	\$ 16.78	\$ 3,517.8102
490	Tennis Courts	16.26	85%	per acre	\$ 729.5233	\$ 21.8857	\$ 3.60	\$ 755.0090
491	Racquet/Tennis Club	14.03	85%	per square foot	\$ 0.6295	\$ 0.0189	\$ -	\$ 0.6484
492	Health/Fitness Center	32.93	85%	per square foot	\$ 1.4774	\$ 0.0443	\$ 0.01	\$ 1.5317
495	Recreational Community Center	33.82	85%	per square foot	\$ 1.5174	\$ 0.0455	\$ 0.01	\$ 1.5729

Maximum Impact Fee Schedule - Road Improvements continued

ITE Code	Land Use	Trip Ends*	% New Trips	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Institutional (500-599)								
520	Private Elementary School	15.43	80%	per square foot	\$ 0.6516	\$ 0.0195	\$ -	\$ 0.6711
530	Private High School	12.89	85%	per square foot	\$ 0.5783	\$ 0.0173	\$ -	\$ 0.5956
560	Church/Place of Worship	9.11	90%	per square foot	\$ 0.4328	\$ 0.0130	\$ -	\$ 0.4458
565	Day Care Center	79.26	10%	per square foot	\$ 0.4184	\$ 0.0126	\$ -	\$ 0.4310
566	Cemetery	4.73	90%	per acre	\$ 224.7002	\$ 6.7410	\$ 1.11	\$ 232.5512
Medical (600-699)								
610	Hospital	13.22	77%	per square foot	\$ 0.5373	\$ 0.0161	\$ -	\$ 0.5534
620	Nursing Home	7.60	75%	per square foot	\$ 0.3009	\$ 0.0090	\$ -	\$ 0.3099
630	Clinic	31.45	77%	per square foot	\$ 1.2782	\$ 0.0383	\$ 0.01	\$ 1.3265
Office (700-799)								
710	General Office Building	11.03	92%	per square foot	\$ 0.5356	\$ 0.0161	\$ -	\$ 0.5517
714	Corporate Headquarters Building	7.98	92%	per square foot	\$ 0.3875	\$ 0.0116	\$ -	\$ 0.3991
715	Single-Tenant Office Building	11.65	92%	per square foot	\$ 0.5657	\$ 0.0170	\$ -	\$ 0.5827
720	Medical-Dental Office Building	36.13	92%	per square foot	\$ 1.7545	\$ 0.0526	\$ 0.01	\$ 1.8171
760	Research and Development Center	8.11	92%	per square foot	\$ 0.3938	\$ 0.0118	\$ -	\$ 0.4056
770	Business Park	12.44	92%	per square foot	\$ 0.6041	\$ 0.0181	\$ -	\$ 0.6222
Retail (800-899)								
812	Building Materials and Lumber Store	45.16	81%	per square foot	\$ 1.9308	\$ 0.0579	\$ 0.01	\$ 1.9987
813	Free-Standing Discount Superstore	50.75	75%	per square foot	\$ 2.0091	\$ 0.0603	\$ 0.01	\$ 2.0794
814	Variety Store	64.03	49%	per square foot	\$ 1.6561	\$ 0.0497	\$ 0.01	\$ 1.7158
815	Free-Standing Discount Store	57.24	61%	per square foot	\$ 1.8430	\$ 0.0553	\$ 0.01	\$ 1.9083
816	Hardware/Paint Store	51.29	40%	per square foot	\$ 1.0829	\$ 0.0325	\$ 0.01	\$ 1.1254
817	Nursery (Garden Center)	68.10	81%	per square foot	\$ 2.9116	\$ 0.0873	\$ 0.01	\$ 3.0089
818	Nursery (Wholesale)	39.00	81%	per square foot	\$ 1.6674	\$ 0.0500	\$ 0.01	\$ 1.7274
820	Shopping Center	42.94	75%	per square foot	\$ 1.6999	\$ 0.0510	\$ 0.01	\$ 1.7609
823	Factory Outlet Center	26.59	81%	per square foot	\$ 1.1368	\$ 0.0341	\$ 0.01	\$ 1.1809
826	Specialty Retail Center	44.32	81%	per square foot	\$ 1.8949	\$ 0.0568	\$ 0.01	\$ 1.9617
841	Automobile Sales	32.30	79%	per square foot	\$ 1.3469	\$ 0.0404	\$ 0.01	\$ 1.3973

Road Improvements

Maximum Impact Fee Schedule - Road Improvements continued

ITE Code	Land Use	Trip Ends*	% New Trips	Unit of Measure	Net Fee per Unit	Adminis- tration (3%)	CIE Preparation	Total Impact Fee
Retail Continued								
843	Auto Parts Store	61.91	44%	per square foot	\$ 1.4378	\$ 0.0431	\$ 0.01	\$ 1.4909
848	Tire Store	24.87	67%	per square foot	\$ 0.8795	\$ 0.0264	\$ -	\$ 0.9059
849	Tire Superstore	20.36	83%	per square foot	\$ 0.8920	\$ 0.0268	\$ -	\$ 0.9188
850	Supermarket	102.24	43%	per square foot	\$ 2.3205	\$ 0.0696	\$ 0.01	\$ 2.4001
851	Convenience Market (Open 24 Hours)	737.99	20%	per square foot	\$ 7.7908	\$ 0.2337	\$ 0.04	\$ 8.0645
853	Convenience Market w/Gasoline Pumps	845.60	16%	per square foot	\$ 7.1414	\$ 0.2142	\$ 0.04	\$ 7.3956
854	Discount Supermarket	90.86	52%	per square foot	\$ 2.4939	\$ 0.0748	\$ 0.01	\$ 2.5787
860	Wholesale Market	6.73	61%	per square foot	\$ 0.2167	\$ 0.0065	\$ -	\$ 0.2232
857	Discount Club	41.80	61%	per square foot	\$ 1.3459	\$ 0.0404	\$ 0.01	\$ 1.3963
862	Home Improvement Superstore	29.80	32%	per square foot	\$ 0.5033	\$ 0.0151	\$ -	\$ 0.5184
863	Electronics Superstore	45.04	27%	per square foot	\$ 0.6419	\$ 0.0193	\$ -	\$ 0.6612
876	Apparel Store	66.40	49%	per square foot	\$ 1.7174	\$ 0.0515	\$ 0.01	\$ 1.7789
875	Department Store	22.88	49%	per square foot	\$ 0.5918	\$ 0.0178	\$ -	\$ 0.6096
880	Pharmacy/Drugstore	90.06	40%	per square foot	\$ 1.9015	\$ 0.0570	\$ 0.01	\$ 1.9685
890	Furniture Store	5.06	20%	per square foot	\$ 0.0534	\$ 0.0016	\$ -	\$ 0.0550
Services (900-999)								
912	Drive-in Bank	148.15	22%	per square foot	\$ 1.7204	\$ 0.0516	\$ 0.01	\$ 1.7820
931	Quality Restaurant	89.95	38%	per square foot	\$ 1.8042	\$ 0.0541	\$ 0.01	\$ 1.8683
932	High-Turnover (Sit-Down) Restauant	127.15	38%	per square foot	\$ 2.5503	\$ 0.0765	\$ 0.01	\$ 2.6368
934	Fast-Food Restaurant	496.12	27%	per square foot	\$ 7.0705	\$ 0.2121	\$ 0.03	\$ 7.3126
941	Quick Lubrication Vehicle Shop	40.00	83%	per service bay	\$1,752.4184	\$ 52.5726	\$ 8.65	\$ 1,813.6410
944	Gasoline/Service Station	168.56	20%	per pump	\$1,779.4437	\$ 53.3833	\$ 8.78	\$ 1,841.6070
945	Gasoline Station w/Convenience Market	162.78	14%	per pump	\$1,202.8980	\$ 36.0869	\$ 5.94	\$ 1,244.9249
947	Self-Service Car Wash	108.00	40%	per stall	\$2,280.2553	\$ 68.4077	\$ 11.26	\$ 2,359.9230

*Trip Ends are total trip ends per 1,000 square feet of floor area or other unit of measure as noted, per ITE *Trip Generation* manual.

Notes: ITE Code means the land use code assigned in the *Trip Generation* manual published by the Institute of Transportation Engineers, 9th Edition.

n/a - not applicable. Fee taken from the Calculation of Housing Unit Fee table.

"Square foot" means square foot of gross building floor area.

Appendix: Glossary

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

Capital improvement: an improvement with a useful life of 10 years or more, by new construction or other action, which increases the service capacity of a public facility.

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

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

Development impact fee: a payment of money imposed upon development as a condition of development approval to pay for a proportionate share of the cost of system improvements needed to serve new growth and development.

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

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

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

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

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

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

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

(G) Libraries and related facilities.

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

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

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

Project improvements: site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project and are not system improvements. The character of the improvement shall control a determination of whether an improvement is a project improvement or system improvement and the physical location of the improvement on site or off site shall not be considered determinative of whether an improvement is a project improvement or a system improvement. If an improvement or facility provides or will provide more than incidental service or

facilities capacity to persons other than users or occupants of a particular project, the improvement or facility is a system improvement and shall not be considered a project improvement. No improvement or facility included in a plan for public facilities approved by the governing body of the municipality or county shall be considered a project improvement.

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

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

Service area: a geographic area defined by a municipality, county, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area. Service areas in Dawson may be designated on the basis of sound planning or engineering principles or both.

System improvement costs: costs incurred to provide additional public facilities capacity needed to serve new growth and development for planning, design and engineering related thereto, including the cost of constructing or reconstructing system improvements or facility expansions, including but not limited to the construction contract price, surveying and engineering fees, related land acquisition costs (including land purchases, court awards and costs, attorneys' fees, and expert witness fees), and expenses incurred for qualified staff or any qualified engineer, planner, architect, landscape architect, or financial consultant for preparing or updating the capital improvement element, and administrative costs, provided that such administrative costs shall not exceed 3 percent of the total amount of the costs. Projected interest charges and other finance costs may be included if the impact fees are to be used for the payment of principal and interest on bonds, notes, or other financial obligations issued by or on behalf of the municipality or county to finance the capital improvements element but such costs do not include routine and periodic maintenance expenditures, personnel training, and other operating costs.

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

Appendix: Future Growth

In order to accurately calculate the demand for future services for Dawson County, new growth and development must be quantified in future projections. These projections include forecasts for population, households, housing units, and employment to the year 2040. These projections provide the base-line conditions from which the current (2017) Level of Service calculations are produced.

■ Types of Projections

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

- Population data and forecasts are used to establish current and future demand for services where the Level of Service (LOS) standards are per capita based.
- Household data and forecasts are used to forecast future growth in the number of housing units.
- Housing unit data and forecasts relate to certain service demands that are household based, such as parks, and are used to calculate impact costs when the cost is assessed when a building permit is issued. The number of households—defined as *occupied* housing units—is always smaller than the supply of available housing units. Over time, however, each housing unit is expected to become occupied by a household, even though the unit may become vacant during future re-sales or turnovers.
- Employment forecasts are refined to reflect 'value added' employment figures. This reflects an exclusion of jobs considered to be transitory or non-site specific in nature, and thus, not requiring building permits to operate (i.e., are not assessed impact fees).

'Value added' employment data is combined with population data to produce what is known as the 'day-night population.' These figures represent the total number of persons receiving services, both in their homes and in their businesses, to produce an accurate picture of the total number of persons that rely on certain 24-hour services, such as fire protection.

The projections used for each public facility category are specified in each public facility chapter.

■ Population and Housing Unit Forecasts

In 2016, a Dawson County population projection was made for the Etowah Water and Sewer Authority. The projection, and the methodology behind it, was subsequently approved by the Corps of Engineers as part of a proposal to create a drinking water reservoir in the county. At the time the projection was made, the most recent annual population estimate published by the Bureau of the Census was for 2014. Most recently, the Bureau has published a population estimate for Dawson County for 2016. That estimate differed slightly from what the Etowah W&S Authority projection had anticipated for 2016. As a result, the population projection shown on the table below is based on the Etowah W&S projection, adjusted for 2016, but ending in 2040 with the original projection (70,709 people).

The following table presents the forecast for population for each year from 2017 to 2040² and also provides a forecast for housing units over the same period. The figures shown are, in essence, mid-year estimates reflecting Census Bureau practice. In other words, the increase in population between 2017 and 2040 would actually be from July 1, 2017 to July 1, 2040.

Population and Housing Projections

	Total Population	Avg. Household Size	Occupied Housing Units	Occupancy Rate	Total Housing Units
2016	23,604	2.423	9,740	89.4%	10,897
2017	24,841	2.436	10,199	89.4%	11,411
2018	26,133	2.428	10,761	89.4%	12,039
2019	27,481	2.424	11,337	89.4%	12,684
2020	28,887	2.421	11,931	89.4%	13,348
2021	30,351	2.420	12,541	89.4%	14,031
2022	31,875	2.421	13,164	89.4%	14,728
2023	33,460	2.425	13,798	89.4%	15,437
2024	35,106	2.430	14,449	89.4%	16,165
2025	36,815	2.435	15,118	89.4%	16,914
2026	38,587	2.441	15,807	89.4%	17,685
2027	40,425	2.448	16,516	89.4%	18,478
2028	42,328	2.454	17,247	89.4%	19,296
2029	44,298	2.462	17,995	89.4%	20,133
2030	46,337	2.470	18,761	89.4%	20,990
2031	48,444	2.478	19,548	89.4%	21,870
2032	50,622	2.487	20,354	89.4%	22,772
2033	52,871	2.496	21,180	89.4%	23,696
2034	55,193	2.505	22,031	89.4%	24,648
2035	57,588	2.515	22,901	89.4%	25,621
2036	60,058	2.523	23,802	89.4%	26,629
2037	62,604	2.530	24,740	89.4%	27,679
2038	65,227	2.536	25,717	89.4%	28,772
2039	67,929	2.541	26,732	89.4%	29,907
2040	70,709	2.545	27,785	89.4%	31,086
Increase 2017-2040	45,868		17,586		19,675

To estimate the number of housing units each year, the number of occupied housing units is first determined. This is calculated by dividing the population each year by the average household size. For household sizes, estimates published this year by Woods & Poole Economics (a nationally recognized source also accepted by the State) were relied upon.

To find the total number of housing units, vacant units must be added in. This was determined by using an 'occupancy rate' based on the proportion of occupied units to vacant units for the last data point available—the American Community Survey published in 2015 by the Census Bureau. Dividing the number of occupied units by the occupancy rate produces the total number of housing units.

² 2016 is shown on the table for consistency with the Census Bureau's estimate.

■ Employment Forecasts

The table below shows the forecasts for employment growth countywide in Dawson County, from 2017 to 2040. The employment figures for Dawson County are based on forecasts published by Woods & Poole Economics in their latest (2017) *Georgia Profile* for Dawson County. Woods & Poole counts jobs, not just employed people, which captures people holding two or more jobs, self-employed sole proprietors and part-time workers. This gives a more complete picture than Census figures (the number of people with jobs).

In the table below the total employment figures are refined to show what is referred to as 'non-building related' jobs. 'Non-building related' jobs are those that do not normally require issuance of a building permit, and thus would not be assessed an impact fee. Such jobs include any employment that is considered to be transitory in nature, such as those working on construction sites or are strictly land-based such as farming and other agricultural workers.

This is done to better measure the services being provided by the County, which in this report will be measured and, ultimately, assessed based on structures.

Employment Projections

	Total Employment	Non-Building Related*	Government	Private Sector Employment
2016	12,328	1,127	1,202	9,999
2017	12,652	1,144	1,218	10,290
2018	12,974	1,162	1,234	10,578
2019	13,283	1,176	1,250	10,857
2020	13,594	1,192	1,266	11,136
2021	13,903	1,208	1,281	11,414
2022	14,217	1,222	1,298	11,697
2023	14,531	1,237	1,313	11,981
2024	14,850	1,252	1,328	12,270
2025	15,172	1,263	1,342	12,567
2026	15,500	1,275	1,357	12,868
2027	15,832	1,286	1,371	13,175
2028	16,165	1,295	1,385	13,485
2029	16,505	1,305	1,398	13,802
2030	16,845	1,314	1,412	14,119
2031	17,189	1,322	1,425	14,442
2032	17,543	1,330	1,439	14,774
2033	17,895	1,337	1,452	15,106
2034	18,249	1,344	1,464	15,441
2035	18,607	1,350	1,477	15,780
2036	18,974	1,357	1,489	16,128
2037	19,342	1,363	1,501	16,478
2038	19,713	1,370	1,512	16,831
2039	20,095	1,375	1,524	17,196
2040	20,477	1,382	1,535	17,560
Increase 2017-2040	7,825	238	317	7,270

The table also shows the number of workers employed by governmental entities (county, state and federal) as estimated by Woods & Poole for each year. Governments are exempt from impact fees, whether a building is to be constructed or not.

The last column on the table shows what is called 'private sector employment', although it also includes non-profits and institutions. The numbers are derived by subtracting the 'non-building related' workers and the 'government' workers from the total employment figures. Businesses employing these 'private sector' workers are the ones that would be most likely to be assessed an impact fee.

* Includes farm, forestry, mining and construction workers.

Source: 2017 Georgia Profile, Woods & Poole, Economists.

■ Service Area Projections

The entire county is a single service area because all Dawson County services being considered for impact fee funding serve all residents and business in the county, whether in the unincorporated area or within the City of Dawsonville.

As explained in the text of this report, impact fees for the library services and the parks & recreation facilities are paid exclusively by residential uses. Thus, the housing unit count and projections presented earlier form the basis for those impact fee calculations.

For the fire protection and law enforcement categories, the 24-hour service population--called the day-night population—is used for overall Level of Service calculations. Impact fees in these categories are assessed on a per-housing unit basis or on a per-nonresidential square foot basis, depending on the use.

The day-night population calculation is a combination of the population projections and future ('private sector') employment projections discussed earlier in this Appendix. The use of day-night population in impact fee calculations is based upon the clear rational nexus between persons and services demanded on a 24-hour basis.

Day-Night Population

	Total Population	Private Sector Employment	Total Day-Night Population
2016	23,604	9,999	33,603
2017	24,841	10,290	35,131
2018	26,133	10,578	36,711
2019	27,481	10,857	38,338
2020	28,887	11,136	40,023
2021	30,351	11,414	41,765
2022	31,875	11,697	43,572
2023	33,460	11,981	45,441
2024	35,106	12,270	47,376
2025	36,815	12,567	49,382
2026	38,587	12,868	51,455
2027	40,425	13,175	53,600
2028	42,328	13,485	55,813
2029	44,298	13,802	58,100
2030	46,337	14,119	60,456
2031	48,444	14,442	62,886
2032	50,622	14,774	65,396
2033	52,871	15,106	67,977
2034	55,193	15,441	70,634
2035	57,588	15,780	73,368
2036	60,058	16,128	76,186
2037	62,604	16,478	79,082
2038	65,227	16,831	82,058
2039	67,929	17,196	85,125
2040	70,709	17,560	88,269
Increase 2017-2040	45,868	7,270	53,138

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

Impact fee calculations for road improvements, on the other hand, are based on the number of vehicle trips generated by homes and businesses onto the county's road system. These trip generation figures are translated into per-housing unit and per-nonresidential floor area fees using the different trip rates specific to each type of land use.

This is discussed more thoroughly in the next Appendix Section.

Appendix: Trip Generation

In order to calculate new growth and development's fair share of the cost of road improvements, it is necessary to establish how much of the future traffic on Dawson County's roads will be generated by new growth, over and above the traffic generated by the county's residents and businesses today. This Appendix Section describes the process through which this determination is made.

■ Summary

A Level of Service must be established for road improvements in order to assure that, ultimately, existing development and new growth are served equally. This Section also presents the process through which new growth and development's 'fair share' of road improvement costs is calculated, and tables summarizing the technical portions of this methodology are included.

Level of Service

The County has set its Level of Service for road improvements at LOS "D", a level below which most roads in the county operate. Using this LOS maximizes roadway capacity before traffic conditions actually break down (LOS "F").

All road improvement projects benefit existing and future traffic proportionally to the extent that relief from over-capacity conditions eases traffic problems for everyone. For example, since new growth by 2040 will represent a certain portion of all 2040 traffic, new growth would be responsible for that portions' cost of the road improvements.

It is noted that the cost-impact of non-Dawson County generated traffic on the roads traversing the county (cross commutes) is off-set by state and federal assistance. The net cost of the road projects that accrues to Dawson County reasonably represents (i.e., is 'roughly proportional' to) the impact on the roads by Dawson County residents driving to and from their homes, and commuters that come in to work in the county.

The basis for the road impact fee would therefore be Dawson County's cost for the improvements divided by all traffic generated within the county in 2040 (existing today plus new growth)—i.e., the cost per trip—times the traffic generated by new growth alone. For an individual land use, when a building permit is issued, the cost per trip would be applied to the number of trips that will be generated by the new development, assuring that new growth would only pay its 'fair share' of the road improvements that serve it.

Approach

This methodology proceeds along the following lines:


- Total traffic currently generated by Dawson County residents and businesses in 2017 on the road system within the county is calculated from trip generation and commuting data. Various data sources are relied upon to determine current conditions, as explained in each appropriate section, below.
- Future Dawson County-generated traffic from new growth in the county is calculated from housing unit and employment forecasts to 2040.
- The portion of total 2040 traffic that is generated by new housing units and employment in the county establishes the percentage of Dawson County's cost of the future road improvements that can be included in an impact fee.

Appendix: Trip Generation

Summary Table

The table below shows how the portion of 2040 traffic generated by new growth is calculated. The figures represent all trips generated by land use, including pass-by and diverted trips.


Average Daily Trip Ends Generated by New Growth

	2017	2040	Increase	Percent New Growth Trip Ends
Residential Trips	106,445	289,980	183,535	
Nonresidential Trips	242,393	413,650	171,257	
Less: Internal Commutes*	(9,080)	(15,496)	(6,416)	
Net New Trip Ends	339,758	688,134	348,376	50.6%

* Residents who work in Dawson County. These trips to and from work are included in the residential trips, above.

The next table, below, calculates the Primary Trip Ends generated by existing and future traffic by deleting pass-by and diverted trips, as discussed below.

Primary Daily Trip Ends Generated by New Growth

	Percent Primary Trip Ends*	Primary Trip Ends			Percent New Growth Primary Trip Ends
		2017	2040	Increase	
Residential Trips	80%	84,725	230,810	146,085	
Commercial	51%	117,129	199,885	82,756	
Industrial+Utility	92%	11,222	19,148	7,926	
Less: Internal Commutes	100%	(9,080)	(15,496)	(6,416)	
Net New Primary Trip Ends		203,996	434,346	230,351	53.0%

* Derived from 'Trip Generation Handbook' chapter, *Trip Generation*, 9th Edition, Institute of Transportation Engineers.

Overall, new residents and businesses located within Dawson County will generate 53% (more accurately, 53.0338598%) of all Dawson County vehicles on its roads. Thus, new growth's 'fair share' of the cost to the County to provide road improvements to serve current and future traffic cannot exceed this figure.

■ Pass-by and Diverted Trips

The impact of new growth and development on Dawson County's road network is the increased traffic added to the system, expressed by transportation engineers as 'trips'. Every 'trip' has two ends—a beginning at its origin and an end at its destination (known as 'trip ends'). There are three types of trips, defined as:

A **Primary Trip** (and its trip ends)—a vehicle travelling from its original beginning to its intended final destination. Driving from one's home to one's place of work is an example of a primary trip.

A **Pass-by Trip**—a vehicle travelling along its usual route from its origin to its final destination that stops off at an intermediate location for any reason. A trip from home to work that stops along the way for gas, dropping off a child at daycare, picking up coffee or dinner, or for any other reason, represents a 'pass-by' trip at the intermediate location.

A **Diverted Trip** (previously called a diverted 'link' trip)—a vehicle that diverts from its normal primary route between its origin to its final destination, and takes a different route to stop off at an intermediate location for any reason. While a pass-by trip remains on its normal route, a diverted trip changes its route to other streets to arrive at the intermediate stop.

New primary trips add vehicles to the road network. Pass-by and diverted trips involve the same vehicles stopping off between their original beginnings and their final destinations, and therefore do not add new vehicles to the road network—the vehicles were already there on their way to their final destinations.

These different types of trips result in different types of 'trip ends'. On a home-to-daycare-to-work trip, for instance, there are two primary trip ends (home and work) and two pass-by or diverted trip ends: arriving at the daycare center and leaving from there to drive to work, for instance. The net impact on the road network, however, is created by the one vehicle and its two primary trip ends.

Impact fee calculations take note of these pass-by and diverted trip ends as not adding to the overall traffic on the road network, and deletes them from the total trip ends reported in ITE's *Trip Generation* manual. While the table above uses overall average percentages of primary trip ends derived from ITE for broad land use categories, the actual percentage for each land use listed on the impact fee schedule for roads is applied to the total trip ends to determine the primary trip ends attributed to that land use.

Although both summary tables above reflect about the same percentage of 2040 traffic that will be generated by new growth, the increase in primary trip ends from the second table will play an important role in calculating the per-trip road impact fee.

■ Residential Trip Generation

Average trip generation rates published by the Institute of Transportation Engineers (ITE) differentiate between ‘single-family detached housing’ and ‘apartments’. The closest correlations with the US Census definitions are ‘single-family units’ and ‘multi-family units’, which are shown on the following table.

Residential Units by Type: 2017 and 2040


	2015*	Percent**	Total in 2017***	Increase 2017-2040	Total in 2040
Single-Family Units	9,837	93.3%	10,649	18,361	29,010
Multi-Family Units	704	6.7%	762	1,314	2,076
Total	10,541	100.0%	11,411	19,675	31,086

- * Based on American Community Survey report (Census Bureau).
- ** Percent of 2015 total housing units.
- *** See Forecasts chapter for housing unit projections.

The 2015 breakdown of housing units by type on the table above are taken from the most recent American Community Survey for Dawson County (published by the Census Bureau). The 2015 percentage by housing type (single-family and multi-family) is calculated, and applied to the total number of housing units projected in 2017 (taken from the Future Growth Appendix of this report). It is assumed that these percentages will persist into the future, producing a breakdown of the projected 9,134 new housing units forecast for the 2017-2040 period.

The next table, below, calculates the amount of traffic that is generated by the county’s housing stock today, and the amount that will be generated in 2040.

Residential Trip Generation: 2017-2040 New Growth Increase

	ADT* Trip Ends	2017 Units	2017 ADT Trip Ends	2040 Units	2040 ADT Trip Ends	Increase 2017-2040	Percent New Growth Trip Ends
Single-Family Units	9.52	10,649	101,378	29,010	276,175	174,797	
Multi-Family Units	6.65	762	5,067	2,076	13,805	8,738	
Total		11,411	106,445	31,086	289,980	183,535	

* Average Daily Traffic (trip ends) on a weekday; Institute of Transportation Engineers *Trip Generation*, 9th Edition. Total includes trips to/from work.

The calculations are made on the basis of ‘average daily traffic’ on a normal weekday, using average trip generation rates derived through multiple traffic studies (350 for single-family and 86 for

apartments) and published by ITE. The rates are expressed for 'trip ends'—that is, traffic both leaving and coming to a housing unit.

Comparing traffic in 2017 to 2040, the future increase in trip ends can be calculated, which will represent 63.3% of all residential trip ends generated in the county.

It should be noted that the traffic generated includes trips to and from work and, more particularly, residents who work at a business within the county.

■ **Nonresidential Trip Generation**

Calculating traffic generated by businesses located in Dawson County is more problematical than residential trips because there is no breakdown of types of businesses in the county that is readily available. In addition, while employment forecasts have been made in terms of the number of jobs, there is no data available for floor areas, much less by detailed type of use.

The alternate is to view nonresidential traffic generation on a broad 'average' basis. For this, there is data available from ITE for a number of individual uses relating to the total number of trips generated per employee. These trips, of course, include not only trips taken by the employees (to/from work, lunch, etc.) but also customers and others that are attracted to the use, serve it or are served by it in some way.

The Average Daily Traffic (ADT) numbers on the following table, therefore, are calculated by dividing all trips to a use—employees, customers, deliveries to or from, etc.—by the number of employees alone. Since there is more data available for the average number of employees per 1,000 square feet of floor area, it enables a determination of the average total trips generated by the use by the same floor area (and thus the number per '1' square foot of floor area for impact fee calculations).

The table on the following page shows the 'trips per employee' per 1,000 square feet of floor area for those uses for which impact fees are commonly collected and for which the data is available.

Overall, the average trip generation rate of all uses shown on the following table is 10.21 trips per employee for 'industrial' uses and 25.31 for all 'commercial' uses. The 'industrial' category includes such uses as manufacturing and assembly, storage and transportation of goods; the 'commercial' category includes all sales and service uses such as stores, offices, motels, banks, amusements and private institutions). The last column shows the average rate for all 'commercial' uses listed, as opposed to the 'industrial' uses shown in the column on its left.

Although the 'overall' averages are useful for projecting total traffic generation, impact fees for particular uses will reflect the actual average trip generation rate for the specific use.

Appendix: Trip Generation

ITE Trips-per-Employee Data

			<u>ADT</u>		<u>Average</u>	<u>Average</u>
	<u>ITE</u>	<u>LAND USE</u>	<u>Trip Ends</u>		<u>by</u>	<u>All</u>
	<u>CODE</u>		<u>per Employee</u>		<u>Category</u>	<u>Commercial</u>
<i>Port and Terminal (000-099)</i>	30	Intermodal Truck Terminal	6.99	}	10.21	25.31
<i>Industrial (100-199)</i>	110	General Light Industrial	3.02			
	120	General Heavy Industrial	0.82			
	140	Manufacturing	2.13			
	150	Warehousing	3.89			
	151	Mini-Warehouse	32.47			
	152	High-Cube Warehouse	22.13			
<i>Lodging (300-399)</i>	310	Hotel or Conference Motel	14.34	}	13.58	
	320	Motel	12.81			
<i>Recreational (400-499)</i>	430	Golf Course	20.52	}	34.79	
	443	Movie Theater	53.12			
	460	Arena	10.00			
	480	Amusement Park	8.33			
	490	Tennis Courts	66.67			
	491	Racquet/Tennis Club	45.71			
	492	Health/Fitness Center	46.71			
	495	Recreational Community Center	27.25			
<i>Institutional (500-599)</i>	520	Private Elementary School	15.71	}	29.58	
	530	Private High School	19.74			
	560	Church/Place of Worship	26.24			
	565	Day Care Center	28.13			
	566	Cemetery	58.09			
<i>Medical (600-699)</i>	610	Hospital	4.50	}	5.26	
	620	Nursing Home	3.26			
	630	Clinic	8.01			
<i>Office (700-799)</i>	710	General Office Building	3.32	}	4.18	
	714	Corporate Headquarters Building	2.33			
	715	Single-Tenant Office Building	3.70			
	720	Medical-Dental Office Building	8.91			
	760	Research and Development Center	2.77			
	770	Business Park	4.04			
<i>Retail (800-899)</i>	812	Building Materials and Lumber Store	32.12	}	32.86	
	814	Variety Store	66.70			
	815	Free-Standing Discount Store	28.84			
	816	Hardware/Paint Store	53.21			
	817	Nursery (Garden Center)	21.83			
	818	Nursery (Wholesale)	23.40			
	826	Specialty Retail Center	22.36			
	841	Automobile Sales	21.14			
	850	Supermarket	87.82			
	854	Discount Supermarket	40.36			
	860	Wholesale Market	8.21			
	861	Discount Club	32.21			
	875	Department Store	11.56			
	890	Furniture Store	12.19			
<i>Services (900-999)</i>	912	Drive-in Bank	30.94			

Source: *Trip Generation*, 9th Edition, Institute of Transportation Engineers, where survey results given for key land uses.

We know from the 2010 Census how many people worked in Dawson County based on commuting patterns. The next table provides a breakdown between commercial and industrial employment in the county and calculates trip ends generated by each.

Tax base valuations give us some clue as to the breakdown. When the County's 'industrial' and 'utility' tax valuations are combined, the figures suggest that a little over 88% of all uses are 'commercial' in nature, while almost 12% are industrial. These percentages, applied to total employment in the county, give us the estimated number of employees in 2010 in each category.

Nonresidential Trip Generation: 2010 Census


	Tax Base		Percent of Total	2010 Employees	Average ADT	Total Nonres Trip Ends	
Commercial	\$ 235,135,994	}	\$ 235,135,994	88.4%	7,049	25.31	178,410
Industrial	\$ 6,269,281		\$ 30,892,635	11.6%	1,581	10.21	16,138
Utility	\$ 24,623,354						
Total Nonresidential	\$ 266,028,629		\$ 266,028,629		7,583		194,548
				Internal Commutes*	3,644	times 2 =	(7,288)
						Net Nonres Trips	187,260

* Residents who work in Dawson County. These trips are included in residential trip generation rate.

The table calculates the total number of trips using the average rates for commercial and industrial from the ITE Trips-per-Employee Data table on the previous page. From the total of all nonresidential trips is deducted the number of trips to/from work generated by county residents, since these trips have already been calculated as part of the residential trip generation rates (i.e., county residents driving to/from work at county establishments).

Lastly, the following table calculates the total number of trip ends that will be generated by new nonresidential growth in future traffic on Dawson County's roads.

Nonresidential Trip Generation: 2017-2040 New Growth Increase

	2017 Employees	2017 Trip Ends	2040 Employees	2040 Trip Ends	2017-2040 Increase	Percent New Growth Trip Ends
Commercial	9,095	230,195	15,521	392,837	162,642	
Industrial+Utility	1,195	12,198	2,039	20,813	8,615	
Total	10,290	242,393	17,560	413,650	171,257	
Less: Internal Commutes at	3.75%	(9,080)		(15,496)	(6,416)	
Net Nonres Trip Ends		233,313		398,154	164,841	

The preceding table shows the number of trip ends currently generated by Dawson County businesses based on 2017 employment. The trip ends by use are distributed using the same percentages calculated on the previous table. The same calculations are made for the year 2040 based on projected employment in the county, and the difference between 2017 and 2040 represents trip ends generated by future growth and development. This totals 41.5% of all nonresidential 2040 trip ends.

The results of the residential and nonresidential trip generation analyses are combined on the Summary table at the beginning of this Appendix Section for an overall calculation of new growth's share of future traffic generated by Dawson County residents and businesses. From these figures, pass-by and diverted trip ends are then deleted to determine primary trip ends, which more closely relates to vehicles on the road and thus contribute to traffic congestion.

■ Terminology

This Methodology uses the term 'average daily traffic' (ADT) for a weekday, which is defined by ITE as the 'average weekday vehicle trip ends', which are "the average 24-hour total of all vehicle trips counted from a study site from Monday through Friday."

Additionally, ITE defines a 'trip or trip end' as "a single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site. For trip generation purposes, the total trip ends for a land use over a given period of time are the total of all trips entering plus all trips exiting a site during a designated time period".

Lastly, ITE defines 'average trip rate' as "the weighted average of the number of vehicle trips or trip ends per unit of independent variable (for example, trip ends per occupied dwelling unit or employee) using a site's driveway(s). The weighted average rate is calculated by dividing the sum of all independent variable units where paired data is available. The weighted average rate is used rather than the average of the individual rates because of the variance within each data set or generating unit. Data sets with a large variance will over-influence the average rate if they are not weighted.

Backup material for agenda item:

3. Presentation of Non-Profit Food Service Permits for Temporary Events- Bill Ringle,
Dawson County Environmental Health



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Planning

Work Session: 12.14.17

Prepared By: Streetman

Voting Session: TBD?

Presenter: B. Ringle

Public Hearing: Yes No

Agenda Item Title: Non-Profit Temporary Food Service Events

Background Information:

Bill Ringle would like to come before the BOC and present/discuss his office being delegated the authority to issue permits and/or doing inspections for Non-Profit Temporary Food Service Events.

Current Information:

Please see attached letter from Mr. Ringle. He is willing to come before the BOC and do a presentation.

Budget Information: Applicable: Not Applicable: Budgeted: Yes No

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Approve

Department Head Authorization: JStreetman

Date: 11.21.17

Finance Dept. Authorization: Vickie Neikirk

Date: 12/7/17

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization:

Date:

Comments/Attachments:



Dawson County Environmental Health

189 Hwy. 53 W., Ste. 102, Dawsonville, GA 30534
PH: 706-265-2930 FAX: 706-265-7529 • www.phdistrict2.org

Pamela Logan, M.D., M.P.H., M.A., Health Director

March 22, 2017

Dawson County Government

ATTN: Mr. Billy Thurmond, Chairman, Dawson County Board of Commissioners

RE: Non-Profit Temporary Food Service Events--Reply Requested

Dear Mr. Thurmond:

The purpose of this letter is to clarify the requirements related to food safety at temporary non-profit events. Each year in Georgia, communities around the state have various non-profit events involving the service of food. Under Georgia law (O.C.G.A 26-2-391), a county or municipality is authorized to issue permits for the operation of non-profit food service at events that last 120 hours or less if sponsored by the county, municipality, or a non-profit organization. The law specifies the food safety standards that must be met to protect the public's health. Additionally, the county or municipality may delegate the authority to issue such permits to the County Board of Health. Please find enclosed a copy of the current law and associated guidance document for your review and reference.

Upon reviewing this information, if the Dawson County Government wishes to delegate the authority to issue such permits to the County Board of Health, please do so by completing and returning the enclosed form. Please mail the original, signed and dated form to the Environmental Health Office address listed in the letterhead above by April 28, 2017.

Should you have any questions regarding this law or if you need information on safe food handling practices at temporary non-profit events, please do not hesitate to call. You may also visit the link, <http://dph.georgia.gov/sites/dph.georgia.gov/files/EnvHealth/Food/Education/Non-ProfitFoodBrochure.pdf>, to download a copy of the "Food Safety at Non-Profit Temporary Events" brochure. Your prompt attention is greatly appreciated.

Thank you,

George W. "Bill" Ringle
Environmental Health Manager

Enclosure

Please complete the following information and return to the Health Department by April 28, 2017.

County/Municipality Name: _____

Manager/Authorized Agent: _____

Contact Phone Number: _____

Dawson County Government wishes to delegate the authority to the County Board of Health to issue non-profit food service permits at temporary events of 120 hours or less, which are sponsored by the Dawson County Government or a non-profit organization.

Manager/Authorized Agent Signature

Date

Backup material for agenda item:

4. Presentation of Cancellation Notice of Fire Engine Approved Funding and Request for Use of Another Vendor- Lanier Swafford, Emergency Services Director



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Emergency Services

Work Session: 14 December 2017

Prepared By: Lanier Swafford

Voting Session: 21 December 2017

Presenter: Lanier Swafford

Public Hearing: Yes _____ No X

Agenda Item Title: Notice of Cancelation of Fire Engine approved funding and request for use of another vendor

Background Information:

The Board of Commissioners approved a purchase of a fire engine from Ten 8 Fire and Emergency Services on 2 November 2017. The purchased was approved using a financing option presented by BB&T at a rate of 2.44% for 7 years. The Finance Department was notified on 29 November that BB&T could no longer honor that rate and was withdrawing their bid. This is due to the possible changes of the federal tax law.

Current Information:

DCES would like to make the Board aware of this action and ask them to consider moving forward with the purchase using another loan option. Bids have been solicited by the finance department and the most competitive bid is – for 7 years at 2.91% fixed rate through BB&T. Annual payments of \$71,893.81. Total interest amount \$53,814.67

Budget Information: Applicable: X Not Applicable: _____ Budgeted: Yes X No _____

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining

Recommendation/Motion: Motion to approve the purchase of the fire engine and finance the truck through BB&T at a fixed rate of 2.91%% for 7 years.

Department Head Authorization: Lanier Swafford

Date: 06 December 2017

Finance Dept. Authorization: Vickie Neikirk

Date: 12.7.17

County Manager Authorization: _____

Date: _____

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

118

SECOND QUOTES ON FIRE TRUCK FINANCING

December 2017

\$ 449,442

United Community	4 years		3.14%	Would have attorney fee for document prep
	7 years		3.25%	
PNC Bank	4 years		3.13%	
	7 years		3.43%	
BB & T	4 years	option 1	2.62%	Not subject to change
	7 years	option 2	2.91%	Not subject to change
	4 years	option 3	2.11%	Subject to change
	7 years	option 4	2.37%	Subject to change
Bank of Ozarks	no response			
Regions	no response			

5130 Parkway Plaza Blvd.
Charlotte, N.C. 28217
(704) 954-1700
Fax (704) 954-1799

Via Electronic Mail
vneikirk@dawsoncounty.org

mcwilliams@bbandt.com
direct dial (678) 989-1110

December 7, 2017

Ms. Vickie Neikirk
Finance Director
Dawson County
PO Box 476
Ludowici, GA 31316

RE: Lease Purchase for Fire Truck

Dear Ms. Neikirk:

Branch Banking and Trust Company ("BB&T") is pleased to offer this proposal for the financing requested by Dawson County (the "County").

- (1) **Project:** Pierce Saber Pumper
- (2) **Amount To Be Financed:** \$449,442.00
- (3) **Interest Rates, Financing Terms and Corresponding Payments:**

<u>Term</u>	<u>Rate</u>
Option 1: 48 Months	2.62%
Option 2: 84 Months	2.91%

Options 1 and 2 **are not** subject to change/adjustments due to changes in the federal corporate income tax rate

<u>Term</u>	<u>Rate</u>
Option 3: 48 Months	2.11%
Option 4: 84 Months	2.37%

Options 3 and 4 **are** subject to change, until the final maturity date, based upon changes in the federal corporate income tax rate as described below:

If at any time after the date hereof there should be any decline in the maximum marginal rate of federal income tax applicable to the taxable income of BB&T, its successors or assigns ("BB&T Tax Rate"), as a result of any change in law, rule, regulation or other action by appropriate federal government authorities; then, the interest rate stated under Option 3 or Option 4 above will be adjusted to preserve BB&T's after-tax return.

Payments shall be annual in arrears, as requested. See the attached amortization schedule for sample payments. The financing documents shall allow prepayment of the principal balance in-whole, at any time, with no prepayment premium.

The interest rates stated above are valid for a closing not later than January 22, 2018. All applicable taxes, permits, costs of counsel for the County and BB&T, if any, shall be the County's responsibility and paid for by the County.

The stated interest rates assume that the County expects to borrow less than \$10,000,000 in the calendar year of closing (2017 or 2018). BB&T reserves the right to terminate its interest in this bid or to negotiate a mutually acceptable rate if the financing is not qualified tax-exempt financing.

(4) Financing Documents:

BB&T proposes to use the ACCG equipment lease purchase documentation with an assignment to BB&T Governmental Finance. This financing shall be secured by a first lien security interest in all personal property acquired with proceeds. Closing of the financing is contingent upon completing documentation acceptable to BB&T.

* * * * *

BB&T shall have the right to cancel this offer by notifying the County of its election to do so (whether or not this offer has previously been accepted by the County) if at any time prior to the closing there is a material adverse change in the County's financial condition, if we discover adverse circumstances of which we are currently unaware, if we are unable to agree on acceptable documentation with the County or if there is a change in law (or proposed change in law) that changes the economic effect of this financing to BB&T. We reserve the right to negotiate and/or terminate our interest in this transaction should we be the successful proposer.

BB&T appreciates the opportunity to make this financing proposal and requests to be notified within five days of this proposal should BB&T be the successful proposer. Please call me at (678) 989-1110 with your questions and comments. We look forward to hearing from you.

Sincerely,

BRANCH BANKING AND TRUST COMPANY



Matt Williams
Vice President

Enclosures

RESOLUTION AUTHORIZING, AMONG OTHER THINGS, THE EXECUTION OF A LEASE PURCHASE AGREEMENT WITH ASSOCIATION COUNTY COMMISSIONERS OF GEORGIA

WHEREAS, the Board of Commissioners of DAWSON COUNTY, GEORGIA (the "County") has determined that it is in the best interest of the County to lease certain equipment (the "Equipment") from Association County Commissioners of Georgia ("ACCG") pursuant to a Lease Purchase Agreement (the "Lease"); and

WHEREAS, in order to provide the funds needed to purchase the Equipment, ACCG will assign its interest in the Lease to Branch Banking and Trust Company ("BB&T") pursuant to an Assignment, Transfer and Security Agreement (the "Assignment").

NOW, THEREFORE, be it resolved by the Board of Commissioners of the County, and it is hereby resolved by the authority of the same, as follows:

Section 1. Findings. The obligation of the County to make the payments under the Lease is annually renewable as provided therein. The obligation of the County to make such payments will not constitute a debt of the County within the meaning of any constitutional or statutory limitation on indebtedness. The Lease does not directly or contingently obligate the County to make any payments beyond those appropriated for the County's then current calendar year.

Section 2. Authorization of Lease. The Chairman and the Vice Chairman are hereby authorized, empowered and directed to execute and deliver the Lease. The Lease shall be in substantially the form attached hereto as Exhibit A, or with such changes therein as may be deemed necessary by the person executing the same to accomplish the purposes of the transactions contemplated therein and in this Resolution. The execution of the Lease shall constitute conclusive evidence that the Lease and any and all changes thereto have been approved by the person executing the same.

Section 3. Consent to Assignment. The County hereby consents to the execution and delivery of the Assignment.

Section 4. General Authority. The Chairman, Vice Chairman, Clerk and officers and employees of the County are hereby authorized, empowered and directed to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of the documents herein authorized and as may be necessary to carry out the purposes and intents of this Resolution.

Section 5. Actions Ratified, Approved and Confirmed. All acts and doings of the Chairman, Vice Chairman, Clerk and officers and employees of the County which are in conformity with the purposes and intents of this Resolution are hereby ratified, approved and confirmed.

Section 6. No Personal Liability. No stipulation, obligation or agreement contained in this Resolution or in the documents authorized hereby shall be deemed to be a stipulation, obligation or agreement of any member of the Board of Commissioners, officer or employee of the County in his or her individual capacity, and no such member of the Board of Commissioners officer or employee shall be personally liable or be subject to personal liability or accountability.

Section 7. Repealing Clause. All resolutions or parts thereof in conflict with the provisions herein contained are, to the extent of such conflict, hereby superseded and repealed.

Section 8. Effective Date. This Resolution shall take effect immediately upon its adoption.

Section 9. Reimbursement. The County intends that the adoption of this Resolution will be a declaration of the County's official intent to reimburse expenditures for the Equipment from the proceeds of the financing described above.

Section 10. Bank Qualification. The Lease is hereby designated as a qualified tax-exempt obligation within the meaning of Section 265(b)(3) of the Internal Revenue Code of 1986, as amended.

Adopted on _____, 2017

Dawson County, Georgia

(SEAL)

By: _____
Chairman

Attest:

By: _____
Clerk

CLERK'S CERTIFICATE

The undersigned Clerk of the Board of Commissioners of Dawson County, Georgia, DOES HEREBY CERTIFY that the foregoing pages of typewritten matter pertaining to a Lease Purchase Agreement constitute a true and correct copy of the Resolution adopted on _____, 2017 by the Board of Commissioners in a meeting that was open to the public, and that the original of said Resolution appears of record in the minute book of the Board of Commissioners, which is in my custody and control.

WITNESS my hand and the official seal of the Board of Commissioners of Dawson County, Georgia.

(SEAL)

Clerk

Branch Banking and Trust Company
Draft Amortization Schedule

Dawson County
Pierce Saber Pumper
Option 2 - \$449,442.00 @ 2.91%; 84 Months; Annual

Nominal Annual Rate : 2.910 %

AMORTIZATION SCHEDULE - Normal Amortization

	Date	Payment	Interest	Principal	Balance
Loan	01/19/2018				449,442.00
1	01/19/2019	71,893.81	13,078.76	58,815.05	390,626.95
2	01/19/2020	71,893.81	11,367.24	60,526.57	330,100.38
3	01/19/2021	71,893.81	9,605.92	62,287.89	267,812.49
4	01/19/2022	71,893.81	7,793.34	64,100.47	203,712.02
5	01/19/2023	71,893.81	5,928.02	65,965.79	137,746.23
6	01/19/2024	71,893.81	4,008.42	67,885.39	69,860.84
7	01/19/2025	71,893.81	2,032.97	69,860.84	0.00
Grand Totals		503,256.67	53,814.67	449,442.00	

Backup material for agenda item:

5. Presentation of Firefighter Cancer and Disability Insurance Options- Lanier Swafford,
Emergency Services Director



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Emergency Services

Work Session: 14 December 2017

Prepared By: Lanier Swafford

Voting Session: 21 December 2017

Presenter: Lanier Swafford

Public Hearing: Yes _____ No X

Agenda Item Title: Consideration of the quote for Firefighter Cancer and Disability Insurance

Background Information:

HB 146 was passed in 2017 to require all legally organized fire departments in Georgia to provide certain cancer benefits to their firefighters effective January 1, 2018. The policy herein described was provided to Dawson County by ACCG, Intergovernmental Risk Management Association. An additional quote was provided through Volunteer Fireman's Insurance Services and was through Chubb at a rate of \$23,587.00.

Current Information:

While Dawson County has existing insurance relationships with both ACCG-IRMA, and VFIS, ACCG has provided the lowest quote for the coverage. The current purchasing policy allows for us to bring you this request with only two quotes as this is unique coverage not provided by all companies and a relationship already exists with the two companies who provided quotes. Detailed explanations concerning the coverage and rates can be found attached.

Budget Information: Applicable: Not Applicable: Budgeted: Yes No

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
General					18,497.00	

Recommendation/Motion: Motion to approve for Dawson County to award ACCG - IRMA, through The Hartford Life and Accident Insurance Company, Lump Sum Cancer & Long Term Disability (Income Replacement) to provide coverage to Dawson County Firefighters for 2018 at a total of \$18,497.00.

Department Head Authorization: Lanier Swafford

Date: 12/04/17

Finance Dept. Authorization: Vickie Neikirk

Date: 12/7/17

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

See attached



ACCG-IRMA Firefighters' Cancer Benefit Program Proposal for Coverage

Effective Date: January 1, 2018

Anniversary Date: January 1

County Name: Dawson County

County FCC ID Number: 1800

Insurer: Hartford Life and Accident Insurance Company

There are two coverage components required by House Bill 146 (2017) effective January 1, 2018:

- 1) Lump Sum Cancer Benefit
- 2) Long-Term Disability (Income Replacement)

The ACCG-IRMA Lump Sum Cancer Benefit and Long-Term Disability (Income Replacement) coverage components are designed to comply with House Bill 146 when purchased together. However, a county is permitted to purchase only one component if desired.

Estimated annual premiums are based on the Eligible Firefighter census data provided by the county. Premiums for Long-Term Disability (Income Replacement) differ based on whether a firefighter is employed or is a volunteer. While the premiums below are estimated annual amounts, the county will be billed on a quarterly basis in an amount that reflects the county's updates to the census.

Component 1: Lump Sum Cancer Benefit – All Firefighters	
Maximum Benefit each diagnosis:	\$6,250 (less severe forms of cancer)
	\$25,000 (severe forms of cancer)
Lifetime Benefit per firefighter:	\$50,000
Lump Sum Cancer Benefit Only - Estimated Annual Premium for All Firefighters:	\$12,191
Component 2: Long-Term Disability (Income Replacement)	
Employed Firefighters	
Monthly benefit:	60% of pre-disability firefighter earnings
Maximum monthly benefit per firefighter:	\$5,000
Estimated Annual Premium for Employed Firefighters:	\$4,337
Volunteer Firefighters	
Monthly Benefit per firefighter:	\$1,500
Estimated Annual Premium for Volunteer Firefighters:	\$1,969
Long-Term Disability Only (Income Replacement) – Estimated Annual Premium for All Firefighters:	\$6,306
Estimated Annual Premium for Components 1 & 2: Lump Sum Cancer Benefit + Long Term Disability (Income Replacement):	\$18,497

This proposal is valid for 30 days after proposal is issued until the effective date, whichever is later. This overview is not a part of the policy(ies) and does not provide or explain all provisions of the policy(ies).



DESCRIPTION OF COVERAGE PROVIDED THROUGH ACCG

All legally organized fire departments in Georgia are required by House Bill 146 (2016-2017) to provide certain cancer benefits to their firefighters effective January 1, 2018. ACCG has developed a solution for Georgia counties that need this coverage, providing financial protection to firefighters and their families in the event they contract cancer.

INSURER: The Hartford Life and Accident Insurance Company
 COVERAGES PROVIDED: Lump Sum Cancer & Long Term Disability (Income Replacement)
 MASTER POLICYHOLDER: ACCG - Interlocal Risk Management Agency
 ADMINISTRATOR: Association County Commissioners of Georgia

Who is eligible? An “Eligible Firefighter” is a recruit or a trained individual who is a full-time employee, part-time employee, or volunteer for a legally organized fire department as defined by O.C.G.A. § 25-4-2 after having served 12 consecutive months for such fire department.

CLASS DESCRIPTIONS: Class 1 - Volunteer Firefighters; Class 2 – Employee Firefighters

Lump Sum Cancer Benefit: **Full-time/Part-time Employees and Volunteers**
 Maximum Limit each diagnosis: \$6,250 (less severe forms of cancer as noted in HB 146);
 \$25,000 (severe forms of cancer as noted in HB 146)
 Lifetime Benefit per Firefighter: \$50,000
 Continuation Rights: Yes (Enroll within 31 days of termination of eligibility)

Long-Term Disability (Income Replacement)
 Elimination Period: 180 Days
 Benefit Duration: 3 Years or until released to work as firefighter
 Return to Work Incentive: Included
 Integration Method: Direct with Family Social Security Offset
 Pre-Existing Condition Limit: 3 months lookback
 Survivor Income Benefit: 3 times last monthly Benefit
 Continuation Rights: Yes (Enroll within 31 days of termination of eligibility)

Benefits:
 Volunteer: \$1,500 Monthly Benefit
 Full-time/Part-time Employee: 60% of pre-disability earnings as firefighter for Participating Employer
 Minimum Monthly Benefit: \$100
 Maximum Monthly Benefit: \$5,000

The disability benefits will be reduced by any other income benefits other than those purchased solely by the firefighter as noted by House Bill 146 (2016-2017).

This overview is not a part of the policy(ies) and does not provide or explain all provisions of the policy(ies).

Questions about this program? Call Willis Towers Watson representatives Lindsey Albright (404.224.5044) or Meghan Murray (404.302.3898) or Ashley Abercrombie at ACCG (404.589.7828).

Backup material for agenda item:

6. Presentation of #299-17 IFB- Construction Services for Veterans Memorial Park Pool House- Lisa Henson, Parks and Recreation Director



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Parks and Recreation

Work Session: 12/14/17

Prepared By: Melissa Hawk/ Lisa Henson

Voting Session: 12/21/17

Presenter: Lisa Henson/Melissa Hawk

Public Hearing: Yes No

Agenda Item Title: IFB #299-17 Construction Services for Veterans Memorial Park Pool House Award

Background Information:

A Request for Proposal was released for a Design/Build on June 9, 2017. No proposals were received. It was decided to revise the scope to construction services only and receive separate quotes for demolition and architecture services. Quotes were sought for demolition and awarded to Townley Construction. Quotes were sought for architecture services and awarded to Wright Mitchell Associates. Both are in good standings with the County for pervious work.

Current Information:

Dawson County Purchasing received 4 sealed bids for this IFB. The lowest qualified, most responsive and responsible bidder is Keystone Construction with a bid of \$439,000.00

Budget Information: Applicable: Not Applicable: Budgeted: Yes No

Tires Cos of Goods Sold - 2018

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
324	6120	541200	\$350,000.00	\$350,000.00	\$439,000.00	

Recommendation/Motion: To accept the price submitted by Keystone Commercial for IFB #Construction Services for Veterans Memorial Park Pool House and to award a contract to begin scope of work upon contract execution.

Department Head Authorization: Lisa Henson

Date: 11/16/17

Finance Dept. Authorization: _____

Date: _____

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

Power Point Presentation

CONSTRUCTION SERVICES FOR THE VETERANS MEMORIAL PARK POOL HOUSE IFB #299-17

WORK SESSION DECEMBER 14, 2017



Background

- ▶ The Dawson County Board of Commissioners approved the replacement of the Veterans Memorial Park Pool House with SPLOST funds.
- ▶ Demolition of the original pool house took place in August, 2017 and was completed by Townley Construction who submitted the lowest quote of \$2,470.00.
- ▶ Wright Mitchell & Associates, Inc. created the plans at the lowest quote of \$15,000.00.
- ▶ Bid according to policy.
- ▶ Bidders submitted a qualification questionnaire to ensure their ability to perform the scope of work described in the Invitation for Bid.
- ▶ Standard Construction Contract to begin as soon as possible with a mandated completion date of May 1, 2018.

Scope of Work

- ▶ The awarded contractor(s) shall:
 - ▶ Construct a 1560 square foot, premier pool house facility to include an office space, men's and women's restrooms/showers, concession space with an additional 1140 square feet of covered porches spaces.
 - ▶ Space will have a metal roof, wood trusses, concrete foundations and slabs, and CMU and rock veneer. Work includes mechanical, electrical, plumbing, plastic shower/restroom doors.

Acquisition Strategy & Methodology

- ▶ Advertised in Legal Organ
- ▶ Posted on County Website
- ▶ Posted on GLGA Marketplace
- ▶ Posted on Georgia Procurement Registry (GPR)
- ▶ Emailed notification through Vendor Registry (VR)
- ▶ Notification through County's Facebook and Twitter accounts
- ▶ **4 bids received**

Cost Proposals

ITEM DESCRIPTION	UNIT OF MEASURE		KEYSTONE COMMERCIAL	DIVERSIFIED CONSTRUCTION OF GEORGIA	GREATER GEORGIA CONTRACTING	ELEMENTS OF CONSTRUCTION
			TOTAL COST	TOTAL COST	TOTAL COST	TOTAL COST
Construction Services for Veterans Memorial Park Pool House –Base Bid	Lump Sum		\$439,000.00	\$492,470.00	\$564,779.80	\$479,000.00
The following prices shall be incorporated by a change order if the scope of work is increased.						
ITEM DESCRIPTION	UNIT PRICE DESCRIPTION	UNIT OF MEASURE	UNIT COST	UNIT COST	UNIT COST	UNIT COST
Unsuitable Soil	Per cubic yard unforeseen, removal and hauloff (based on minimum of 25 CY)	CY	\$80.00	\$30.00	\$18.75	\$8.00
Structural Soil	Per cubic yard additional structure soils (based on minimum of 25 CY)	CY	\$40.00	\$40.00	\$18.75	\$10.00
Sidewalks	Typical 4" thick	SF	\$8.50	\$11.00	\$5.63	\$8.00
2" Cold Water Line Building	Installed from existing toilet building	LF	137	\$30.00	\$22.50	\$12.00
4" Sewer Line	Installed from building to manhole to building	LF	\$14.50	\$25.00	\$12.50	\$20.00

Recommendation

Staff respectfully requests the Board to accept responses received for IFB #299-17 Construction Services for the Veterans Memorial Park Pool House and award a contract to Keystone Commercial, the lowest qualified, responsive and responsible bidder as submitted.

Backup material for agenda item:

7. Presentation of #305-17 IFB- Stand-by Road Striping Services- David McKee, Public Works Director



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Public Works

Work Session: 12/14/17

Prepared By: Melissa Hawk

Voting Session: 12/21/17

Presenter: David McKee/Melissa Hawk

Public Hearing: Yes No

Agenda Item Title: #305-17 IFB Stand by Road Striping

Background Information:

The Dawson County Board of Commissioners has historically contracted with a striping company for its road striping needs to meet the Purchasing Policy Ordinance Requirements. Two solicitations were released for these services. The first did not receive any responses. The second received 3.

Current Information:

The current Stand-by Road Striping Services Contract will have exhausted all renewal options as of December 31, 2017. An Invitation for Bids package was released as per the Purchasing Policy Ordinance. All avenues of advertising were used for both solicitations. No explanations were received as to why the first solicitation went unanswered.

Budget Information: Applicable Not Applicable: Budgeted: Yes No

Fund	Dept.	Acct No.	Budget	Balance	Requested	Remaining
100	4220	531118	\$5,000.00	\$5,000.00		

Recommendation/Motion: To accept the bid submitted and award a service contract to Parker Traffic Markings for Stand-by Road Striping Services for one (1) year with two (4) possible renewal option years.

Department Head Authorization: David McKee

Date: 11/30/2017

Finance Dept. Authorization: Vickie Neikirk

Date: 12/7/17

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

Presentation

IFB #305-17 Stand-by Road Striping Services - Rebid

WORK SESSION DECEMBER 14, 2017



Background

- ▶ Dawson County Board of Commissioner has historically awarded a contract for Stand-by Road Striping Services to meet the Purchasing Policy Ordinance requirement.
- ▶ The first solicitation released on October 10, 2017 did not receive any responses.
- ▶ The rebid solicitation released on November 1, 2017 received 3 responses.

Acquisition Strategy & Methodology for Both Solicitations Released

- ▶ Advertised in Legal Organ
- ▶ Posted on County Website
- ▶ Posted on GLGA Marketplace
- ▶ Posted on Georgia Procurement Registry
- ▶ Emailed notification through vendor registry
- ▶ Notification through County's Facebook and Twitter accounts
- ▶ Notification through Chamber of Commerce

#305-17 Stand-by Road Striping – Rebid Bid Proposal

Item Description	Unit of Measure	Parker Traffic Markings		Peek Pavement Markings		Roadside Specialties	
		Standard Paint	High Build Wet Weather Paint	Standard Paint	High Build Wet Weather Paint	Standard Paint	High Build Wet Weather Paint
Solid Traffic Yellow	LM	\$550.00	\$850.00	\$795.00	\$1,350.00	\$850.00	\$950.00
Skip Traffic Yellow	LM	\$250.00	\$300.00	\$550.00	\$895.00	\$550.00	\$650.00
Solid Traffic White	LM	\$550.00	\$850.00	\$795.00	\$1,350.00	\$850.00	\$950.00
Skip Traffic White	LM	\$250.00	\$300.00	\$550.00	\$895.00	\$550.00	\$650.00
RPM, Type I,	Each	\$4.00	\$4.00	\$6.00	\$6.00	\$4.50	\$4.50
RPM, Type II,	Each	\$2.00	\$2.00	\$6.00	\$6.00	\$4.50	\$4.50
RPM, Type III	Each	\$4.00	\$4.00	\$6.00	\$6.00	\$4.50	\$4.50

NOTE: Parker Traffic Markings, the current Contractor, performs all required services with high professionalism.

Recommendation

Staff respectfully requests the Board to accept the bids received and award a contract to Parker Traffic Markings for one (1) year and two (2) possible renewal option years.

Backup material for agenda item:

8. Presentation of #296-17 RFP- Banking Services Award Recommendation- Vickie Neikirk, Chief Financial Officer



DAWSON COUNTY BOARD OF COMMISSIONERS AGENDA FORM

Department: Finance

Work Session: 12/14/17

Prepared By: Melissa Hawk

Voting Session: 12/21/17

Presenter: Vickie Neikirk/Melissa Hawk

Public Hearing: Yes No

Agenda Item Title: #296-17 Banking Services

Background Information:

The Dawson County Board of Commissioners has historically contracted with a banking institution operating within the boundaries of Dawson County for its financial services.

Current Information:

The current Banking Services Contract will have exhausted all renewal options as of December 31, 2017. A Request for Proposal was released as per the Purchasing Policy Ordinance. Three (3) responses were received.

Budget Information: Applicable: Not Applicable: Budgeted: Yes No

Recommendation/Motion: To accept the proposal submitted and award a professional services contract for banking services to United Community Bank for one (1) year with four (4) possible renewal option years.

Department Head Authorization: Vickie Neikirk

Date: 11/09/2017

Finance Dept. Authorization: _____

Date: _____

County Manager Authorization: DH

Date: 12/7/17

County Attorney Authorization: _____

Date: _____

Comments/Attachments:

Presentation

RFP #296-17 BANKING SERVICES

WORK SESSION DECEMBER 14, 2017



Background

- ▶ The Dawson County Board of Commissioners has historically contracted with a banking institution operating within the boundaries of Dawson County for its financial services.
- ▶ The Elected Offices have been involved with this RFP process.
- ▶ Accounts include the Sheriff's Office, Clerk of Court, Magistrate Court, Probate Court, Superior Court, Tax Commissioner's Office, DA's Office and Dawson County.
- ▶ Total of 30 accounts
- ▶ The previous two contracts were awarded to United Community Bank after the individual evaluations

Acquisition Strategy & Methodology

- ▶ Advertised in Legal Organ
- ▶ Posted on County Website
- ▶ Posted on GLGA Marketplace
- ▶ Posted on Georgia Procurement Registry
- ▶ Emailed notification through vendor registry
- ▶ Notification through County's Facebook and Twitter accounts
- ▶ Notification through Chamber of Commerce
- ▶ Notified previous vendors
- ▶ Emailed solicitation to 5 local banks

Evaluation Committee

- ▶ The Evaluation Committee was comprised of the following members:
 - ▶ Vickie Neikirk, Chief Financial Officer
 - ▶ Natalie Johnson, Accounting and Budget Manager
 - ▶ Lisa Thurmond, Chief Magistrate
 - ▶ Jennifer Burt, Probate Judge
 - ▶ Sandra Evans, Human Resources & Budget Manager, Dawson County Sheriff's Office

Evaluation Criteria and Proposer Scores

RFP #296-17 BANKING SERVICES									
COMPANY	COMPANY BACKGROUND AND STRUCTURE	TECHNICAL EXPERIENCE OF FIRM	QUALIFICATIONS OF STAFF	APPROACH & RESPONSIVENESS TO SCOPE OF WORK & METHODOLOGY	REFERENCES	FINANCIAL STABILITY & RATINGS	TECHNICAL SCORE	Cost/ FINANCIAL	Total SCORE
BANK OF THE OZARKS	0	0	0	0	0	0	0	0	0
SUNTRUST	0	0	0	0	0	0	0	0	0
UNITED COMMUNITY BANK	90	89	58	114	54	58	77	10	87
Rounded up to nearest whole number									
*NOTE: TECHNICAL PROPOSAL INCLUDED PRICE. REQUIRED FORMS WERE NOT SUBMITTED, INCLUDING THE VENDOR'S PRICE PROPSAL FORM									
**NOTE: REQUIRED FORMS WERE NOT SUBMITTED, INCLUDING THE VENDOR'S PRICE PROPSAL FORM									

Cost Proposals

Tasks	BANK OF THE OZARKS	SUNTRUST	UNITED COMMUNITY BANK
Account Maintenance	*Note	**Note	\$0.00
Average Monthly Deposits			\$0.00
Average Monthly Wire Transfers In			\$0.00
Average Monthly Wire Transfers Out			\$0.00
Average Number of Checks Issued Monthly			\$0.00
Average Monthly ACH Items			\$0.00
Payroll Direct Deposit (ACH) - Transmissions			\$0.00
ACH Items			\$0.00
Cancelled Check Files			\$0.00
Purchase Card			\$0.00
Software			\$0.00
Remote Deposit Equipment & Software On-Site Training			\$0.00
Minimum Balance Penalties			\$0.00
Total	\$0.00	\$0.00	\$0.00
High/Low Variance	0.00	0.00	0.00
Value of 1 point	0.00		
Grade Reduction	0.00	0.00	0.00
Point (Max. 10)	0.00	0.00	10.00
Fee Grade (pts x 0.0)	0.00	0.00	10.00

Recommendation

Staff respectfully requests the Board to accept the proposal submitted and award a professional services contract for banking services to United Community Bank for one (1) year with four (4) possible renewal option years.

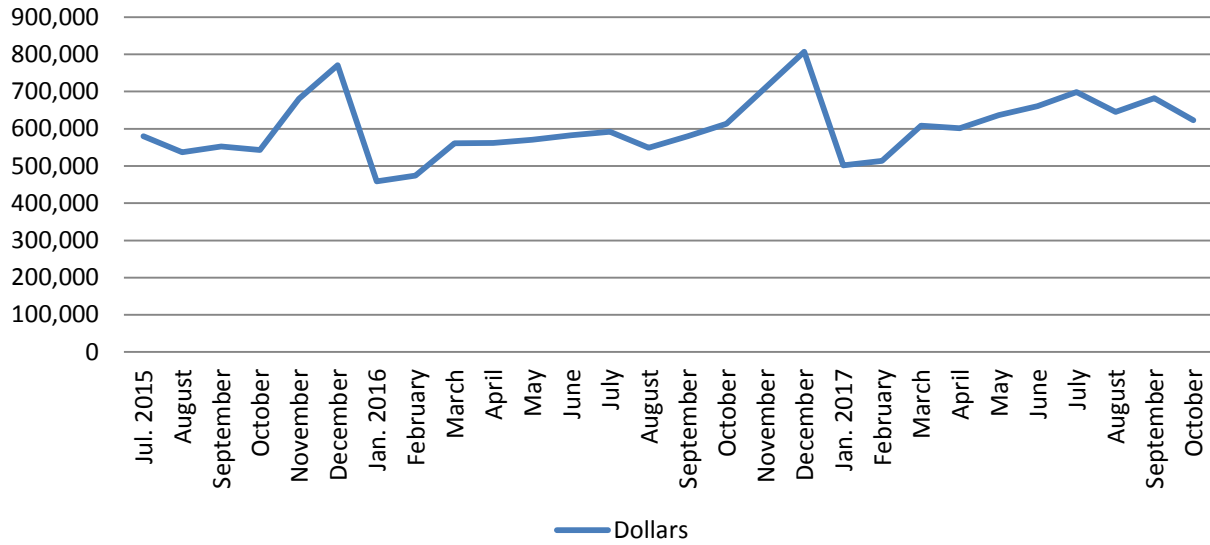
Backup material for agenda item:

10. County Manager Report

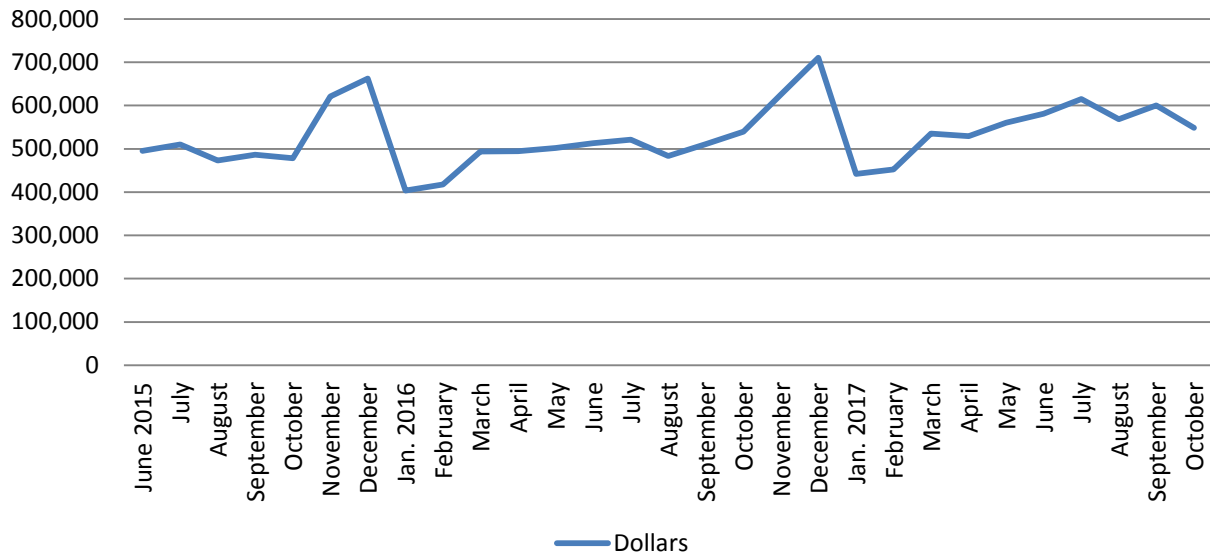


Key Indicator Report
November 2017

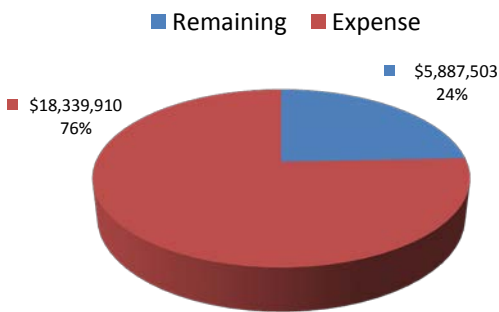
SPLOST VI COLLECTION CHART



LOST COLLECTION CHART

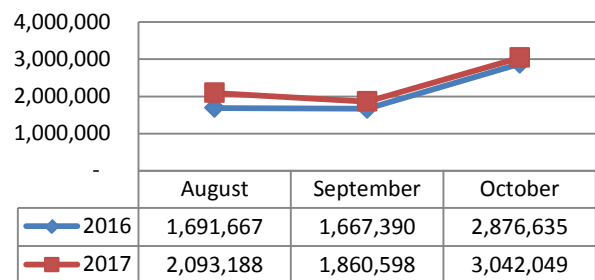


Budget

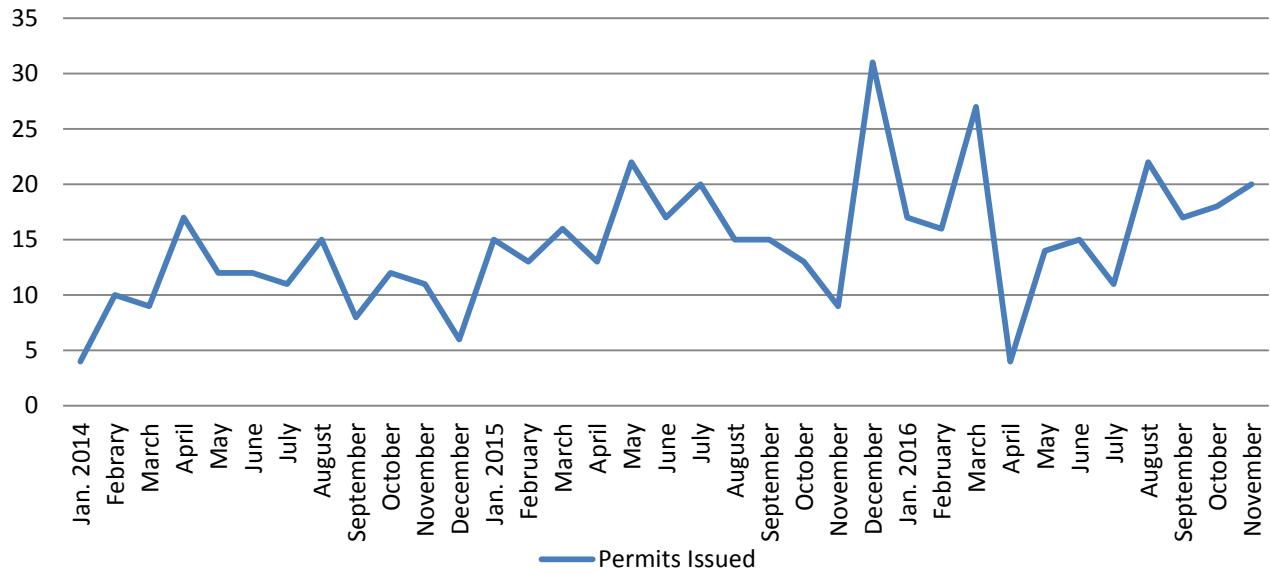


Through 10/31/17

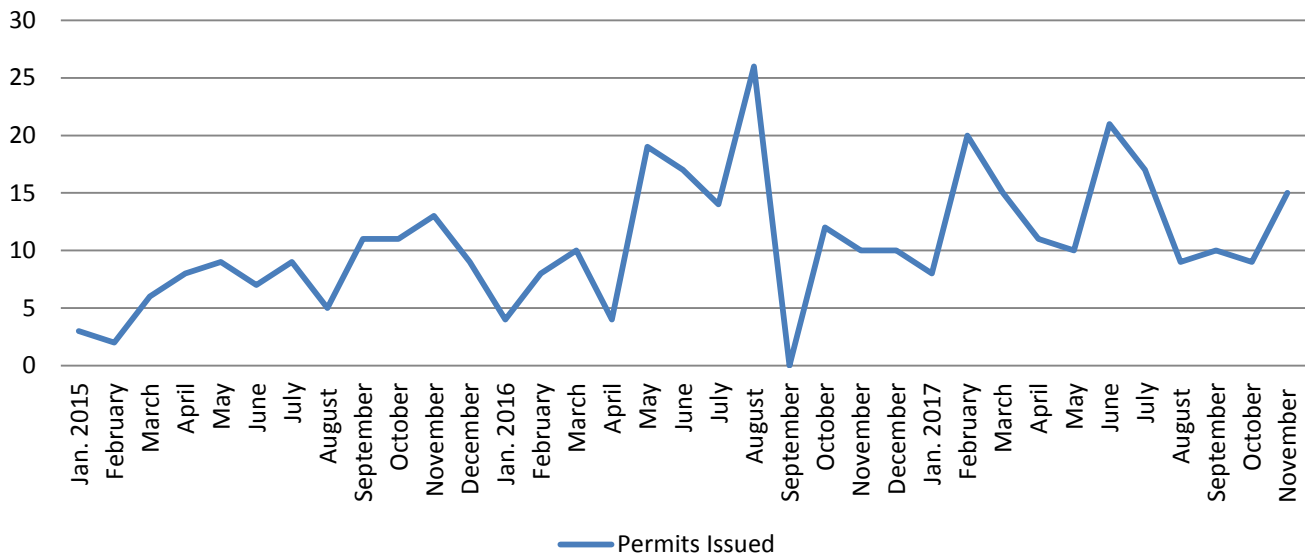
All Revenue Per Month



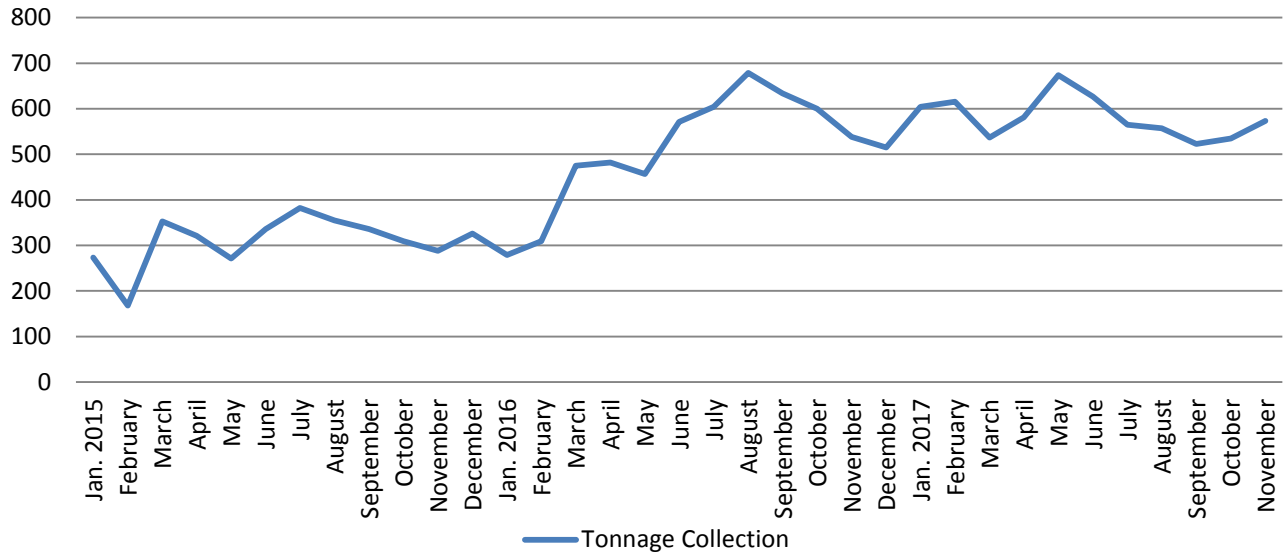
SINGLE FAMILY HOME BUILDING PERMITS ISSUED



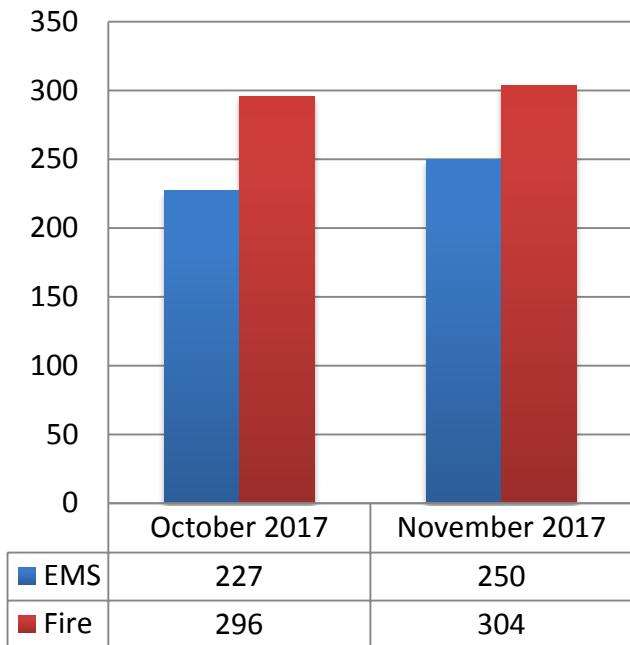
COMMERCIAL BUILDING PERMITS ISSUED



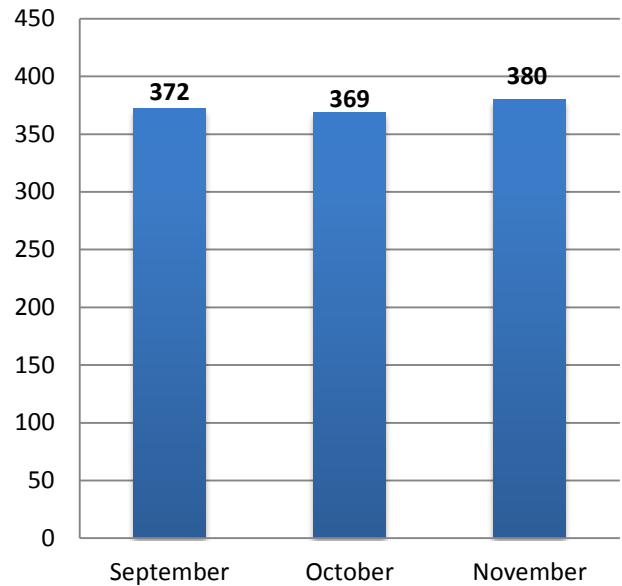
TRANSFER STATION TONNAGE COLLECTION



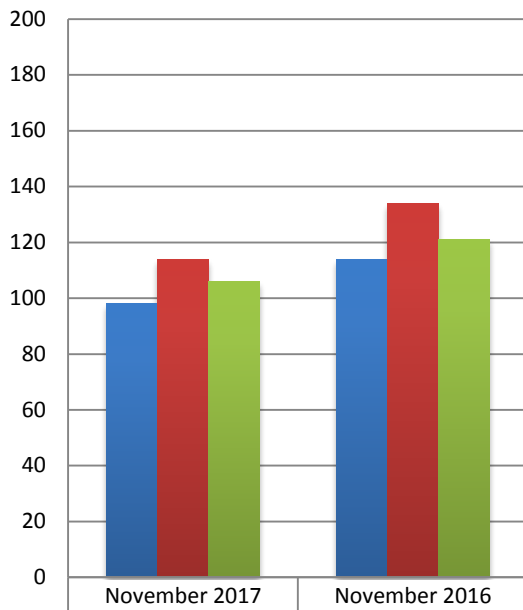
EMS/Fire Calls for Service



Number of County Employees

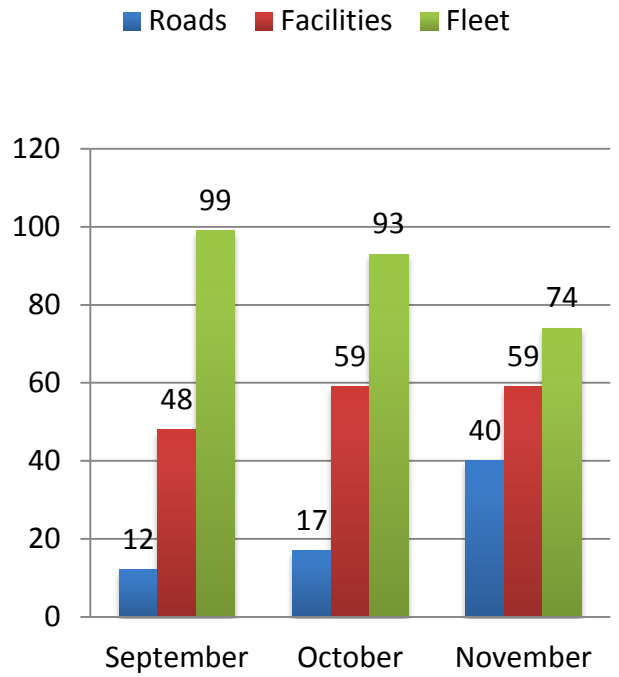


Inmate Population



	November 2017	November 2016
Lowest Daily Count	98	114
Highest Daily Count	114	134
Daily Average	106	121

Repair Requests





Dawson County Board of Commissioners

Elections/Registrar Monthly Report – November 2017

- **New Applications/Transfers In: 189**
- **Changes/Duplicates: 454**
- **Cancelled/Transferred Out: 77**
- **Total Processed: 720**

HIGHLIGHTS

Voter Registration Projects:

- Completed Municipal Election; credit for voting applied, began process of all applications that have been held from voter registration cutoff (30 days prior to an election).

Elections Projects:

- Municipal General Election – November 7, 2017
 - Official & Complete: 282 out of 1790 voted = 15.75%
- TSX voting unit batteries are ordered. We found with units not being State owned, we are not obligated to utilize the State vendor. Therefore the purchase price requested (and approved) from the BOC within the project was \$7950 (vendor cost). The lowest bid purchase is \$4614.29 (Batteries+Bulbs), savings of \$3335.71. Batteries expected by the end of December.
- The transfer process of older R6 units is in the beginning stage. Union County has requested 25 (we have 56). The process is to list existing serial numbers on a transfer sheet, forward to the Secretary of State for approval. SOS will then set up a time for KSU to come to our office and acceptance test the units before the receiving county picks them up. Union County request list is in process of sending to SOS for scheduling (work in progress).
- Exterior voting sign replacement order is in final stages of approval for print.

Highlights of plans for upcoming month:

- Finalize TSX battery replacement & cleanup.
- Older voting unit's acceptance tested and transferred to other counties.
- Task list preparation for 2018 Municipal March Special Election in place.
- Prepare municipal qualifying packets for January candidate qualifying for March 20, 2018 Special Election.
- GEOA Regional Facilitator quarterly meeting in 161 County, December 14, 2017.



Dawson County Board of Commissioners

Dawson County Emergency Services Monthly Report – November 2017

Fire Responses	September	October	November
2015	239	317	253
2016	229	287	319
2017	328	296	304

EMS Responses	September	October	November
2015	174	239	181
2016	185	220	221
2017	243	227	250

Plan Reviews: November: 10

EMS Revenue:

October 2016 - \$ 59,082.61
 October 2017 - \$ 40,755.74

- 32% Decrease

Plan Review and Inspection Revenue Total: \$ 2,300.00

- County: \$ **2,200.00**
- City: \$ 100.00

Business Inspections Total: 28

- County Follow up: 10
- City Follow up: 00
- County Final Inspection: 07
- City Final Inspection: 01
- County Annual Inspections: 10
- City Annual Inspections: 00

HIGHLIGHTS

Dawson County Emergency Services Projects:

- Training hours completed by staff: 1465.5 including a Mass Casualty Training Class and Exercise and Physical Agility testing for all three shifts
- KARE for Kids Boot Drive - \$ 7,588.61
- PR Details: 13 events reaching 708 individuals including 2 fire safety presentations to an audience of 433; 3 special needs classes totaling 64 individuals, 1 Day Care provider class with 18 students, and 9 CPR classes provided training to 229 individuals
- Smoke detector installations: 02
- Search and Rescue: 00
- Fire investigation: 01
- Child Safety Seat Installation: 02
- Total water usage: 9,100 gals
- EWSA: 9,000 gals
- City: 100 gals
- **4-Fires:** Building 01; Brush / Grass 01; Vehicle 01; Cooking 01; Dumpster 0



Dawson County Board of Commissioners

Facilities Monthly Report – November 2017

- **Total Work Orders: Fifty-nine (59)**
- **Community Service Workers: Three (3)**

HIGHLIGHTS:

- * **Major clean up at Fleet Shop**
- * **Began Building Inspections**
- * **Completed HVAC Preventative Maintenance on Government Center and All County Building**
- * **Installed Christmas Decorations at Government Center and Historical Court House**



MONTHLY REPORT

For Period Covering the Month of November 2017

SN	TASKS/ WORK DONE	LOCATION/S of Service
1	Over-hauled Fleet Shop inside and out	Fleet Shop
2	Moved Public Defender into New Court House. They are in 2 locations-Court house and Historical Court house	Government Center
3	Beginning Building Inspections-Completed Veterans Memorial Park	Veterans Memorial
4	Working on hiring Maint man for new jail	New Jail
5	Completed HVAC Preventative Maintenance on all County Buildings	County Building
6	Completed HVAC Preventative Maintenance on Government Center	Government Center
7	Completed Fall landscaping clean up all County Buildings	County Building
8	Facilities and IT met with County Manager	Human Resources
9	Moved part of Public Defenders office to New Courthouse	Government Center
10	Repaired water leak outside of Health Department	Health Department
11	Met with Roofing company on repairs for the jail	Jail
12	Repaired outside lights at library	Library
13	Cleaned out gutters at Chappell Building, Health Dept and Agriculture Building	Various Buildings
14	Christmas Decorations up at Historical Courthouse and Government Center	Govern Ctr/Historical Courthous
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26	Total Work Orders for the month = (59)	Facilities
27	Total Community Service for the month = (3)	Facilities

These numbers do not reflect daily/ weekly routine duties to include:

- Cutting of grass and landscape maintenance on all county properties
- Cutting of grass and landscape maintenance on all five (5) parks on the west side of county
- Cleaning of the new government center and other county owned buildings, offices and facilities
- Emptying outside trash receptacles at county owned buildings
- Collecting and recycling of all county buildings, offices and facilities

Noted By: _____
JAMES TOLBERT, Facilities Director

Prepared By: MVBosten, 02/01/17



Dawson County Board of Commissioners

Finance Monthly Report – November 2017

FINANCE HIGHLIGHTS

- **LOST Collections:** \$548,487 – up 1.56% compared to 2016
- **SPLOST Collections:** \$623,291 – up 1.56% compared to 2016; 18.03% over projections for October 2017; Total SPLOST VI collections: \$16,904,587
 - \$529,797– County Portion (85%)
 - \$93,494 – City Portion (15%)
- **TAVT:** \$88,675
- **See attached Revenue and Expenditure Comparison for 2017**
- **Total County Debt:** \$2,916,350 (See attached Debt Summary)
- **Audit Status:** The 2016 audit is complete.
- **EMS Billing Collections:** \$62,735 for November; \$627,008 YTD
- **Budget Status:** The 2018 Budget was approved on September 21, 2017.
- **Monthly Donations/Budget Increases:** \$5,703
 - Passport Fees - \$1,200
 - Donations - \$4,503

PURCHASING HIGHLIGHTS

Formal Solicitations

- Road Striping Services
- EMS Uniforms
- Parking Lot/Roadway Milling & Paving at Veterans Memorial Park

Informal Solicitations

- Tipping Fees/Hosting Fees for Transfer Station

Quotes for less than \$25,000 this month

- Gasoline – Fleet
- Diesel – Fleet
- Painting – Park & Rec
- Milling - Roads

Purchases for less than \$25,000 that did not get required quotes this month

- Catering Services (\$3,045) – Sheriff

Pending Projects

- Banking
- Emergency Medical Supplies

- Natural Gas
- Road Striping
- Insurance Broker Services

Work in Progress

- Hazard Mitigation Plan Update – Fire
- Property Revaluation & Equalization Project – Tax Assessor
- Pool House Demo/Rebuild - Parks
- 4 Road Rehab Project – Roads

Future Bids

- Other 2017 Bids

Future Bids – SPLOST VI

- Spreader Body Dump Truck – Roads
- Pothole Patching Machine – Roads
- Equipment for Public Works
- Water Filtration System for DCGC & DCSO – Facilities
- Other 2017 SPLOST Projects

DAWSON COUNTY LOST COLLECTION ANALYSIS

LOST COLLECTIONS BY SALES MONTH	2016											2017										
	2016 LOST			TAVT			TOTAL OF LOST & TAVT			2017 LOST			TAVT			TOTAL OF LOST & TAVT						
	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE	TAVT	\$ CHANGE	% CHANGE		
JANUARY	403,647	(3,472)	-0.9%	88,609	(11,082)	-11.1%	492,256	(14,554)	-2.9%	441,890	38,243	9.47%	93,458	4,849	5.47%	535,348	43,092	8.75%				
FEBRUARY	417,338	16,290	4.1%	59,291	(11,685)	-16.5%	476,629	4,605	1.0%	452,433	35,095	8.41%	74,403	15,112	25.49%	526,835	50,206	10.53%				
MARCH	494,022	92,341	23.0%	92,619	(1,944)	-2.1%	586,641	90,397	18.2%	535,291	41,269	8.35%	107,527	14,908	16.10%	642,818	56,177	9.58%				
APRIL	494,218	30,785	6.6%	72,830	(37,438)	-34.0%	567,048	(6,653)	-1.2%	529,434	35,216	7.13%	81,123	8,293	11.39%	610,557	43,509	7.67%				
MAY	502,178	(7,052)	-1.4%	71,669	(14,265)	-16.6%	573,847	(21,317)	-3.6%	560,380	58,202	11.59%	107,209	35,540	49.59%	667,589	93,742	16.34%				
JUNE	513,139	18,140	3.7%	76,593	(24,865)	-24.5%	589,732	(6,725)	-1.1%	581,229	68,090	13.27%	119,692	43,099	56.3%	700,921	111,189	18.85%				
JULY*	520,934	10,640	2%	71,040	(33,947)	-32.3%	591,974	(23,307)	-3.8%	614,883	93,949	18.03%	80,577	9,537	13.4%	695,460	103,486	17.48%				
AUGUST	483,123	10,224	2.2%	85,774	(17,254)	-16.7%	568,897	(7,030)	-1.2%	568,284	85,161	17.63%	109,357	23,583	27.5%	677,641	108,744	19.11%				
SEPTEMBER	510,465	24,187	5%	90,752	1,510	1.7%	601,217	25,697	4.5%	600,343	89,878	17.61%	92,071	1,319	1.5%	692,415	91,198	15.17%				
OCTOBER	539,988	61,868	12.9%	70,396	(10,325)	-12.8%	610,384	51,543	9.2%	548,487	8,499	1.57%	88,675	18,279	26.0%	637,162	26,778	4.39%				
NOVEMBER	625,356	6,574	1.1%	57,577	(16,732)	-22.5%	682,932	(10,158)	-1.5%													
DECEMBER	710,278	48,140	7.3%	92,777	(8,064)	-8.0%	803,056	40,077	5.3%													
Prorata Distribution(June)	1,513	778					1,513			908												
Prorata Distribution (Dec.)	995	(1,044)					995															
TOTAL	\$ 6,217,194	\$ 308,399		\$929,927			\$7,147,120	\$122,574	22.9%	\$ 5,433,562	\$ 553,602		\$954,092			\$6,386,746	\$728,122	127.88%				

FY17 LOST & TAVT	\$6,386,746
FY16 LOST & TAVT	\$7,147,120
FY15 LOST & TAVT	7,024,812
FY14 LOST & TAVT	6,771,602
FY13 LOST & TAVT	6,287,973
FY12 CONVERTED	5,763,005
FY12	5,632,027
FY11	5,244,606
FY10	4,939,542
FY09	4,789,221
FY08	5,015,881
FY07	5,621,760
FY06	5,608,446
FY05	4,426,013
FY04	3,527,663

FY16 ACTUAL TO DATE	\$4,879,051
FY17 ACTUAL TO DATE	\$5,433,562
\$ DIFFERENCE	554,510
% DIFFERENCE	11.37%

BELOW FIGURES INCLUDE TAVT CALCULATIONS

FY16 ACTUAL TO DATE	\$5,658,624
FY17 ACTUAL TO DATE	\$6,386,746
\$ DIFFERENCE	728,122
% DIFFERENCE	12.87%



Dawson County Board of Commissioners

Fleet Maintenance and Fuel Center Monthly Report –November 2017

FLEET

- **Preventative Maintenance Performed: 21**
- **Tires Mounted: 36**
- **Repair Orders Completed: 74**
- **Labor Hours: 138.0**
- **Labor Cost Savings: \$5103.24**
(Comparison of the Fleet Maintenance rate of \$43.02 per labor hour to outsourced vendors rate of \$80.00 per labor hour)
- **Parts Cost Savings: \$1,424.50**
(Comparison of Dawson County's parts discounts to outsourced markup; average 20%)
- **Total Cost Savings for October: \$6,527.74**

FUEL CENTER

- **Average fuel center price per gallon:**
Gasoline: \$1.92
Diesel: \$2.20
- **Fuel Center Usage - Dawson County and Board of Education**
Gasoline: 10,071.0 gallons; 774 transactions
Diesel: 7,039.0 gallons; 184 transactions
- **Fuel Center Usage - Etowah Water and City of Dawsonville**
Gasoline: 1,415.3 gallons; 71 transactions
Diesel: 275.2 gallons; 10 transactions
- **Revenue from Etowah Water and City of Dawsonville: \$84.53**

HIGHLIGHTS

- Fleet Maintenance has advertised the County surplus sale in the local newspaper and on County cyber outlets to let citizens know about the upcoming surplus sale. The sale will take place from December 4th to December 15th 2017.
-
-



Dawson County Board of Commissioners

Human Resources Department Monthly Report – November 2017

POSITION CONTROL

- Positions approved by BOC: 443
- # of filled F/R Positions: 273
- # of filled F/T Positions: 0
- # of filled Grant Funded Positions: 6
- # of filled P/R Positions: 39
- # of filled P/T Seasonal Positions: 12
- # of Supplemental Positions: 50
- # of Vacant Positions: 34
- # of Frozen Positions: 29
- % of Budgeted/Actual Positions: 86%

ADDITIONAL INFORMATION

- FMLA/LOA tracking: 5
- WC and/or P & L Claims filed: 3
- Unemployment Claims received: 1
- Performance Evaluations received: 10

HIGHLIGHTS

Positions Advertised/ Posted: 3

- D.A.'s Office- Receptionist
- Treatment Court- Counselor
- Treatment Court- Lead Counselor

Applications Received: 27

New Hires added into system: 11

- Sarah Ahmed- D.A.'s Office
- Larayne Smith- D.A.'s Office
- Dawn Phillips- Emergency Services
- Robert Figueroa- Planning & Development
- James Abercrombie- Public Works
- Doug Oliver- Public Works
- Nita Manterfield- Senior Services
- Hunter Griffin- Sheriff's Office
- Jonathan Mahan- Sheriff's Office
- Mary Stewart- Sheriff's Office
- Ashley Bush- Sheriff's Office

Terminations Processed: 3

- Nichole Miller- D.A.'s Office
- Cory West- Emergency Services
- Jennifer Beaujon- Treatment Court

Additional Highlights for November

- HR Director Yarbrough completed "Designing Effective Performance Appraisal Systems" at the Fall GLGPA Conference
- HR Specialist Hudson completed "Hearings and Appeals, Discipline and Grievances" at the Fall GLGPA Conference
- Attended department meetings throughout the county with County Manager Headley



Dawson County Board of Commissioners

Information Technology – November 2017

- **Calls for Service: 133**
- **Service Calls Completed: 133**

Highlights

- **Completed process for obtaining off site data back-up**
- **Began process for new telephone system upgrade**



Dawson County Board of Commissioners

Marshal Monthly Report – November 2017

- Alcohol License Establishment Inspections: 0
- Alcohol Pouring Permits Issued: 36
- Animal Control Calls Handled: 85
- Animal Bites to Human investigated: 0
 - 0 Quarantined –
- Animals Taken to DC Humane Society: 46
- Dangerous Dog Classification: 0
- Citations Issued: 1 (illegal dumping)
- Complaint Calls/In Field Visits: 53
- After hour calls: 0
- Erosion Site Visits: 0
- E-911 Addresses Issued: 0
- Non-conforming Signs Removed: 12

HIGHLIGHTS

New Code enforcement officer is onboard and having a positive impact. Has already issued a citation and conducted a sign sweep.



Dawson County Board of Commissioners

Planning and Development Monthly Report – November 2017

- **Total Building permits Issued**
 - October 2017: 48 up 20%
 - YTD 2017: 479
 - Single Family New Homes: 20 up from 18 in October 11% increase
 - Commercial Buildings: 15 up from 9 in October 67% increase
- **Business Licenses Issued:**
 - November 2017: 139
 - YTD 2017: 1807
- **Total Building Inspections Completed:**
 - October 2017: 360 down 4%
 - YTD 2017: 3894
- **Variances/Zonings Processed:**
 - November 2017: 2
 - YTD 2017: 20
- **Plats Reviewed:**
 - November 2017: 11
 - YTD 2017: 120
- **Total Stormwater/Erosion Inspections: 7**
- **Total Stormwater Warnings/Stop Work Orders Issued: 0**
- **Total Civil Plan Review Meetings: 3**
- **Total Building Plan Review Meetings: 6**

HIGHLIGHTS

Planning & Building Projects:

- Planning Commission heard one rezoning and one variance application.
- Code Enf. conducted a successful sign sweep picking up illegal signs in the right of way.



Dawson County Board of Commissioners

Parks and Recreation Monthly Report - November 2017

- **Youth Sports Participants**
 - November 2017: 839 down 48% compared to same month last year due to only 1 football team making the playoffs into November.
 - YTD 2017: 13,118 down 2% compared to last year
- **Facility Rentals/Bookings/Scheduled Uses:**
 - November 2017: 1152 up 21% compared to same month last year
 - YTD 2017: 19,336 up 37% compared to last year
- **Adult and Youth Wellness and Specialty Program Participation:**
 - November 2017: 216 up 72% compared to same month last year.
 - YTD 2017: 15,496 down 31% compared to last year due to WHP and pool numbers now being tracked under facility usage
- **Total Customers Served:**
 - November 2017: 2207 down 2% compared to same month last year
 - YTD 2017: 47,922 up 5% compared to last year

HIGHLIGHTS

Park Special Events:

-

Park Projects:

- VMP gym lobby, restrooms, gym interior and offices painted.
- Winter-Spring Activity Guide received
- All metal halide bulbs were replaced in RCP gyms and the VMP gym
- All interior light bulbs were replaced at VMP and RCP including, offices, storage, concessions, lobby, etc.
- WHP and VMP pool winterized for the season.
- VMP gym was the host site for the DC employees Thanksgiving lunch and the Community Thanksgiving Dinner sponsored by the Rotary Club.
- Final bids were received for the new pool house at VMP
- Bid documents were released and pre-bid meeting held for the repaving of VMP
- Preliminary quote was obtained to replace and update electrical panels for Fields 1 and 2 at VMP

- VMP – All foul poles painted, trash cans painted, top rail fence guard cleaned, all gates painted, pool house pump room doors painted, scoreboard poles painted, gym exterior doors painted, toilet flaps replaced, hot water supply line repaired
- RCP – Both entry gates painted, pruned crepe myrtles at electronic sign, cleaned Rotary Memorial, cleaned all signage in park, painted electrical panel at field 7-8, painted transformer at 2 story, painted pavilion walls in both pavilions, inspected all scoreboards

Athletic and Program Summary:

- Additional specialty programs for the month included basketball lessons, dance classes, adult boot camp, Tai Chi, Tennis Lessons and Yoga
- Mountain Football League (MFL) wrapped up its inaugural year of football. Only one team from Dawson County made it to the Super Bowl
- Basketball and wrestling uniforms were distributed to all participants
- Basketball and wrestling pictures were taken
- Basketball games and wrestling matches got underway for the 2017-2018 season.

On the Horizon:

- Next Park Board meeting December 11th at 5:30
- Breakfast with Santa is December 2nd at RCP.
- New flooring will be installed at VMP in the gym lobby, gym concessions and offices.
- Bid will be awarded in December for the new pool house construction.
- Bid will be awarded in January for the repaving at VMP

	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC	TOTALS
Rock Creek Park													
Tv Room	9	11	8	5	8	17	6	6	3	5	8		
Classroom	8	8	6	4	6	14	2	6	5	8	10		
Community Room	33	38	42	36	38	49	36	39	38	45	46		
Gyms	198	165	140	128	135	210	220	230	215	230	305		
Small Pav.	1	5	5	9	26	42	43	39	26	11	6		
Large Pav.	0	5	5	12	14	15	10	8	6	3	5		
Fields 7-16	20	25	160	165	150	160	140	160	185	160	90		
Soccer Fields	25	35	265	260	260	125	25	80	230	250	175		
Tennis Courts	10	15	15	15	15	25	25	25	25	25	25		
Weight Room	224	235	255	268	241	246	195	186	171	164	158		
2 story/upstairs	10	10	10	10	10	10	10	10	10	10	10		
Totals	538	552	911	912	903	913	712	789	914	911	838	0	8893
Veteran's Memorial Park													
Gym	115	95	55	58	55	52	80	65	60	90	175		
Small Pav.	0	0	2	2	8	11	5	3	2	3	1		
Large Pav.	0	0	2	5	12	8	5	3	4	5	2		
Pool Rentals-Uses	0	0	0	0	22	120	98	32	4	0	0		
Pool Swimmers Season Passes					386	2407	2379	452	135	0	0		
War Hill Park visitors- Day Use					178	298	341	381	129	152	67		
War Hill Park Camping Reservations					179	198	195	137	118	102	24		
Fields 1-6	0	25	85	78	60	55	70	75	75	50	25		
Football Field	0	5	0	1	5	15	5	5	25	10	5		
Other	15	15	15	15	15	15	15	15	15	15	15		
Totals	130	140	159	159	920	3179	3193	1168	567	427	314	0	10356
Fire Station 2	8	9	10	10	7	5	6	10	10	12			87
Total	676	701	1080	1081	1830	4097	3911	1967	1491	1350	1152	0	19336
T-Ball Participants	57	116	116	116	116	15	35	94	94	94	0		
BB Participants	102	250	250	250	250	74	51	181	181	181	0		
Adult League	0	0	120	306	315	315	315	0	0	0	0		
Basketball	278	60	0	0	0	0	0	0	60	283	283		
Football	0	0	0	0	159	163	166	166	166	166	22		
Cheer	0	0	0	0	60	60	62	62	62	62	20		
Wrestling	25	0	0	0	0	0	0	0	4	20	20		
Track	6	21	21	21	22	0	0	0	0	0	0		
Travel	90	90	90	90	90	90	160	160	160	160	160		
Instructional League	47	73	73	73	0	0	0	0	20	64	64		
Softball	38	111	111	111	111	56	14	80	80	80	0		

Soccer	288	264	264	264	264	264	160	270	270	270	270		
Swim Team	0	10	10	49	55	55	55	0	0	0	0		
Tournament Participation	0	370	0	0	252	105	0	0	0	0	0		
Volleyball	36	71	71	71	0	0	0	0	0	0	0		
Totals	967	1436	1126	1351	1694	1197	1018	1013	1097	1380	839	0	13118

Monthly Report Totals - 2017

Activity	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Total
All Sports Day Camps (1 & 2)	-	-	-	-	-	90	-	-	-	-	-	-	90
Basketball Lessons	6	6	6	16	16	1	1	-	-	-	-	-	52
Battle of the Best Relay for Life Fundraiser	-	1,500	-	-	-	-	-	-	-	-	-	-	1,500
Boot Camp (all classes)	24	33	35	35	31	21	19	140	161	150	94	-	743
Breakfast with Santa	-	-	-	-	-	-	-	-	-	-	-	-	0
Camp of Ballers	-	-	-	-	-	-	-	-	-	-	-	-	0
Cheerleading Camp	-	-	-	-	-	-	15	-	-	-	-	-	15
Circuits & Supersets	-	-	-	-	-	-	-	-	-	-	-	-	0
Community Egg Hunt	-	-	-	1,500	-	-	-	-	-	-	-	-	1,500
Dance	7	7	9	13	13	-	-	35	36	25	16	-	161
Dance Camp	-	-	-	-	-	-	-	-	-	-	-	-	0
Dance Recital	-	-	-	-	100	-	-	-	-	-	-	-	100
FIT (Functional Interval Training)	-	-	-	13	10	-	-	-	-	-	-	-	23
Fit Camp/Fit Trail	-	-	-	-	-	5	2	2	6	-	-	-	15
Guard Prep Camp	-	-	-	-	-	-	-	-	-	-	-	-	0
Healthy Eating Club	-	-	8	8	-	-	-	-	-	-	-	-	16
Lady Tigers Fundamental Basketball Camp (girls)	-	-	-	-	-	20	-	-	-	-	-	-	20
Movies in the Park	-	-	-	-	-	500	-	200	-	-	-	-	700
Pool Swimmers	-	-	-	-	-	-	-	-	-	-	-	-	0
Pups in the Park	-	-	-	-	-	-	-	-	250	-	-	-	250
Relay for Life	-	-	-	3,000	-	-	-	-	-	-	-	-	3,000
Rotary Day	-	-	-	-	500	-	-	-	-	-	-	-	500
Sandy's Basketball Camps	-	-	-	-	-	16	16	-	-	-	-	-	32
SilverSplash	-	-	-	-	-	-	18	113	-	-	-	-	131
Speed & Agility Camp	-	-	-	-	-	-	-	-	-	-	-	-	0
Spring Sports Opening Day	-	-	3,000	-	-	-	-	-	-	-	-	-	3,000
Swim Lessons	-	-	-	-	-	85	-	-	-	-	-	-	85
Tai Chi	8	5	5	5	4	4	4	28	12	36	30	-	141
Tennis Lessons	-	36	36	36	20	24	-	-	-	44	36	-	232
Tigers Fundamental Basketball Camp (boys)	-	-	-	-	-	24	-	-	-	-	-	-	24
Trunk or Treat	-	-	-	-	-	-	-	-	-	2,800	-	-	2,800
UFA Soccer Camp	-	-	-	-	-	19	-	-	-	-	-	-	19
Volleyball Camp/Clinic	-	30	-	-	-	-	15	-	-	-	-	-	45
Volleyball Lessons	-	-	-	-	3	5	6	-	-	-	-	-	14
Water Aerobics	-	-	-	-	-	-	17	44	-	-	-	-	61
Yoga	12	12	20	12	12	12	12	37	30	43	40	-	242

57 1,629 3,119 4,638 709 826 125 599 495 3,098 216 0 15,511

**Beginning with the August 2017 totals, the participation totals are based on daily usage, rather than total number of participants on the class roster.

November numbers are lower due to multiple holidays resulting in facilities being closed and instructor illness.



Dawson County Board of Commissioners

Public Works Monthly Report –November 2017

ROADS:

- Work Orders: 40
- Mowing: 102.57 road miles
- Gravel: 309.44 tons
- Tanner Road, Steve Tate, Kelly Bridge Road, and Thompson Road have been completed.
- Grizzle/Lumpkin Campground/Industrial Park intersection are 98% completed.

ENGINEERING/GIS:

- Assisted Other Departments with GIS needs
- Assisted public with maps and GIS requests
- Continued working Culvert analysis

TRANSFER STATION:

- Solid Waste: 573.10 Tons
- Recycling: 29.28 Tons
- Recycling scrap metal: 7.36 Tons



Dawson County Board of Commissioners

Dawson County Senior Services Monthly Report – November 2017

SENIOR CENTER

- **Home Delivered Meals Served**
 - November 2017: 1,236 down 18% compared to same month last year
 - YTD 2017: 14,626 down 25% compared to last year
- **Congregate Meals Served**
 - November 2017: 480 down 18% compared to same month last year
 - YTD 2017: 6,012 up 1% compared to last year
- **Physical Activity Participation**(Tai Chi, Silver Sneakers, individual fitness)
 - November 2017: 396 up 12% compared to same month last year
 - YTD 2017: 5,412 up 24% compared to last year
- **Lifestyle Management Participation**(art, bridge, bingo, awareness, prevention)
 - November 2017: 288 down 19% compared to same month last year
 - YTD 2017: 2,734 down 11% compared to last year

TRANSIT

- **DOT Trips Provided**
 - November 2017: 255 up 3% compared to same month last year
 - YTD 2017: 2,702 down 10% compared to last year
- **Senior Trips Provided**
 - November 2017: 645 up 17% compared to same month last year
 - YTD 2017: 7,542 up 13% compared to last year
- **# of Miles**
 - November 2017: 7,091 down 2% compared to same month last year
 - YTD 2017: 81,400 down 6% compared to last year
- **Gallons of Fuel**
 - November 2017: 832 down 2% compared to same month last year
 - YTD 2017: 10,213 down 3% compared to last year

HIGHLIGHTS

November Meetings & Events:

- November 1 - Heating Assistance Program with 9th District – signed up over 30 clients for assistance with their gas/electrical bill.
- November 1 – Legacy Link visited the Senior Center to do the second of their yearly inspections. No deficiencies were found.
- November 1 – Lanier Swafford taught the “Stop the Bleed” training at the Senior Center for all employees including Transit.
- November 2 – Senior Center hosted the annual RSVP Reception to honor volunteers.
- November 6 – Tammy Loggins and Lee Adkins attended a training seminar at Legacy Link for DHS Trip reporting.
- Senior Clients went on a Field Trip to the Apple Houses in Ellijay on November 8.
- November 8 – Held Open Enrollment for insurance needs with Georgia Cares.
- November 9 – Hosted the Community Network Meeting at the Senior Center.
- Legacy Link came to the center on November 14th and conducted a training seminar on the new Department of Aging Harmony Program for the staff.
- November 16 - Dawn Pruett attend the Family Connection Board Meeting and Mitigation Meeting.
- November 22 – Senior Center staff delivered 5 Thanksgiving Meals to Homebound Seniors in need. These meals were prepared by Kroger.
- November 22 – Dawn Pruett and Marshelle Savage took 12 senior clients to the Rotary Community Thanksgiving Dinner held at Veteran’s Park.
- November 20 – Dawn Pruett attended Meals on Wheels of Georgia Board Meeting in Macon.
- November 20 – Welcomed the Dahlonega Gymnastics who performed for our senior clients.
- November 29 – David Headley, Dawn Pruett, Lisa Henson and David McKee met at the Senior Center to discuss plans for the new center.
- November 29 – David Headley and Danielle Yarbrough met with Center and Transit Staff at the Center.
- Silver Sneakers classes continue on Tuesday and Thursday. Tai Chi is offered Monday and Wednesday. Floor and Chair Yoga are held on Fridays. Sit and Stretch is held each Wednesday. Bible Study is on the First Tuesday and every Thursday as well as Art/Jewelry Classes on Thursday and Friday

Special Dates Coming Soon:

- December 2: Christmas Bazaar and Art Show
- December 4: Outside the Lines Christmas Ornament Party
- December 5: Retired Teachers and Bingo
- December 6: Dollar Tree
- December 11: Christmas Dollar Holler
- December 12: Reindeer Games with EON Health
- December 13: Wal-Mart
- December 14: Christmas Party
- December 15: Today’s Seniors with Dawn and Krista
- December 18: Christmas Caroling with 4

- December 18: Nutrition Education with Michelle
- December 19: Amicalola Falls Christmas Lunch
- December 20: Wal-Mart
- December 21: Christmas Pizza Party
- December 26: Bingo
- December 27: Health Education with Dedri
- December 27: Dollar General