



# City of Rowlett

## Staff Report

4000 Main Street  
P.O. Box 99  
Rowlett, TX 75080-0099  
www.rowlett.com

**AGENDA DATE:** 09/06/2016

**AGENDA ITEM:** 8F

### **TITLE**

Conduct a public hearing and consider an ordinance accepting the City's Updated Impact Fee Study for Roadways and amend the roadway impact fee rate.

### **STAFF REPRESENTATIVE**

Garrett Langford, AICP, Principal Planner

### **SUMMARY**

The purpose of this item to consider an update that will amend the Roadway Impact Fee Study and amend the roadway impact fee. The purpose of the update is to include Bayside (formerly known as Robertson Park) which was incorporated into the City in April of 2015. The Planning and Zoning Commission serving in their capacity of the Capital Improvements Advisory Committee (CIAC) reviewed the study, conducted a public hearing and voted unanimously to recommend approval of the amendments as presented at their July 26, 2016, meeting. The draft meeting minutes can be viewed as Attachment 1.

### **BACKGROUND INFORMATION**

Impact fees are one-time fees that are charged against new developments to assist in paying for the costs of providing additional public infrastructure (water, wastewater, and roads) to support the new developments. Chapter 395 of the Texas Local Government Code requires that cities review and update their water, wastewater, and roadway impact fee studies once every five years. This was last done in December 2013 when the City completed an update of the water, wastewater, and roadway impact fee studies. This involved adopting an updated impact fee study to reflect the changes in the City's future land assumptions, which were changed significantly due to *Realize Rowlett 2020* and associated Form-Based Code rezonings. The resulting changes in demand on water, sewer and roadways and the proposed improvements to satisfy this future demand must be accurately reflected in the study in order for the proposed improvement to be legally eligible to receive funding from the collected impact fees.

The 2013 Impact Fee Update did not include Bayside in the service areas for the Roadway Impact Fee. State law limits roadway impact fees to within the City's municipal boundaries which precluded including Bayside in the 2013 Roadway Impact Fee Study. Now that Bayside is within the City's municipal boundaries, Staff is proposing a minor update to the 2013 Roadway Impact Fee Study to incorporate Bayside within the study. This will allow the City to collect roadway impact fees for the new developments that occur within Bayside. Kimley-Horn and Associates has been working with City Staff to compile the necessary information to update the Roadway Impact Fee Study.

Per State Law, the City Council must set a public hearing date at least 30 days prior to the scheduled public hearing wherein the final study will be presented to the Council and public input received. The City Council set this date for September 6, 2016, at 7:30 p.m. Ultimately the Council is tasked with three decisions regarding impact fees:

1. Conduct a public hearing to receive public comments regarding the Updated Roadway Impact Fee Study.
2. Consider approving the Updated Roadway Impact Fee Study.
3. Amend the roadway impact fee rates.

Once City Council approves the Study then an amendment to the roadway impact fee will be necessary as the Study establishes a new maximum fee rate that can be charged for Service Area 2.

## **DISCUSSION**

Impact fees are a mechanism to recover costs associated with infrastructure needed to serve future development. There are three kinds of impact fees: water, wastewater, and roadway. Impact fees are a one-time fee and are governed by Chapter 395 of the Texas Local Government Code. Only certain capacity building costs are eligible to be paid for with impact fees and associated projects must be shown on the approved Impact Fee Capital Improvement Plan included in the study. These include: construction, planning, surveying, and engineering; land acquisition and associated costs; capital improvement planning and/or financial consulting; projected interest and finance costs and local share for state and federal roadways. Impact fees cannot be used on capital improvements NOT identified in the Impact Fee Capital Improvement Plan (CIP), operations and maintenance costs, improvements to remedy existing deficiencies, administrative and operational costs of the City, and non-CIP debt service.

As it was stated previously in this report, the purpose of updating the Roadway Impact Fee Study is to include Bayside and its CIP eligible roadway projects. The final updated study can be viewed in its entirety in Exhibit A. In addition, representatives from Kimley-Horn and Associates will provide a detailed presentation at the September 6<sup>th</sup> meeting to present the report's findings. The update has modified the Land Use Assumptions and Capital Improvement Plan to reflect the future developments that are expected to occur within Bayside.

The report establishes the maximum allowable roadway impact fee that could be assessed by the City of Rowlett. The maximum assessable roadway impact fee calculated in this report is \$855 (unchanged from 2014) for Service Area 1 and \$466 for Service Area 2. Currently, the maximum rate charged for Service Area 2 is \$698. Even though the amount of CIP eligible projects for Service Area 2 is increasing from \$10,200,663 to \$32,809,201 the fee rate is being reduced because there will be much more development with the inclusion of Bayside to spread the cost of the increase CIP roadway projects. Good news.

Attachment 2 shows the current roadway impact fee schedule for Service Areas 1 and 2. Staff recommends leaving the roadway impact fees for Service Area 1 unchanged and amending the

fees for Service Area 2 based on the new maximum fee rate of \$466 per development unit (Exhibit B – Detailed Proposed Fee Chart for Service Area 2). The percentage of the allowable maximum fee rate has been adjusted in order to maintain the same collection rate for all land uses except single family dwellings. The fee rate for single family homes was already set at 100% of the maximum so the reduction in the maximum fee rate will result in a reduction in the amount collected for new single family homes in Service Area 2.

### **FINANCIAL/BUDGET IMPLICATIONS**

The true fiscal impact of the study and fee rates are directly tied to development. The Study is meant to provide an overview of eligible funds recoverable through impact fees. Based on the amount of projects listed in the Capital Improvement Plans, impact fees alone will not cover the cost. Thus, it will still be important to supplement costs of major projects with the general fund and future bond elections.

### **RECOMMENDATION ACTION**

Move to approve the ordinance to accept the Updated Roadway Impact Fee Study and accept the roadway impact fees as presented and amend the master fee schedule accordingly.

### **ORDINANCE**

**AN ORDINANCE OF THE CITY OF ROWLETT, TEXAS, UPDATING AND ADOPTING REVISED LAND USE ASSUMPTIONS AND THE CAPITAL IMPROVEMENT PLAN FOR ROADWAY FACILITIES; AMENDING THE MASTER FEE SCHEDULE TO REVISE THE IMPACT FEES FOR ROADWAY FACILITIES; PROVIDING FOR SERVICE AREAS AND SERVICE UNITS; PROVIDING A REPEALING CLAUSE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the City Council of the City of Rowlett has previously adopted land use assumptions, on which the City's Capital Improvements Plan was based, and adopted certain impact fees in the City's Master Fee Schedule for roadway facilities for the financing of capital improvements required by new development in the City; and

**WHEREAS**, the City has contracted with Kimley-Horn and Associates, Inc., to prepare an Impact Fee Study and to review and advise on whether changes in the City's land use assumptions were warranted; and

**WHEREAS**, Kimley-Horn has completed such plan, entitled, "2016 Roadway Impact Fee Minor Update," which plan has been submitted to and considered by the City Council, following public hearing, on September 6, 2016; and

**WHEREAS**, the City Council finds that it is in the best interest of the City and its citizens to approve and adopt the revised land use assumptions and capital improvements plan revisions recommended by Kimley-Horn, and to revise its impact fees accordingly; and

**WHEREAS**, the City Council of the City of Rowlett, in compliance with state laws with reference to amending its land use assumptions, capital improvements plan, and impact fees, have given the requisite notice by publication and otherwise, and after holding due hearings and affording a full and fair hearing to all property owners generally, the governing body of the City of Rowlett is of the opinion that said land use assumptions, capital improvements plan, and impact fees should be amended as provided herein.

**NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ROWLETT, TEXAS:**

**SECTION 1.** That the City's previously-adopted Land Use Assumptions and Capital Improvements Plan for roadway facilities be and are hereby amended by updating and adopting the "2016 Roadway Impact Fee Minor Update," prepared by Kimley-Horn and Associates, Inc., as the amended land use assumptions for roadway facilities, and the capital improvements plan of the City of Rowlett for roadway impact fees, a copy of which is attached hereto and incorporated herein as Exhibit A

**SECTION 2.** That the impact fee rates and charges for roadway impact fees, based on Service Area 2, land use category, and development unit, as set forth in Exhibit "B," which is attached hereto and by this reference incorporated herein, be and are hereby adopted.

**SECTION 3.** That the Master Fee Schedule of the City of Rowlett, Texas, be and is hereby amended by repealing the section entitled "Roadway Impact Fees Service Area 1 and Service Area 2," and replacing said section with a new section, entitled "Roadway Impact Fees Service Area 1 and Service Area 2," and the tables shown in Exhibit "C," which exhibit is attached hereto and by this reference incorporated herein, and are hereby adopted as the Impact Fees for the City of Rowlett, Texas for the Service Areas shown therein. The tables shown in Exhibit "C" shall replace the existing Roadway Impact Fees Service Area 1 and Service Area 2 tables shown in the Master Fee Schedule and the fees adopted herein shall be effective and shall henceforth be charged for applicable new development of and from the effective date of this ordinance.

**SECTION 4.** All ordinances and provisions of the City of Rowlett, Texas, that are in conflict with this Ordinance shall be repealed and the same hereby repealed, and all ordinances and provisions of ordinances of said City is not so repealed are hereby retained in full force and effect.

**SECTION 5.** That should any section, paragraph, subdivision, clause, phrase or provision of this ordinance shall be judged invalid or unconstitutional, the same shall not affect the validity of this ordinance as a whole or any portion thereof other than that portion so decided to be invalid or unconstitutional.

**SECTION 6.** This ordinance shall take effect immediately from and after its passage as the law and charter in such case provide.

## **ATTACHMENTS**

Exhibit A – 2016 Roadway Impact Fee Study Minor Update

Exhibit B – Detailed Proposed Fee Chart for Service Area 2

Exhibit C – Abbreviated Chart for Master Fee Schedule

Attachment 1 – CIAC Meetings Minutes

Attachment 2 – Detailed Current Fee Chart for Service Areas 1 and 2

*2016 Roadway Impact Fee Minor Update*

**City of Rowlett, Texas**



**Prepared by:**

**Kimley»»Horn**

Texas Registration Number 928

801 Cherry Street, Unit 11, Suite 950  
Fort Worth, TX 76102  
817.335.6511

**June 2016**

# Table of Contents

**Table of Contents ..... i**

**2.1 Executive Summary ..... 1**

**2.2 Introduction ..... 3**

**2.3 Roadway Impact Fee Calculation Inputs..... 4**

    A. Land Use Assumptions .....4

    B. Capital Improvement Plan..... 6

**2.4 Methodology For Roadway Impact Fees ..... 11**

    A. Service Area ..... 11

    B. Service Units ..... 11

    C. Cost Per Service Unit ..... 12

    D. Cost of the CIP ..... 12

    E. Service Unit Calculation ..... 15

**2.4 Impact Fee Calculation..... 20**

    A. Maximum Assessable Roadway Impact Fee Per Service Unit..... 20

    B. Plan For Awarding the Roadway Impact Fee Credit..... 22

    C. Service Unit Demand Per Unit of Development ..... 24

**2.5 Sample Calculations..... 26**

**2.6 Conclusion ..... 27**

**APPENDICES**

    A. Conceptual Level Project Cost Projections

    B. CIP Service Units of Supply

    C. Existing Roadway Facilities Inventory

    D. Land Use Assumptions

## List of Exhibits

2.1	Roadway Service Areas .....	6
2.2	Roadway Impact Fee Capital Improvement Plan – Service Area 1 .....	6
2.3	Roadway Impact Fee Capital Improvement Plan – Service Area 2 .....	6

## List of Tables

2.1	Land Use Assumptions for Roadway Impact Fees .....	3
2.2	10-Year Roadway Impact Fee Capital Improvement Plan for Service Area 1 .....	5
2.3	10-Year Roadway Impact Fee Capital Improvements Plan for Service Area 2 .....	5
2.4	Level of Use for Proposed Facilities .....	7
2.5	Level of Use for Existing Facilities.....	8
2.6	10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area 1 .....	10
2.7	10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area 2 .....	10
2.8	Transportation Demand Factor Calculations.....	13
2.9	10-Year Growth Projections .....	14
2.10	Maximum Assessable Roadway Impact Fee.....	18
2.11	Land Use/Vehicle-Mile Equivalency Table (LUVMET).....	20

## 2.1 EXECUTIVE SUMMARY

This study was performed to update the City of Rowlett Roadway Impact Fees. Transportation system analysis is an important tool for facilitating orderly growth of the transportation system and for providing adequate facilities that promote economic development in the City of Rowlett. The implementation of an impact fee is a way to shift a portion of the burden of paying for new facilities onto new development.

The City of Rowlett is divided into two (2) service areas for the purposes of the 2016 Roadway Impact Fee Minor Update. These service areas cover the entire corporate boundary of the City of Rowlett, which has expanded since the 2013 Roadway Impact Fee Study to include the Bayside Area. Each service area is an individual study area. For each service area the funds collected must be spent on projects identified in the Roadway Impact Fee Capital Improvement Program (CIP) for that specific service area. The 2016 Roadway Impact Fee Minor Update only effects Service Area 2 (South). Service Area 1 (North) remains unchanged.

Roadway improvements necessary to serve the 10-year (2013-2023) needs were evaluated. Typically, infrastructure improvements are sized beyond the 10-year requirements; however, Texas’ impact fee law (Chapter 395) only allows recovery of costs to serve the 10-year planning period. For example, the projected recoverable cost to construct the infrastructure needed through 2023 by service area is:

SERVICE AREA:	1 (North)	2 (South)
COST OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH	\$ 22,001,285	\$ 32,809,201

A portion of the remainder can be assessed as the planning window extends beyond 2023 and as the impact fees are updated in the future. As required by Chapter 395 this total cost is reduced by 50% to account for the credit of the use of ad valorem taxes to fund the Roadway Impact Fee CIP.

The impact fee law defines a service unit as follows: “Service Unit means a standardized measure of consumption attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years.”

Therefore, the City of Rowlett defines a *service unit* as the number of vehicle-miles of travel during the afternoon peak-hour. For each type of development the City of Rowlett utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET) to determine the number of service units.

Based on the City’s 10-year growth projections and the associated demand (consumption) values for each service area are as follows in terms of vehicle-miles:

<b>SERVICE AREA:</b>	<b>1 (North)</b>	<b>2 (South)</b>
TOTAL VEHICLE-MILES OF NEW DEMAND OVER TEN YEARS	12,867	35,176

Based on the additional service units and the recoverable capital improvements plans, the City may assess a maximum roadway impact fee per vehicle-mile ( $[\text{Recoverable Cost of CIP} * 50\%] / \text{Total Growth}$ ) of:

<b>SERVICE AREA:</b>	<b>1 (North)</b>	<b>2 (South)</b>
MAX ASSESSABLE FEE PER SERVICE UNIT	\$ 855	\$ 466

## 2.2 INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure Texas cities must follow in order to create and implement impact fees. Senate Bill 243 (SB 243) amended Chapter 395 in September 2001, to define an impact fee as “a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.”

Chapter 395 mandates that impact fees be reviewed and updated at least every five (5) years. Accordingly, the City of Rowlett developed its Land Use Assumptions and Roadway Capital Improvement Plan (CIP) with which to update the City’s Roadway Impact Fees in 2013. The City has retained Kimley-Horn and Associates, Inc. to provide a minor update to the adopted 2013 Roadway Impact Fee Study. This report includes details of the impact fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the CIP, and the refinement of the Land Use Equivalency Table.

This report introduces and references two of the basic inputs to the Roadway Impact Fee: the **Land Use Assumptions** and the **Capital Improvement Plan (CIP)**. Information from these two components is used extensively in the remainder of the report. This report consists of a detailed discussion of the methodology for the computation of impact fees. This discussion - **Methodology for Roadway Impact Fees** and **Impact Fee Calculation** addresses each of the components of the computation and modifications required for the study. The components include:

- Service Areas;
- Service Units;
- Cost Per Service Unit;
- Cost of the CIP;
- Service Unit Calculation;
- Maximum Assessable Impact Fee Per Service Unit; and
- Service Unit Demand Per Unit of Development.

The report also includes a section concerning the **Plan for Awarding the Roadway Impact Fee Credit**. In the case of the City of Rowlett, the credit calculation was based on awarding a 50 percent credit.

The final section of the report is the **Conclusion**, which presents the findings of the update analysis.

## 2.3 ROADWAY IMPACT FEE CALCULATION INPUTS

### A. LAND USE ASSUMPTIONS

The land use assumptions used for this report were from the 2013 Roadway Impact Fee Study with the exception of the additional growth that is anticipated as a result of the annexation of the Bayside area. Information regarding this growth has been included in the **Appendix**, in addition to the information regarding the 2013 Roadway Impact Fee Study land use assumptions. For purposes of roadway impact fees, the City of Rowlett was divided into two service areas contained entirely within the current corporate limits. Lakeview Parkway (SH 66) serves as the dividing line between the two areas. Exhibit 2.1 displays the roadway Service Areas. In the 2016 Roadway Impact Fee Minor Update Service Area 1 remains the same, and Service Area 2 now includes the Bayside area.

The population and employment estimates and projections were all compiled in accordance with the following categories:

*Dwelling Units:* Number of dwelling units, both single-and multi-family.

*Employment:* Square feet of building area based on three (3) different classifications. Each classification has unique trip making characteristics.

Retail: Land use activities which provide for the retail sale of goods that primarily serve households and the location choice is oriented toward the household sector, such as grocery stores and restaurants.

Service: Land use activities which provide personal and professional services such as government and other professional administrative offices.

Basic: Land use activities that produce goods and services such as those that export outside of the local economy, such as manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses.

**Table 2.1** presents the land use assumptions updated from the 2013 study that were utilized in the roadway impact fee development. This table illustrates the growth that is projected for the City of Rowlett from 2013 – 2023.

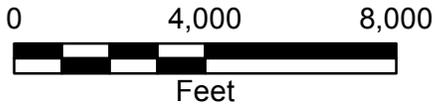
**Table 2.1 Residential and Non-Residential Land Use Assumption Growth Projections (2013-2023)**

SERVICE AREA	DWELLING UNITS	BASIC (ft <sup>2</sup> )	SERVICE (ft <sup>2</sup> )	RETAIL (ft <sup>2</sup> )
1	1,013	422,500	270,000	474,300
2	3,157	227,500	1,310,000	1,080,700

# Roadway Service Areas



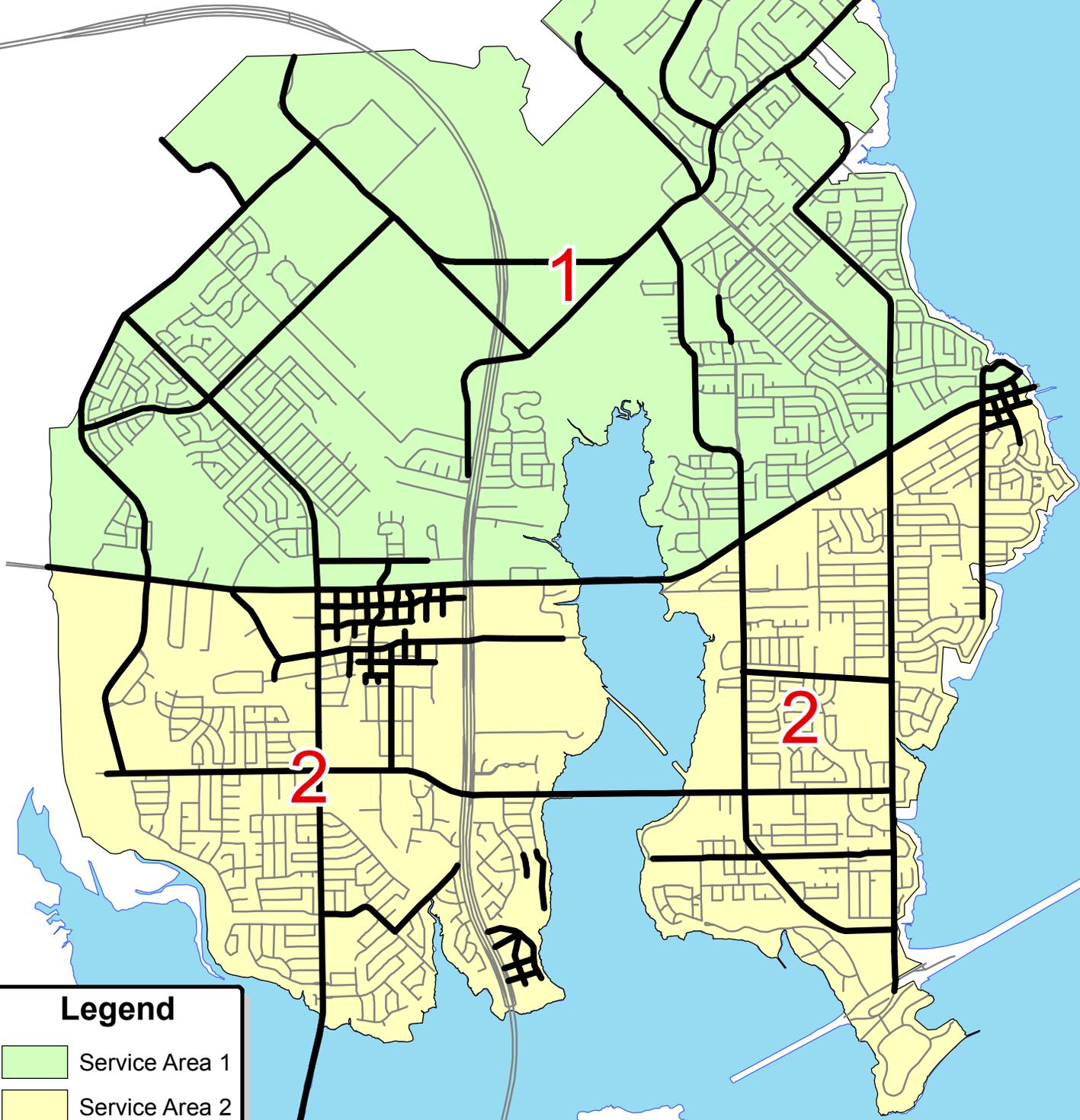
2016 Roadway Impact  
Fee Minor Update



June 2016

Kimley»Horn

\*Service Area 1 remains unchanged from the 2013 Roadway Impact Fee Study



**Legend**

-  Service Area 1
-  Service Area 2
-  Lake

## B. CAPITAL IMPROVEMENT PLAN

The City has identified the City-funded transportation projects needed to accommodate the projected growth within the City. The CIP for Roadway Impact Fees is made up of:

- Recently completed projects with excess capacity available to serve new growth;
- Projects currently under construction; and
- Remaining projects needed to complete the City's Master Thoroughfare Plan.

The CIP includes arterial and collector facilities. All of the arterial and collector facilities are part of the currently adopted Master Thoroughfare Plan or included in one of the Council adopted specific area roadway plans (Downtown, Healthy Living, or Signature Gateway).

The CIP for Roadway Impact Fees that is proposed for the Roadway Impact Fee Minor Update is listed in **Tables 2.2** and **2.3**, and mapped in **Exhibit 2.2 (Service Area 1)** and **Exhibit 2.3 (Service Area 2)**. The CIP for Service Area 1 was not evaluated as part of this update. Service Area 2 was updated from minor changes. The tables show the length of each project as well as the facility's classification. The CIP was developed in conjunction with input from City of Rowlett staff and represents those projects that will be needed to accommodate the growth projected from the land use assumptions.

The various roadway classifications describe the purpose and function of each roadway. These roadway classifications are based on the existing City of Rowlett Master Thoroughfare Plan. There are seven primary classifications that were used in the 2016 Rowlett Roadway Impact Fee Minor Update. These classifications are:

- Major Thoroughfare – 6 Lanes Divided (A+);
- Major Thoroughfare – 6 Lanes Divided (A);
- Secondary Thoroughfare – 4 Lanes Divided (B+);
- Secondary Thoroughfare – 4 Lanes Undivided (B); and
- Collector Thoroughfare – 2 Lanes Undivided (C).

The specific area roadway plans were identified as SG (Signature Gateway), D (Downtown), or HL (Healthy Living). Each of the classifications have different vehicular capacities assigned to them (see **Table 2.4**) based on their roadway characteristics. Major/secondary arterial thoroughfares are designed to move more traffic and provide a larger amount of capacity. Arterials provide for travel between neighborhoods and commercial areas or serve as routes for thru-traffic from adjacent cities. A collector's primary function is to bring traffic from local streets to arterial facilities. Collectors are intended to move less traffic and are designed with lower vehicular capacity than arterial facilities.

**Table 2.2 10-Year Roadway Impact Fee Capital Improvement Plan for Service Area 1**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
SA 1	1-A	B	Castle Dr.	Miles Rd. to Merritt Rd.	0.51	100%
	1-B	B, B+	Hickox Rd. (1)	Rowlett Rd. to 235' NE. of Toler Rd.	0.59	100%
	1-C	B+	Hickox Rd. (2)	235' NE. of Toler Rd. to Merritt Rd.	0.76	100%
	1-D	B	Merritt Rd.	N. City Limit to 860' SE. of	1.52	100%
	1-E	A	Liberty Grove-Merritt Connector (1)	PGBT NBFR to 805' E. of PGBT NBFR	0.15	100%
	1-F	B	Liberty Grove-Merritt Connector (2)	805' E. of PGBT NBFR to Liberty Grove Rd.	0.49	100%
	1-G	B	Liberty Grove Rd. (1)	Rosebud Dr. to PGBT SBFR	0.67	100%
	1-H	B	Liberty Grove Rd. (2)	PGBT NBFR to Merritt Rd.	0.16	100%
	1-I	B	Liberty Grove Rd. (3)	Merritt Rd. to Chiesa Rd.	0.95	100%
	1-J	B	Liberty Grove Rd. (4)	Chiesa Rd. to Princeton Rd.	0.28	100%
	1-K	B	Liberty Grove Rd. (5)	Broadmoor Ln. to Elm Grove Rd.	0.84	100%
	1-L	B	Elm Grove Rd.	N. City Limit to Liberty Grove Rd.	1.08	100%
	1-M	B+	Dalrock Rd. (1)	Liberty Grove Rd. to 770' SE. of Lake North Rd.	0.46	100%
	1-N	B+	Dalrock Rd. (2)	105' NE. of Pecan Ln. to Princeton Rd.	1.45	100%
	1-O	A (1/3)	Dalrock Rd. (3)	Princeton Rd. to Lakeview Pkwy.	0.36	100%
	1-P	C	Princeton Rd.	Existing Princeton Rd. to Liberty Grove Rd.	0.19	100%
	1-Q	B	Chiesa Rd. (1)	Liberty Grove Rd. to Danridge Rd.	1.40	100%
	1-R	C	Danridge Rd.	Maplewood Dr. to Traveler's Crossing	0.25	100%
	1-S	C	Freedom Ln.	Big A. Rd. to Lakeview Pkwy.	0.15	100%
	1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	50%
	1-U	HL-C3	HL Collector #1	HL Collector #1	0.22	100%
	1-V	HL-C2	HL Collector #2	HL Collector #2	0.22	100%
	1			Dalrock Rd. at Lakeview Pkwy.		50%
	2			Liberty Grove Rd. at Chiesa Rd.		100%
	3			Princeton Rd. at Liberty Grove Rd.		100%
	4			Merritt Rd. at Hickox Rd.		100%
	5			Merritt Rd. at Castle Dr.		100%
	6			Merritt Rd. at Liberty Grove Rd.		100%
7			Merritt Rd. at PGBT		100%	

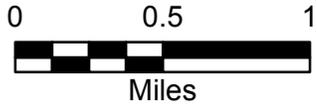
**Table 2.3 10-Year Roadway Impact Fee Capital Improvement Plan for Service Area 2**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
SA 2	2-A	B	Main St.	Lakeview Pkwy. to 310' W. of Rowlett Rd.	0.58	100%
	2-B	B	Future Main-Century Connection	Main St. to Century Dr.	0.11	100%
	2-C	A (1/3)	Miller Rd. (1)	Dexham Rd. to Rowlett Rd.	1.02	100%
	2-D	A (1/3)	Miller Rd. (2)	Rowlett Rd. to PGBT SBFR	0.77	100%
	2-E	A (1/3)	Miller Rd. (3)	PGBT NBFR to 360' E. of PGBT NBFR	0.07	100%
	2-F	A	Miller Rd. (4)	360' E. of PGBT NBFR to Lake Ray Hubbard Bridge	0.33	100%
	2-G	A	Miller Rd. (5)	Lake Ray Hubbard Bridge to 372' W. of Dalrock Rd.	1.02	100%
	2-H	B+	Chiesa Rd. (2)	360' S. of Lakeview Pkwy. to Miller Rd.	1.25	100%
	2-I	B+	Chiesa Rd. (3)	Miller Rd. to Dalrock Rd.	1.21	100%
	2-J	A (1/3)	Dalrock Rd. (4)	Lakeview Pkwy. to Miller Rd.	1.79	100%
	2-K	A (1/3)	Dalrock Rd. (5)	Miller Rd. to IH-30 WBFR	0.98	100%
	1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	50%
	2-M	D-C	Melcer Dr.	Melcer Dr. Extension	0.20	100%
	2-N	D-C	Martin Dr. (1)	Main St. to South End	0.14	100%
	2-O	C	Martin Dr. (2)	Melcer Dr. to Main St.	0.11	100%
	2-P	A (1/3)	Rowlett Rd.	Century Dr. to Kyle Rd.	0.31	100%
	2-Q	SG-C5	SG Collector #1	SG Collector #1	0.28	100%
	2-R	SG-C5	SG Collector #2	SG Collector #2	0.07	100%
	2-S	SG-C5	SG Collector #3	SG Collector #3	0.16	100%
	2-T	SG-C4	SG Collector #4	SG Collector #4	0.17	100%
	2-U	SG-A+	SG Major Thoroughfare	SG Major Thoroughfare	0.09	100%
	2-V	HL-C1	HL Collector #3	HL Collector #3	0.13	100%
	2-W	BS-A	Bayside Arterial	IH-30 WBFR to Bayside Boulevard	0.26	100%
	1		Intersection Improvement	Dalrock Rd. at Lakeview Pkwy.		50%
	2		Intersection Improvement	Dalrock Rd. at Chiesa Rd.		100%
	3		Signal Installation	Dexham Rd. at Miller Rd.		100%

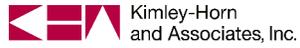
# Impact Fee CIP (SA 1)



## Roadway Impact Fee Update

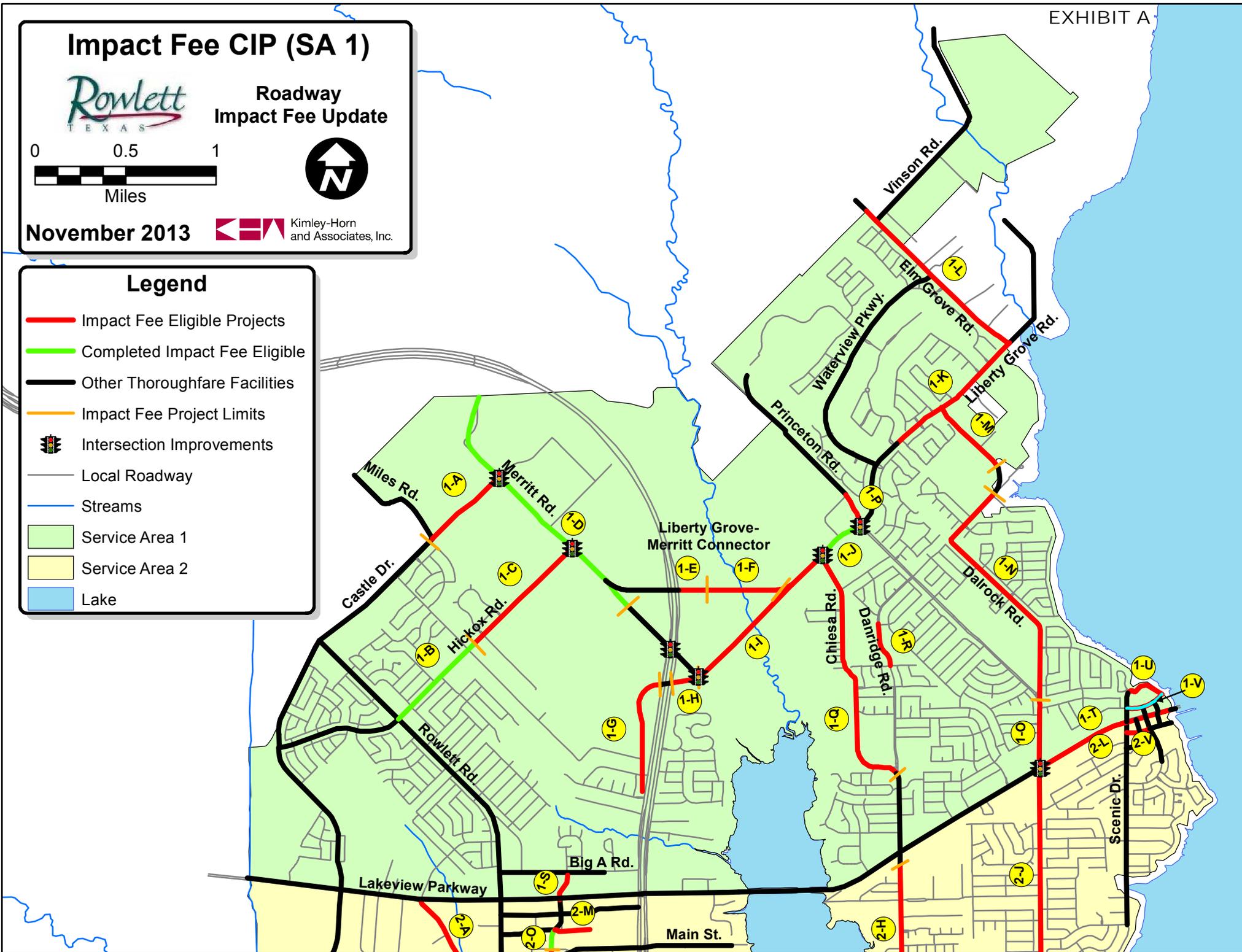


November 2013



### Legend

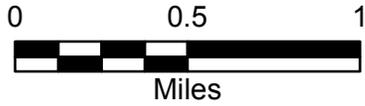
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Other Thoroughfare Facilities
- Impact Fee Project Limits
- Intersection Improvements
- Local Roadway
- Streams
- Service Area 1
- Service Area 2
- Lake



# Impact Fee CIP (SA 2)



## 2016 Roadway Impact Fee Minor Update



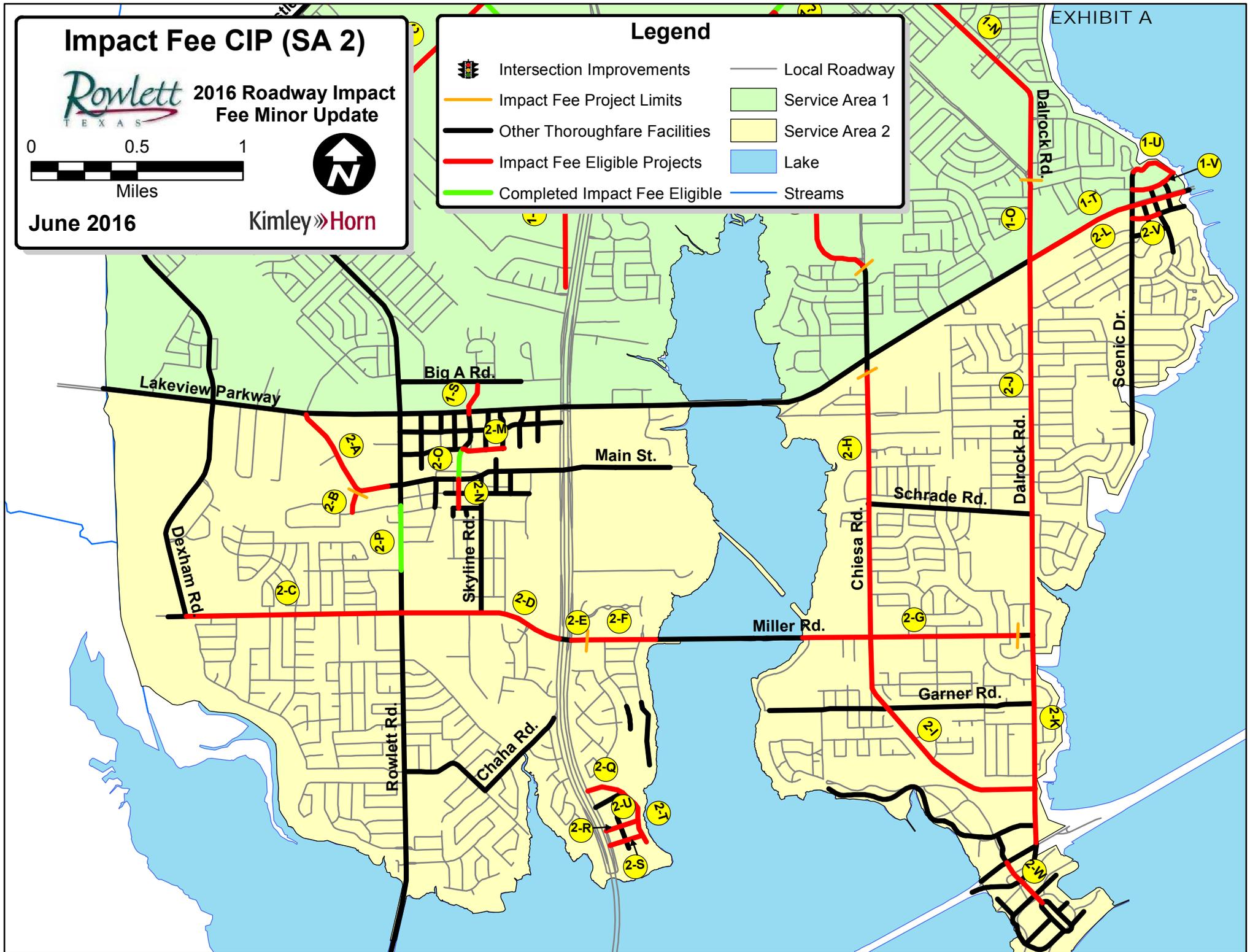
June 2016

Kimley»Horn

### Legend

- Intersection Improvements
- Impact Fee Project Limits
- Other Thoroughfare Facilities
- Impact Fee Eligible Projects
- Completed Impact Fee Eligible
- Local Roadway
- Service Area 1
- Service Area 2
- Lake
- Streams

EXHIBIT A



## 2.4 METHODOLOGY FOR ROADWAY IMPACT FEES

### A. SERVICE AREA

The service areas used in the 2016 Roadway Impact Fee Minor Update are shown in the previously referenced **Exhibit 2.1**. Chapter 395 of the Texas Local Government Code specifies that “the service areas are limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles.” Based on the guidance in Chapter 395 and examination of the City of Rowlett, two roadway service areas were deemed appropriate. These service areas cover the entire corporate boundary of the City of Rowlett. Service Area 1 is located north of Lakeview Parkway (SH 66) and Service Area 2 is located south of Lakeview Parkway (SH 66). Both service areas are approximately five (5) miles in diameter. In the 2016 Roadway Impact Fee Minor Update Service Area 1 remains the same, and Service Area 2 now includes the Bayside area.

### B. SERVICE UNITS

The “service unit” is a measure of consumption or use of the roadway facilities by new development. In other words, it is the measure of supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. On the supply side, this is a lane-mile of an arterial street. On the demand side, this is a vehicle-trip of one-mile in length. The application of this unit as an estimate of either supply or demand is based on travel during the afternoon peak hour of traffic. This time period is commonly used as the basis for transportation planning and the estimation of trips created by new development.

Another aspect of the service unit is the service volume that is provided (supplied) by a lane-mile of roadway facility. This number, also referred to as capacity, is a function of the facility type, facility configuration, number of lanes, and level of service. The hourly service volumes used in the 2016 Roadway Impact Fee Minor Update are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG), but have been adjusted to the City of Rowlett’s Master Thoroughfare Plan. **Tables 2.4** and **2.5** show the service volumes utilized in this report.

**Table 2.4 Level of Use for Proposed Facilities  
 (used in Appendix B – CIP Service Units of Supply)**

Roadway Type (MTP Classifications)	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
Major Thoroughfare (A+)	Divided	700
Major Thoroughfare (A)	Divided	700
Secondary Thoroughfare (B+)	Divided	700
Secondary Thoroughfare (B)	Undivided	625
Collector Thoroughfare (C)	Undivided	500
Signature Gateway, Healthy Living, and Downtown Roadways	Undivided	425

**Table 2.5 Level of Use for Existing Facilities  
 (used in Appendix C – Existing Roadway Facilities Inventory)**

<b>Roadway Type</b>	<b>Description</b>	<b>Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility</b>
<b>2U-A</b>	Two lane undivided – Rural cross-section	450
<b>2U</b>	Two lane undivided	500
<b>3U</b>	Three lane undivided (TOWLTL)	550
<b>4U</b>	Four lane undivided	500
<b>4D</b>	Four lane divided	650
<b>6D</b>	Six lane divided	700

**C. COST PER SERVICE UNIT**

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the roadway impact fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel at a level of service corresponding to the City’s standards. The cost per service unit is calculated for each service area based on a specific list of projects within that service area.

The second component of the cost per service unit is the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period. Chapter 395 requires that Impact Fees be assessed only to pay for growth projected to occur in the city limits within the next ten years, a concept that will be covered in a later section of this report (see **Section 2.3.E**). As noted earlier, the units of demand are vehicle-miles of travel.

**D. COST OF THE CIP**

The costs that may be included in the cost per service unit are all of the implementation costs for the 2016 Roadway Impact Fee Minor Update, as well as project costs for thoroughfare system elements within the Capital Improvement Plan. Chapter 395 of the Texas Local Government Code specifies that the allowable costs are “...including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;
3. Land acquisition costs, including land purchases, court awards and costs, attorney’s fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the Capital Improvement Plan who is not an employee of the political subdivision.”

The costing methodology was not updated from the 2013 Roadway Impact Fee Study since this was a minor update. The CIP for Service Area 1 remained the same. The engineer’s opinion of the probable costs of the projects in the CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be

determined by the type of facility being constructed, the number of lanes, and the length of the project. The costs for location-specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project as appropriate. In addition, based upon discussions with City of Rowlett staff, State, County, and developer driven projects in which the City has contributed a portion of the total project cost have been included in the CIP as lump sum costs.

A typical roadway project consists of a number of costs, including the following: construction, design engineering, survey, and right-of way acquisition. While the construction cost component of a project may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. Each new project's construction cost was divided into two cost components: roadway construction cost and major construction component allowances. The roadway construction components consist of the following pay items: (1) street excavation, (2) lime stabilization, (3) concrete pavement, (4) topsoil, (5) concrete sidewalks, and (6) turn lanes and median openings.

Based on the paving construction cost subtotal, a percentage of this total is calculated to allot for major construction component allowances. These allowances include preparation of ROW, traffic control, pavement markings, roadway drainage, illumination, special drainage structures, minor utility relocations, turf/erosion control, and basic landscaping. These allowance percentages are also based on historical data. The paving and major construction component allowance subtotal is given a ten percent (10%) contingency to determine the construction cost total. To determine the total Impact Fee Project Cost, a percentage of the construction cost total is added for engineering, surveying, testing, and mobilization. ROW acquisition costs are included in the cost on a percentage basis.

The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway.

**Tables 2.6 and 2.7** list the CIP projects for the City of Rowlett with conceptual level project cost projections. Detailed cost projections and the methodology used for each individual project can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual costs of construction are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted at this time.

This CIP establishes the list of projects for which impact fees may be utilized. Essentially, it establishes a list of projects for which an impact fee funding program can be established. This is different from a City's construction CIP, which provides a broad list of capital projects for which the City is committed to building. The cost projections utilized in this study should not be utilized for the City's building program or construction CIP. Included in the Roadway Impact Fee CIP was the cost of the 2013 Roadway Impact Fee Study which was \$22,500 per Service Area. The 2016 Roadway Impact Fee Minor Update was included for Service Area 2 as \$9,500.

Table 2.6

10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections - Service Area 1

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA 1	1-A	B	Castle Dr.	Miles Rd. to Merritt Rd.	0.51	100%	\$ 2,185,000	\$ 2,185,000
	1-B	B, B+	Hickox Rd. (1)	Rowlett Rd. to 235' NE. of Toler Rd.	0.59	100%	\$ 2,737,012	\$ 2,737,012
	1-C	B+	Hickox Rd. (2)	235' NE. of Toler Rd. to Merritt Rd.	0.76	100%	\$ 3,531,000	\$ 3,531,000
	1-D	B	Merritt Rd.	N. City Limit to 860' SE. of Future Liberty Grove-Merritt Connector	1.52	100%	\$ 2,926,087	\$ 2,926,087
	1-E	A	Liberty Grove-Merritt Connector	PGBT NBFR to 805' E. of PGBT NBFR	0.15	100%	\$ 1,204,000	\$ 1,204,000
	1-F	B	Liberty Grove-Merritt Connector	805' E. of PGBT NBFR to Liberty Grove Rd.	0.49	100%	\$ 3,106,000	\$ 3,106,000
	1-G	B	Liberty Grove Rd. (1)	Rosebud Dr. to PGBT SBFR	0.67	100%	\$ 2,908,000	\$ 2,908,000
	1-H	B	Liberty Grove Rd. (2)	PGBT NBFR to Merritt Rd.	0.16	100%	\$ 671,000	\$ 671,000
	1-I	B	Liberty Grove Rd. (3)	Merritt Rd. to Chiesa Rd.	0.95	100%	\$ 4,852,000	\$ 4,852,000
	1-J	B	Liberty Grove Rd. (4)	Chiesa Rd. to Princeton Rd.	0.28	100%	\$ 365,293	\$ 365,293
	1-K	B	Liberty Grove Rd. (5)	Broadmoor Ln. to Elm Grove Rd.	0.84	100%	\$ 3,867,000	\$ 3,867,000
	1-L	B	Elm Grove Rd.	N. City Limit to Liberty Grove Rd.	1.08	100%	\$ 4,655,000	\$ 4,655,000
	1-M	B+	Dalrock Rd. (1)	Liberty Grove Rd. to 770' SE. of Lake North Rd.	0.46	100%	\$ 2,505,000	\$ 2,505,000
	1-N	B+	Dalrock Rd. (2)	105' NE. of Pecan Ln. to Princeton Rd.	1.45	100%	\$ 7,131,000	\$ 7,131,000
	1-O	A (1/3)	Dalrock Rd. (3)	Princeton Rd. to Lakeview Pkwy.	0.36	100%	\$ 954,000	\$ 954,000
	1-P	C	Princeton Rd.	Existing Princeton Rd. to Liberty Grove Rd.	0.19	100%	\$ 675,000	\$ 675,000
	1-Q	B	Chiesa Rd. (1)	Liberty Grove Rd. to Danridge Rd.	1.40	100%	\$ 6,044,000	\$ 6,044,000
	1-R	C	Danridge Rd.	Maplewood Dr. to Traveler's Crossing	0.25	100%	\$ 902,000	\$ 902,000
	1-S	C	Freedom Ln.	Big A. Rd. to Lakeview Pkwy.	0.15	100%	\$ 533,000	\$ 533,000
	1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	50%	\$ 2,108,000	\$ 1,054,000
	1-U	HL-C3	HL Collector #1	HL Collector #1	0.22	100%	\$ 830,000	\$ 830,000
	1-V	HL-C2	HL Collector #2	HL Collector #2	0.22	100%	\$ 947,000	\$ 947,000
	1	0	0	Dalrock Rd. at Lakeview Pkwy.	0.00	50%	\$ 1,250,000	\$ 625,000
	2	0	0	Liberty Grove Rd. at Chiesa Rd.	0.00	100%	\$ 250,000	\$ 250,000
	3	0	0	Princeton Rd. at Liberty Grove Rd.	0.00	100%	\$ 250,000	\$ 250,000
	4	0	0	Merritt Rd. at Hickox Rd.	0.00	100%	\$ 250,000	\$ 250,000
	5	0	0	Merritt Rd. at Castle Dr.	0.00	100%	\$ 250,000	\$ 250,000
6	0	0	Merritt Rd. at Liberty Grove Rd.	0.00	100%	\$ 450,000	\$ 450,000	
7	0	0	Merritt Rd. at PGBT	0.00	100%	\$ 250,000	\$ 250,000	
							<b>Service Area Project Cost Subtotal</b>	<b>\$ 56,907,392</b>
							<b>2013 Roadway Impact Fee Update Cost Per Service Area</b>	<b>\$ 22,500</b>
							<b>Total Cost in SERVICE AREA 1</b>	<b>\$ 56,929,892</b>

Notes:

- a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.
- b. The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**Table 2.7**  
**10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections - Service Area 2**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
SA 2	2-A	B	Main St.	Lakeview Pkwy. to 310' W. of Rowlett Rd.	0.58	100%	\$ 5,181,000	\$ 5,181,000	
	2-B	B	Future Main-Century Connection	Main St. to Century Dr.	0.11	100%	\$ 942,000	\$ 942,000	
	2-C	A (1/3)	Miller Rd. (1)	Dexham Rd. to Rowlett Rd.	1.02	100%	\$ 5,128,000	\$ 5,128,000	
	2-D	A (1/3)	Miller Rd. (2)	Rowlett Rd. to PGBT SBFR	0.77	100%	\$ 2,433,000	\$ 2,433,000	
	2-E	A (1/3)	Miller Rd. (3)	PGBT NBFR to 360' E. of PGBT NBFR	0.07	100%	\$ 181,000	\$ 181,000	
	2-F	A	Miller Rd. (4)	360' E. of PGBT NBFR to Lake Ray Hubbard Bridge	0.33	100%	\$ 1,540,000	\$ 1,540,000	
	2-G	A	Miller Rd. (5)	Lake Ray Hubbard Bridge to 372' W. of Dalrock Rd.	1.02	100%	\$ 5,115,000	\$ 5,115,000	
	2-H	B+	Chiesa Rd. (2)	360' S. of Lakeview Pkwy. to Miller Rd.	1.25	100%	\$ 6,194,000	\$ 6,194,000	
	2-I	B+	Chiesa Rd. (3)	Miller Rd. to Dalrock Rd.	1.21	100%	\$ 5,878,000	\$ 5,878,000	
	2-J	A (1/3)	Dalrock Rd. (4)	Lakeview Pkwy. to Miller Rd.	1.79	100%	\$ 4,707,000	\$ 4,707,000	
	2-K	A (1/3)	Dalrock Rd. (5)	Miller Rd. to IH-30 WBFR	0.98	100%	\$ 2,577,000	\$ 2,577,000	
	1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	50%	\$ 2,108,000	\$ 1,054,000	
	2-M	D-C	Mekcer Dr.	Mekcer Dr. Extension	0.20	100%	\$ 741,000	\$ 741,000	
	2-N	D-C	Martin Dr. (1)	Main St. to South End	0.14	100%	\$ 508,000	\$ 508,000	
	2-O	C	Martin Dr. (2)	Mekcer Dr. to Main St.	0.11	100%	\$ 1,294,932	\$ 1,294,932	
	2-P	A (1/3)	Rowlett Rd.	Century Dr. to Kyle Rd.	0.31	100%	\$ 3,792,336	\$ 3,792,336	
	2-Q	SG-C5	SG Collector #1	SG Collector #1	0.28	100%	\$ 1,184,000	\$ 1,184,000	
	2-R	SG-C5	SG Collector #2	SG Collector #2	0.07	100%	\$ 310,000	\$ 310,000	
	2-S	SG-C5	SG Collector #3	SG Collector #3	0.16	100%	\$ 698,000	\$ 698,000	
	2-T	SG-C4	SG Collector #4	SG Collector #4	0.17	100%	\$ 633,000	\$ 633,000	
	2-U	SG-A+	SG Major Thoroughfare	SG Major Thoroughfare	0.09	100%	\$ 450,000	\$ 450,000	
	2-V	HL-C1	HL Collector #3	HL Collector #3	0.13	100%	\$ 590,000	\$ 590,000	
	2-W	BS-A	Bayside Arterial	IH-30 WBFR to Bayside Boulevard	0.26	100%	\$ 3,747,000	\$ 3,747,000	
	1		Intersection Improvement	Dalrock Rd. at Lakeview Pkwy.		50%	\$ 1,250,000	\$ 625,000	
	2		Intersection Improvement	Dalrock Rd. at Chiesa Rd.		100%	\$ 750,000	\$ 750,000	
	3		Signal Installation	Dexham Rd. at Miller Rd.		100%	\$ 250,000	\$ 250,000	
	<b>Service Area Project Cost Subtotal</b>							<b>\$ 56,503,268</b>	
	<b>2013 Roadway Impact Fee Study and 2016 Roadway Impact Fee Minor Update Cost Per Service Area</b>							<b>\$ 32,000</b>	
	<b>Total Cost in SERVICE AREA 2</b>							<b>\$ 56,535,268</b>	

**Notes:**

- a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.
- b. The planning level cost projections shall not supersede the City’s design standards or the determination of the City Engineer for a specific project.

**E. SERVICE UNIT CALCULATION**

The basic service unit for the computation of the City of Rowlett’s roadway impact fees is the vehicle-mile of travel during the afternoon peak hour. To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year study period.

The growth in vehicle-miles from 2013 to 2023 is based upon projected changes in residential and non-residential growth for the period. In order to determine this growth, baseline estimates of population, basic square feet, service square feet, and retail square feet for 2013 were made along with projections for each of these demographic statistics through 2023. The *Land Use Assumptions* (see **Table 2.1**) details the growth estimates used for the impact fee determination.

The residential and non-residential statistics in the *Land Use Assumptions* provide the “independent variables” that are used to calculate the existing (2013) and projected (2023) transportation service units used to establish the roadway impact fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for each service area are the sum of the vehicle-miles “generated” by each category of land use in the service area.

For the purpose of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the existing and projected population is converted to dwelling units. The number of dwelling units in each service area is multiplied by a *transportation demand factor* to compute the vehicle-miles of travel that occur during the afternoon peak hour. This factor computes the average amount of demand caused by the residential land uses in the service area. The *transportation demand factor* is discussed in more detail below.

For non-residential land uses, the process is similar. The *Land Use Assumptions* provide the existing and projected amount of building square footages for three (3) categories of non-residential land uses – basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the North American Industrial Classification System (NAICS).

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers' (ITE), Trip Generation Manual, 9<sup>th</sup> Edition*. This independent variable is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development or development modification that would require the assessment of an impact fee.

The existing and projected land use assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle-miles of travel. As noted earlier, a *transportation demand factor* is applied to these values and then summed to calculate the total peak-hour vehicle-miles of demand for each service area.

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE, Trip Generation Manual, 9<sup>th</sup> Edition*, and the regional Origin-Destination Travel Survey performed by the NCTCOG and the National Household Travel Survey (NHTS). The *ITE, Trip Generation Manual, 9<sup>th</sup> Edition*, provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail rate to avoid double counting trips.

The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics survey conducted by the NCTCOG and the NHTS.

The computation of the *transportation demand factor* is detailed in the following equation:

$$TDF = T * (1 - P_b) * L_{max}$$

where... $L_{max} = \min(L * OD \text{ or } SA_L)$

Variables:

- TDF = Transportation Demand Factor;
- T = Trip Rate (peak hour trips / unit);
- P<sub>b</sub> = Pass-By Discount (% of trips);
- L<sub>max</sub> = Maximum Trip Length (miles);
- L = Average Trip Length (miles);
- OD = Origin-Destination Reduction (50%); and
- SA<sub>L</sub> = Max Service Area Trip Length (see **Table 2.8**).

For land uses which are characterized by longer average trip lengths (primarily residential uses), the maximum trip length has been limited to four (4) miles based on the maximum trip length within each service area. Chapter 395 of the Texas Local Government Code allows for a service area of six (6) miles; however the service area within the City of Rowlett is approximated to be a five (5) mile distance.

The adjustment made to the average trip length (L) statistic in the computation of the maximum trip length (L<sub>max</sub>) is the origin-destination reduction (OD). This adjustment is made because the roadway impact fee is charged to both the origin and destination end of the trip. For example, the impact fee methodology will account for a trip from home to work within the City of Rowlett to both residential and non-residential land uses. To avoid counting these trips as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use.

**Table 2.9** shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land uses. The values utilized for all variables shown in the *Transportation Demand Factor* equation are also shown in the table.

**Table 2.8 Transportation Demand Factor Calculations**

<b>Variable</b>	<b>Residential</b>	<b>Basic (General Light Industrial)</b>	<b>Service (General Office)</b>	<b>Retail (Shopping Center)</b>
<b>T</b>	1.00	0.97	1.49	3.71
<b>P<sub>b</sub></b>	0%	0%	0%	34%
<b>T (with P<sub>b</sub>)</b>	1.00	0.97	1.49	2.45
<b>L (miles)</b>	17.21	10.02	10.92	6.43
<b>SA<sub>L</sub></b>	5.00	5.00	5.00	5.00
<b>L<sub>max</sub>* (miles)</b>	5.00	5.00	5.00	3.22
<b>TDF</b>	<b>5.00</b>	<b>4.85</b>	<b>7.45</b>	<b>7.89</b>
* L <sub>max</sub> is less than 4 miles for retail land uses; therefore this lower trip length is used for calculating the TDF for retail land uses				

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 2.9**. This table shows the total vehicle-miles by service area for the years 2013-2023. These estimates and projections lead to the Vehicle Miles of Travel for 2013-2023.

Table 2.9 10-Year Growth Projections

SERVICE AREA	RESIDENTIAL VEHICLE-MILES		SQUARE FEET <sup>4</sup>			TRANS. DEMAND FACTOR <sup>5</sup>			NON-RESIDENTIAL VEHICLE-MILES <sup>8</sup>			TOTAL VEHICLE MILES <sup>10</sup>	
	DWELLING UNITS	Trip Rate TDF <sup>2</sup>	VEHICLE MILES <sup>3</sup>	BASIC	SERVICE	RETAIL	BASIC <sup>6</sup>	SERVICE <sup>7</sup>	RETAIL <sup>8</sup>	BASIC	SERVICE		RETAIL
1	1,013	1.00	5,064	422,500	270,000	474,300	0.97	1.49	3.71	2,049	2,012	3,742	7,803
2	3,157	5.00	15,786	227,500	1,310,000	1,080,700	4.85	7.45	7.89	1,103	9,760	8,527	19,390
Totals	4,170		20,850	650,000	1,580,000	1,555,000				3,152	11,772	12,269	27,193

VEHICLE-MILES OF INCREASE (2013 - 2023)

SERVICE AREA	VEH-MILES
1	12,867
2	35,176

Notes:

- 1 From Section 2.3.A: Land Use Assumptions
- 2 Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and trip generation rate
- 3 Calculated by multiplying TDF by the number of dwelling units
- 4 From Section 2.3.A: Land Use Assumptions
- 5 Trip generation rate and Transportation Demand Factors from LUVMET for each land use
- 6 'Basic' corresponds to General Light Industrial land use and trip generation rate
- 7 'Service' corresponds to General Office land use and trip generation rate
- 8 'Retail' corresponds to Shopping Center land use and trip generation rate
- 9 Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- 10 Residential plus non-residential vehicle-mile totals for each Service Area

## 2.4 IMPACT FEE CALCULATION

### A. MAXIMUM ASSESSABLE ROADWAY IMPACT FEE PER SERVICE UNIT

This section presents the maximum assessable roadway impact fee rate calculated for each service area. The maximum assessable roadway impact fee is the sum of the eligible Impact Fee CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 2.10** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

Line	Title	Description
1	<i>Total Vehicle-Miles of Capacity Added by the CIP</i>	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project. (from <b>Appendix B</b> – CIP Service Units of Supply)

Each project identified in the Roadway Impact Fee CIP will add a certain amount of capacity to the City’s roadway network based on its length and classification. This line displays the total amount added within the service area.

2	<i>Total Vehicle-Miles of Existing Demand</i>	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from <b>Appendix B</b> – CIP Service Units of Supply)
---	---	--

A number of facilities identified in the Roadway Impact Fee CIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently being used by existing traffic.

3	<i>Total Vehicle-Miles of Existing Deficiencies</i>	Number of vehicle-miles of travel that are not accommodated by the existing roadway system. (from <b>Appendix C</b> – Existing Roadway Facilities Inventory)
---	---	--

In order to ensure that existing deficiencies on the City’s roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Roadway Impact Fee CIP – will have these additional trips removed from the calculation.

4	<i>Net Amount of Vehicle-Miles of Capacity Added</i>	A measurement of the amount of vehicle-miles added by the CIP that will not be utilized by existing demand. ( <b>Line 1</b> – <b>Line 2</b> – <b>Line 3</b> )
---	--	---

5	<i>Total Cost of the CIP within the Service Area</i>	The total cost of the projects within the service area (from <b>Table 2.6/Table 2.7</b> - 10-Year Roadway Capital Improvement Plan with Conceptual Level Cost Projections)
---	--	--

This line simply identifies the total cost of all of the projects identified in the service area.

<b>6</b>	<i>Cost of Net Capacity Supplied</i>	The total CIP cost ( <b>Line 5</b> ) prorated by the ratio of Net Capacity Added ( <b>Line 4</b> ) to Total Capacity Added ( <b>Line 1</b> ). [( <b>Line 4</b> / <b>Line 1</b> ) * ( <b>Line 5</b> )]
----------	--------------------------------------	---

Using the ratio of vehicle-miles added by the Roadway Impact Fee CIP available to serve future growth to the total vehicle-miles added, the total cost of the Impact Fee CIP is reduced to the amount available for future growth (i.e., excluding existing usage and deficiencies).

<b>7</b>	<i>Cost to Meet Existing Needs and Usage</i>	The difference between the Total Cost of the CIP ( <b>Line 5</b> ) and the Cost of the Net Capacity supplied ( <b>Line 6</b> ). ( <b>Line 5</b> – <b>Line 6</b> )
----------	--	---

This line is provided for information purposes only – it is to present the portion of the total cost of the Roadway Impact Fee CIP that is required to meet existing demand.

<b>8</b>	<i>Total Vehicle-Miles of New Demand over Ten Years</i>	Based upon the growth projection provided in the <i>Land Use Assumptions</i> (see <b>Section 2.3.A</b> ), an estimate of the number of new vehicle-miles within the service area over the next ten years. (from <b>Table 2.9</b> )
----------	---	--

This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

<b>9</b>	<i>Percent of Capacity Added Attributable to New Growth</i>	The result of dividing Total Vehicle-Miles of New Demand ( <b>Line 8</b> ) by the Net Amount of Capacity Added ( <b>Line 4</b> ), limited to 100% ( <b>Line 10</b> ). This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth.
<b>10</b>	<i>Chapter 395 Check</i>	

In order to ensure that the vehicle-miles added by the Roadway Impact Fee CIP do not exceed the amount needed to accommodate growth beyond the ten-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Roadway Impact Fee CIP exceeds the growth projected to occur in the next ten years, the Roadway Impact Fee CIP cost is reduced accordingly.

<b>11</b>	<i>Cost of Capacity Added Attributable to New Growth</i>	The result of multiplying the Cost of Net Capacity Added ( <b>Line 6</b> ) by the Percent of Capacity Added Attributable to New Growth, limited to 100% ( <b>Line 10</b> ).
-----------	--	---

The value of the total Roadway Impact Fee CIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

**B. PLAN FOR AWARDING THE ROADWAY IMPACT FEE CREDIT**

Chapter 395 of the Texas Local Government Code requires the Capital Improvement Plan for Roadway Impact Fees to contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code states:

- “(7) A plan for awarding:
- (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or
  - (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the Roadway Impact Fee Capital Improvement Program...”

The following table summarizes the portions of Table 2.10 that utilize this credit calculation, based on awarding a 50 percent credit.

Line	Title	Description
12	<i>Credit</i>	A credit equal to 50% of the total projected cost, as per section 395.014 of the Texas Local Government Code.
13	<i>Maximum Assessable Fee Per Service Unit</i>	Found by dividing the Recoverable Cost of the CIP attributable to growth ( <b>Line 12</b> ) by the Total Vehicle-Miles of New Demand Over Ten Years ( <b>Line 8</b> ). ( <b>Line 12 / Line 8</b> )

**Table 2.10 Maximum Assessable Roadway Impact Fee**

<b>SERVICE AREA:</b>		<b>1 (North)</b>	<b>2 (South)</b>
<b>1</b>	TOTAL VEH-MI OF CAPACITY ADDED BY THE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, <b>APPENDIX B</b> )	33,268	38,061
<b>2</b>	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, <b>APPENDIX B</b> )	8,279	14,824
<b>3</b>	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, <b>APPENDIX C</b> )	822	1,149
<b>4</b>	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	24,167	22,088
<b>5</b>	TOTAL COST OF THE CIP WITHIN SERVICE AREA (FROM <b>TABLES 4A and 4B</b> )	\$ 56,929,892	\$ 56,535,268
<b>6</b>	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 41,355,798	\$ 32,809,201
<b>7</b>	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	\$ 15,574,094	\$ 23,726,067
<b>8</b>	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM <b>TABLE 6</b> and <b>Land Use Assumptions</b> )	12,867	35,176
<b>9</b>	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	53.2%	159.2%
<b>10</b>	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	53.2%	100.0%
<b>11</b>	COST OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	\$ 22,001,285	\$ 32,809,201
<b>12</b>	CREDIT (50% OF LINE 11)	\$ 11,000,643	\$ 16,404,601
<b>13</b>	MAX ASSESSABLE FEE PER SERVICE UNIT (\$ PER VEH-MI) (LINE 12 / LINE 8)	\$ 855	\$ 466

### C. SERVICE UNIT DEMAND PER UNIT OF DEVELOPMENT

The roadway impact fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 2.11**. This table lists the predominant land uses that may occur within the City of Rowlett. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column, if applicable to the land use, presents the number of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 9<sup>th</sup> Edition*, the latest edition for trip generation data. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The adjusted trip length values are based on the *Regional Origin-Destination Travel Survey* performed by the NCTCOG and the NHTS. The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above the maximum trip length allowed within the service area, the maximum trip length used for calculation is reduced to the corresponding value. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee estimate to compute the number of service units consumed by each land use application. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

**Table 2.11 Land Use / Vehicle-Mile Equivalency Table (LUVMET)**

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	NCTCOG Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
<b>PORT AND TERMINAL</b>											
Truck Terminal	030	Acre	6.55			6.55	10.02	50%	5.01	5.00	32.75
<b>INDUSTRIAL</b>											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.00	4.85
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	5.00	3.40
Industrial Park	130	1,000 SF GFA	0.86			0.86	10.02	50%	5.01	5.00	4.30
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.00	1.60
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	5.00	1.30
<b>RESIDENTIAL</b>											
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	17.21	50%	8.61	5.00	5.00
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	5.00	3.10
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	5.00	2.60
Senior Adult Housing-Detached	251	Dwelling Unit	0.27			0.27	17.21	50%	8.61	5.00	1.35
Senior Adult Housing-Attached	252	Dwelling Unit	0.16			0.16	17.21	50%	8.61	5.00	0.80
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	5.00	1.10
<b>LODGING</b>											
Hotel	310	Room	0.59			0.59	6.43	50%	3.22	3.22	1.90
Motel/ Other Lodging Facilities	320	Room	0.47			0.47	6.43	50%	3.22	3.22	1.51
<b>RECREATIONAL</b>											
Golf Driving Range	432	Tee	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acre	0.30			0.30	6.43	50%	3.22	3.22	0.97
Recreational Community Center	495	1,000 SF GFA	1.45			1.45	6.43	50%	3.22	3.22	4.67
Ice Skating Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf Course	431	Hole	0.33			0.33	6.43	50%	3.22	3.22	1.06
Multiplex/Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	3.22	43.92
Racquet / Tennis Club	491	Court	3.35			3.35	6.43	50%	3.22	3.22	10.79
<b>INSTITUTIONAL</b>											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.46	44%	B	6.98	4.20	50%	2.10	2.10	14.66
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Junior / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.21			0.21	4.20	50%	2.10	2.10	0.44
<b>MEDICAL</b>											
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.31			1.31	7.55	50%	3.78	3.78	4.95
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
<b>OFFICE</b>											
Corporate Headquarters Building	714	1,000 SF GFA	1.40			1.40	10.92	50%	5.46	5.00	7.00
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	5.00	7.45
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	10.92	50%	5.46	5.00	17.30
Single Tenant Office Building	715	1,000 SF GFA	1.73			1.73	10.92	50%	5.46	5.00	8.65
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.00	7.40
<b>COMMERCIAL</b>											
<b>Automobile Related</b>											
Automobile Care Center	942	1,000 SF Occ. GLA	3.38	40%	B	2.03	6.43	50%	3.22	3.22	6.54
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station	944	Vehicle Fueling Position	13.87	42%	A	8.04	1.20	50%	0.60	0.60	4.82
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	13.38	56%	B	5.89	1.20	50%	0.60	0.60	3.53
Gasoline/Service Station w/ Conv Market and Car Wash	946	Vehicle Fueling Position	13.94	56%	A	6.13	1.20	50%	0.60	0.60	3.68
New Car Sales	841	1,000 SF GFA	2.59	20%	B	2.07	6.43	50%	3.22	3.22	6.67
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	28%	A	2.99	6.43	50%	3.22	3.22	9.63
<b>Dining</b>											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.84	50%	A	16.92	4.79	50%	2.40	2.40	40.61
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	26.15	50%	B	13.08	4.79	50%	2.40	2.40	31.39
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	11.15	43%	A	6.36	4.79	50%	2.40	2.40	15.26
Quality Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	42.93	70%	A	12.88	4.79	50%	2.40	2.40	30.91
<b>Other Retail</b>											
Free-Standing Discount Store	815	1,000 SF GFA	5.00	30%	C	3.50	6.43	50%	3.22	3.22	11.27
Nursery (Garden Center)	817	1,000 SF GFA	3.80	30%	B	2.66	6.43	50%	3.22	3.22	8.57
Home Improvement Superstore	862	1,000 SF GFA	2.37	48%	A	1.23	6.43	50%	3.22	3.22	3.96
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.42	53%	A	3.96	6.43	50%	3.22	3.22	12.75
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.35	49%	A	5.28	6.43	50%	3.22	3.22	17.00
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	6.43	50%	3.22	3.22	7.89
Supermarket	850	1,000 SF GFA	10.50	36%	A	6.72	6.43	50%	3.22	3.22	21.64
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
Department Store	875	1,000 SF GFA	1.78	30%	B	1.25	6.43	50%	3.22	3.22	4.03
Video Rental Store	896	1,000 SF GFA	13.60	50%	B	6.80	6.43	50%	3.22	3.22	21.90
<b>SERVICES</b>											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	27.41	47%	A	14.53	3.39	50%	1.70	1.70	24.70
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	3.39	50%	1.70	1.70	1.73

**Key to Sources of Pass-by Rates:**  
 A: ITE Trip Generation Handbook 3rd Edition (August 2014)  
 B: Estimated by Kimley-Horn based on ITE rates for similar categories  
 C: ITE rate adjusted upward by KHA based on logical relationship to other categories

## 2.5 SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable roadway impact fee calculations.

**Example 1:**

- **Development Type - One (1) Unit of Single-Family Housing**

<b>Roadway Impact Fee Calculation Steps – Example 1</b>	
<b>Step 1</b>	<b>Determine Development Unit and Vehicle-Miles Per Development Unit</b>
	<i>From Table 2.11 [Land Use – Vehicle Mile Equivalency Table]</i> Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 5.00
<b>Step 2</b>	<b>Determine Maximum Assessable Impact Fee Per Service Unit</b>
	<i>From Table 2.10, Line 13 [Maximum Assessable Fee Per Service Unit]</i> Maximum Fee for City of Rowlett (Service Area 1): \$855 / vehicle-mile
<b>Step 3</b>	<b>Determine Maximum Assessable Impact Fee</b>
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit
	Impact Fee = 1 * 5.00 * \$855  Maximum Assessable Impact Fee = \$4,275

**Example 2:**

- **Development Type – 125,000 square foot Home Improvement Superstore**

<b>Roadway Impact Fee Calculation Steps – Example 2</b>	
<b>Step 1</b>	<b>Determine Development Unit and Vehicle-Miles Per Development Unit</b>
	<i>From Table 2.11 [Land Use – Vehicle Mile Equivalency Table]</i> Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.96
<b>Step 2</b>	<b>Determine Maximum Assessable Impact Fee Per Service Unit</b>
	<i>From Table 2.10, Line 18 [Maximum Assessable Fee Per Service Unit]</i> Maximum Fee for City of Rowlett (Service Area 2): \$466 / vehicle-mile
<b>Step 3</b>	<b>Determine Maximum Assessable Impact Fee</b>
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit
	Impact Fee = 125 * 3.96 * \$466  Maximum Assessable Impact Fee = \$230,670

## 2.6 CONCLUSION

The City of Rowlett has established a process to implement the assessment and collection of roadway impact fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable roadway impact fee that could be assessed by the City of Rowlett. The maximum assessable roadway impact fee calculated in this report is **\$855** (unchanged from 2014) for Service Area 1 and **\$466** for Service Area 2 (from **Table 2.10**):

This document serves as a guide to the assessment of roadway impact fees pertaining to future development and the City's need for roadway improvements to accommodate that growth. Following the public hearing process, the City Council may establish an amount to be assessed (if any) up to the maximum established within this report and update the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this update are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Capital Improvement Plan are appropriately incorporated into the process.

## **APPENDICES**

- A. CONCEPTUAL LEVEL PROJECT COST PROJECTIONS**
- B. CIP SERVICE UNITS OF SUPPLY**
- C. EXISTING ROADWAY FACILITIES INVENTORY**
- D. LAND USE ASSUMPTIONS**

**Appendix A – Conceptual Level Project Cost Projections**

## City of Rowlett - 2013 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees  
Summary of Conceptual Level Project Cost Projections

## Roadway Improvements - Service Area 1

#	Class	Project	Limits	Percent in Service Area	Project Cost	Total Cost in Service Area
1-A	B	Castle Dr.	Miles Rd. to Merritt Rd.	100%	\$ 2,185,000	\$ 2,185,000
1-B	B, B+	Hickox Rd. (1)	Rowlett Rd. to 235' NE. of Toler Rd.	100%	\$ 2,737,012	\$ 2,737,012
1-C	B+	Hickox Rd. (2)	235' NE. of Toler Rd. to Merritt Rd.	100%	\$ 3,531,000	\$ 3,531,000
1-D	B	Merritt Rd.	N. City Limit to 860' SE. of Future Liberty Grove-Merritt Connector	100%	\$ 2,926,087	\$ 2,926,087
1-E	A	Liberty Grove-Merritt Connector (1)	PGBT NBFR to 805' E. of PGBT NBFR	100%	\$ 1,204,000	\$ 1,204,000
1-F	B	Liberty Grove-Merritt Connector (2)	805' E. of PGBT NBFR to Liberty Grove Rd.	100%	\$ 3,106,000	\$ 3,106,000
1-G	B	Liberty Grove Rd. (1)	Rosebud Dr. to PGBT SBFR	100%	\$ 2,908,000	\$ 2,908,000
1-H	B	Liberty Grove Rd. (2)	PGBT NBFR to Merritt Rd.	100%	\$ 671,000	\$ 671,000
1-I	B	Liberty Grove Rd. (3)	Merritt Rd. to Chiesa Rd.	100%	\$ 4,852,000	\$ 4,852,000
1-J	B	Liberty Grove Rd. (4)	Chiesa Rd. to Princeton Rd.	100%	\$ 365,293	\$ 365,293
1-K	B	Liberty Grove Rd. (5)	Broadmoor Ln. to Elm Grove Rd.	100%	\$ 3,867,000	\$ 3,867,000
1-L	B	Elm Grove Rd.	N. City Limit to Liberty Grove Rd.	100%	\$ 4,655,000	\$ 4,655,000
1-M	B+	Dalrock Rd. (1)	Liberty Grove Rd. to 770' SE. of Lake North Rd.	100%	\$ 2,505,000	\$ 2,505,000
1-N	B+	Dalrock Rd. (2)	105' NE. of Pecan Ln. to Princeton Rd.	100%	\$ 7,131,000	\$ 7,131,000
1-O	A (1/3)	Dalrock Rd. (3)	Princeton Rd. to Lakeview Pkwy.	100%	\$ 954,000	\$ 954,000
1-P	C	Princeton Rd.	Existing Princeton Rd. to Liberty Grove Rd.	100%	\$ 675,000	\$ 675,000
1-Q	B	Chiesa Rd. (1)	Liberty Grove Rd. to Danridge Rd.	100%	\$ 6,044,000	\$ 6,044,000
1-R	C	Danridge Rd.	Maplewood Dr. to Traveler's Crossing	100%	\$ 902,000	\$ 902,000
1-S	C	Freedom Ln.	Big A. Rd. to Lakeview Pkwy.	100%	\$ 533,000	\$ 533,000
1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	50%	\$ 2,108,000	\$ 1,054,000
1-U	HL-C3	HL Collector #1	HL Collector #1	100%	\$ 830,000	\$ 830,000
1-V	HL-C2	HL Collector #2	HL Collector #2	100%	\$ 947,000	\$ 947,000
<b>Intersection Improvements</b>						
1		Intersection Improvement	Dalrock Rd. at Lakeview Pkwy.	50%	\$ 1,250,000	\$ 625,000
2		Signal Installation	Liberty Grove Rd. at Chiesa Rd.	100%	\$ 250,000	\$ 250,000
3		Signal Installation	Princeton Rd. at Liberty Grove Rd.	100%	\$ 250,000	\$ 250,000
4		Signal Installation	Merritt Rd. at Hickox Rd.	100%	\$ 250,000	\$ 250,000
5		Signal Installation	Merritt Rd. at Castle Dr.	100%	\$ 250,000	\$ 250,000
6		Signal Installation	Merritt Rd. at Liberty Grove Rd.	100%	\$ 450,000	\$ 450,000
7		Signal Installation	Merritt Rd. at PGBT	100%	\$ 250,000	\$ 250,000
<b>TOTAL</b>					<b>\$ 58,586,392</b>	<b>\$ 56,907,392</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett. The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Castle Dr.	<b>This project consists of the reconstruction of Castle Dr. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-A</b>
<b>Limits:</b>	Miles Rd. to Merritt Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	2,667		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	7,112	cy	\$ 12.00	\$ 85,344
206	6" Lime Stabilization (with Lime @ 27#/sy)	13,928	sy	\$ 4.00	\$ 55,711
306	8" Concrete Pavement w/ 6" Curb	13,335	sy	\$ 46.00	\$ 613,410
406	4" Topsoil	4,149	sy	\$ 5.00	\$ 20,743
506	4' Concrete Sidewalk	21,336	sf	\$ 4.00	\$ 85,344
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 860,552</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	51,633	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	43,028	
√ Pavement Markings/Markers		3%	\$	25,817	
√ Roadway Drainage	Standard Internal System	30%	\$	258,166	
√ Illumination		6%	\$	51,633	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	51,633	
√ Sewer	Minor Adjustments	4%	\$	34,422	
√ Establish Turf / Erosion Control		3%	\$	25,817	
√ Basic Landscaping		3%	\$	25,817	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 567,964</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,428,516</b>
<b>Construction Contingency:</b>					<b>10% \$ 142,852</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,572,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 1,572,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 282,960
<b>Mobilization</b>		6%	\$ 94,320
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 235,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,185,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Hickox Rd. (1)	<b>This completed project consisted of the widening of Hickox Rd. to a four-lane divided secondary thoroughfare. This project includes a 1,225' undivided section. This project was built in 2008 with a City of Rowlett contribution of \$2,737,012.</b>	<b>1-B</b>
<b>Limits:</b>	Rowlett Rd. to 235' NE. of Toler Rd.		
<b>Impact Fee Type:</b>	B, B+		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Service Area(s):</b>	1		

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>City Contribution to Construction Cost:</b>		-	\$ 2,737,012
<b>Engineering/Survey/Testing</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>			
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,737,012</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Hickox Rd. (2)	<b>This project consists of the reconstruction of Hickox Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>1-C</b>
<b>Limits:</b>	235' NE. of Toler Rd. to Merritt Rd.		
<b>Impact Fee Type:</b>	B+		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	4,009		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
105	Unclassified Street Excavation	12,472	cy	\$ 12.00	\$ 149,669
205	6" Lime Stabilization (with Lime @ 27#/sy)	24,054	sy	\$ 4.00	\$ 96,216
305	8" Concrete Pavement w/ 6" Curb	22,272	sy	\$ 38.00	\$ 846,344
405	4" Topsoil	12,027	sy	\$ 5.00	\$ 60,135
505	4' Concrete Sidewalk	32,072	sf	\$ 4.00	\$ 128,288
605	Turn Lanes and Median Openings	2,898	sy	\$ 38.00	\$ 110,131
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,390,783</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	83,447	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	69,539	
√ Pavement Markings/Markers		3%	\$	41,724	
√ Roadway Drainage	Standard Internal System	30%	\$	417,235	
√ Illumination		6%	\$	83,447	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	83,447	
√ Sewer	Minor Adjustments	4%	\$	55,631	
√ Establish Turf / Erosion Control		3%	\$	41,724	
√ Basic Landscaping		3%	\$	41,724	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 917,917</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 2,308,700</b>
<b>Construction Contingency:</b>					<b>10% \$ 230,870</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,540,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 2,540,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 457,200
<b>Mobilization</b>		6%	\$ 152,400
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 381,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,531,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Merritt Rd. N. City Limit to 860' SE. of	<b>This project (currently under construction) consists of the construction of Merritt Rd. as a four-lane divided secondary thoroughfare. This project was a total cost of \$15,292,905 with a City of Rowlett contribution of \$2,926,087.</b>	<b>1-D</b>
<b>Limits:</b>	Future Liberty Grove-Merritt Connector		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	8,048		
<b>Service Area(s):</b>	1		

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>City Contribution to Construction Cost:</b>		-	\$ 2,926,087
<b>Engineering/Survey/Testing</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>			
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,926,087</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove-Merritt Connector (1)	<b>This project consists of the construction of the Liberty Grove-Merritt Connector as a new 6-lane divided major thoroughfare.</b>	<b>1-E</b>
<b>Limits:</b>	PGBT NBFR to 805' E. of PGBT NBFR		
<b>Impact Fee Type:</b>	A		
<b>Ultimate Class:</b>	Major Thoroughfare		
<b>Length (lf):</b>	807		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
103	Unclassified Street Excavation	3,587	cy	\$ 12.00	\$ 43,040
203	6" Lime Stabilization (with Lime @ 27#/sy)	6,994	sy	\$ 4.00	\$ 27,976
303	10" Concrete Pavement w/ 6" Curb	6,635	sy	\$ 46.00	\$ 305,225
403	4" Topsoil	2,511	sy	\$ 5.00	\$ 12,553
503	4' Concrete Sidewalk	6,456	sf	\$ 4.00	\$ 25,824
603	Turn Lanes and Median Openings	583	sy	\$ 46.00	\$ 26,836
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 441,455</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	26,487	
Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	13,244	
√ Roadway Drainage		30%	\$	132,436	
√ Illumination		6%	\$	26,487	
Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	26,487	
√ Sewer	Minor Adjustments	4%	\$	17,658	
√ Establish Turf / Erosion Control		3%	\$	13,244	
√ Basic Landscaping		3%	\$	13,244	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 269,287</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 710,742</b>
<b>Construction Contingency:</b>					<b>10% \$ 71,074</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 782,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 782,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 140,760
<b>Mobilization</b>		6%	\$ 46,920
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 234,600
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,204,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove-Merritt Connector (2) 805' E. of PGBT NBFR to Liberty	<b>This project consists of the construction of the Liberty Grove-Merritt Connector as a new 4-lane undivided secondary thoroughfare.</b>	<b>1-F</b>
<b>Limits:</b>	Grove Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	2,567		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	6,845	cy	\$ 12.00	\$ 82,144
206	6" Lime Stabilization (with Lime @ 27#/sy)	13,405	sy	\$ 4.00	\$ 53,622
306	8" Concrete Pavement w/ 6" Curb	12,835	sy	\$ 46.00	\$ 590,410
406	4" Topsoil	3,993	sy	\$ 5.00	\$ 19,966
506	4' Concrete Sidewalk	20,536	sf	\$ 4.00	\$ 82,144
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 828,285</b>
<b>Major Construction Component Allowances**:</b>					
Item Description		Notes	Allowance	Item Cost	
√	Prep ROW		6%	\$	49,697
	Traffic Control	None Anticipated	0%	\$	-
√	Pavement Markings/Markers		3%	\$	24,849
√	Roadway Drainage	Standard Internal System	30%	\$	248,486
√	Illumination		6%	\$	49,697
√	Special Drainage Structures	Crosses Muddy Creek	\$500,000	\$	500,000
√	Water	Minor Adjustments	6%	\$	49,697
√	Sewer	Minor Adjustments	4%	\$	33,131
√	Establish Turf / Erosion Control		3%	\$	24,849
√	Basic Landscaping		3%	\$	24,849
	Other:		\$0	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			<b>Allowance Subtotal:</b>	<b>\$</b>	<b>1,005,254</b>
<b>Paving and Allowance Subtotal:</b>				<b>\$</b>	<b>1,833,539</b>
<b>Construction Contingency:</b>				<b>10%</b>	<b>\$ 183,354</b>
<b>Construction Cost TOTAL:</b>				<b>\$</b>	<b>2,017,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	<b>\$ 2,017,000</b>
<b>Engineering/Survey/Testing:</b>		18%	\$ 363,060
<b>Mobilization</b>		6%	\$ 121,020
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 605,100
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,106,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove Rd. (1)	<b>This project consists of the reconstruction of Liberty Grove Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-G</b>
<b>Limits:</b>	Rosebud Dr. to PGBT SBFR		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	3,550		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	9,467	cy	\$ 12.00	\$ 113,600
206	6" Lime Stabilization (with Lime @ 27#/sy)	18,539	sy	\$ 4.00	\$ 74,156
306	8" Concrete Pavement w/ 6" Curb	17,750	sy	\$ 46.00	\$ 816,500
406	4" Topsoil	5,522	sy	\$ 5.00	\$ 27,611
506	4' Concrete Sidewalk	28,400	sf	\$ 4.00	\$ 113,600
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,145,467</b>
<b>Major Construction Component Allowances**:</b>					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	68,728	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	57,273	
√ Pavement Markings/Markers		3%	\$	34,364	
√ Roadway Drainage	Standard Internal System	30%	\$	343,640	
√ Illumination		6%	\$	68,728	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	68,728	
√ Sewer	Minor Adjustments	4%	\$	45,819	
√ Establish Turf / Erosion Control		3%	\$	34,364	
√ Basic Landscaping		3%	\$	34,364	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 756,008</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,901,475</b>
<b>Construction Contingency:</b>					<b>10% \$ 190,147</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,092,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 2,092,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 376,560
<b>Mobilization</b>		6%	\$ 125,520
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 313,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,908,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove Rd. (2)	<b>This project consists of the reconstruction of Liberty Grove Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-H</b>
<b>Limits:</b>	PGBT NBFR to Merritt Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	819		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	2,184	cy	\$ 12.00	\$ 26,208
206	6" Lime Stabilization (with Lime @ 27#/sy)	4,277	sy	\$ 4.00	\$ 17,108
306	8" Concrete Pavement w/ 6" Curb	4,095	sy	\$ 46.00	\$ 188,370
406	4" Topsoil	1,274	sy	\$ 5.00	\$ 6,370
506	4' Concrete Sidewalk	6,552	sf	\$ 4.00	\$ 26,208
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 264,264</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	15,856	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	13,213	
√ Pavement Markings/Markers		3%	\$	7,928	
√ Roadway Drainage	Standard Internal System	30%	\$	79,279	
√ Illumination		6%	\$	15,856	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	15,856	
√ Sewer	Minor Adjustments	4%	\$	10,571	
√ Establish Turf / Erosion Control		3%	\$	7,928	
√ Basic Landscaping		3%	\$	7,928	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 174,414</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 438,678</b>
<b>Construction Contingency:</b>					<b>10% \$ 43,868</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 483,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 483,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 86,940
<b>Mobilization</b>		6%	\$ 28,980
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 72,450
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 671,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove Rd. (3)	<b>This project consists of the reconstruction of Liberty Grove Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-I</b>
<b>Limits:</b>	Merritt Rd. to Chiesa Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	4,990		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	13,307	cy	\$ 12.00	\$ 159,680
206	6" Lime Stabilization (with Lime @ 27#/sy)	26,059	sy	\$ 4.00	\$ 104,236
306	8" Concrete Pavement w/ 6" Curb	24,950	sy	\$ 46.00	\$ 1,147,700
406	4" Topsoil	7,762	sy	\$ 5.00	\$ 38,811
506	4' Concrete Sidewalk	39,920	sf	\$ 4.00	\$ 159,680
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,610,107</b>
<b>Major Construction Component Allowances**:</b>					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	96,606	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	80,505	
√ Pavement Markings/Markers		3%	\$	48,303	
√ Roadway Drainage	Standard Internal System	30%	\$	483,032	
√ Illumination		6%	\$	96,606	
√ Special Drainage Structures	Crosses Muddy Creek	\$500,000	\$	500,000	
√ Water	Minor Adjustments	6%	\$	96,606	
√ Sewer	Minor Adjustments	4%	\$	64,404	
√ Establish Turf / Erosion Control		3%	\$	48,303	
√ Basic Landscaping		3%	\$	48,303	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 1,562,670</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,172,777</b>
<b>Construction Contingency:</b>					<b>10% \$ 317,278</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 3,491,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 3,491,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 628,380
<b>Mobilization</b>		6%	\$ 209,460
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 523,650
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,852,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove Rd. (4)	<b>This completed project consisted of the widening of Liberty Grove Rd. to a four-lane divided secondary thoroughfare. This project was part of a 2007 project that included Chiesa Rd. The total Rowlett contribution was \$2,171,924. \$365,293 (17%) of this cost was included in this project.</b>	<b>1-J</b>
<b>Limits:</b>	Chiesa Rd. to Princeton Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	1,492		
<b>Service Area(s):</b>	1		

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>City Contribution to Construction Cost:</b>		-	\$ 365,293
<b>Engineering/Survey/Testing</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>			
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 365,293</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Liberty Grove Rd. (5)	<b>This project consists of the reconstruction of Liberty Grove Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-K</b>
<b>Limits:</b>	Broadmoor Ln. to Elm Grove Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	4,440		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	11,840	cy	\$ 12.00	\$ 142,080
206	6" Lime Stabilization (with Lime @ 27#/sy)	23,187	sy	\$ 4.00	\$ 92,747
306	8" Concrete Pavement w/ 6" Curb	22,200	sy	\$ 46.00	\$ 1,021,200
406	4" Topsoil	6,907	sy	\$ 5.00	\$ 34,533
506	4' Concrete Sidewalk	35,520	sf	\$ 4.00	\$ 142,080
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,432,640</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	85,958	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	71,632	
√ Pavement Markings/Markers		3%	\$	42,979	
√ Roadway Drainage	Standard Internal System	30%	\$	429,792	
√ Illumination		6%	\$	85,958	
√ Special Drainage Structures	Minor Stream Crossing	\$150,000	\$	150,000	
√ Water	Minor Adjustments	6%	\$	85,958	
√ Sewer	Minor Adjustments	4%	\$	57,306	
√ Establish Turf / Erosion Control		3%	\$	42,979	
√ Basic Landscaping		3%	\$	42,979	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 1,095,542</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 2,528,182</b>
<b>Construction Contingency:</b>					<b>10% \$ 252,818</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,782,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 2,782,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 500,760
<b>Mobilization</b>		6%	\$ 166,920
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 417,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,867,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Elm Grove Rd.	<b>This project consists of the reconstruction of Elm Grove Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-L</b>
<b>Limits:</b>	N. City Limit to Liberty Grove Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	5,684		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	15,157	cy	\$ 12.00	\$ 181,888
206	6" Lime Stabilization (with Lime @ 27#/sy)	29,683	sy	\$ 4.00	\$ 118,732
306	8" Concrete Pavement w/ 6" Curb	28,420	sy	\$ 46.00	\$ 1,307,320
406	4" Topsoil	8,842	sy	\$ 5.00	\$ 44,209
506	4' Concrete Sidewalk	45,472	sf	\$ 4.00	\$ 181,888
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,834,037</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	110,042	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	91,702	
√ Pavement Markings/Markers		3%	\$	55,021	
√ Roadway Drainage	Standard Internal System	30%	\$	550,211	
√ Illumination		6%	\$	110,042	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	110,042	
√ Sewer	Minor Adjustments	4%	\$	73,361	
√ Establish Turf / Erosion Control		3%	\$	55,021	
√ Basic Landscaping		3%	\$	55,021	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 1,210,465</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,044,502</b>
<b>Construction Contingency:</b>					<b>10% \$ 304,450</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 3,349,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 3,349,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 602,820
<b>Mobilization</b>		6%	\$ 200,940
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 502,350
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,655,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Dalrock Rd. (1)	<b>This project consists of the reconstruction of Dalrock Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>1-M</b>
<b>Limits:</b>	Liberty Grove Rd. to 770' SE. of Lake North Rd.		
<b>Impact Fee Type:</b>	B+		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	2,409		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>						
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>	
105	Unclassified Street Excavation	7,495	cy	\$ 12.00	\$ 89,936	
205	6" Lime Stabilization (with Lime @ 27#/sy)	14,454	sy	\$ 4.00	\$ 57,816	
305	8" Concrete Pavement w/ 6" Curb	13,383	sy	\$ 38.00	\$ 508,567	
405	4" Topsoil	7,227	sy	\$ 5.00	\$ 36,135	
505	4' Concrete Sidewalk	19,272	sf	\$ 4.00	\$ 77,088	
605	Turn Lanes and Median Openings	1,742	sy	\$ 38.00	\$ 66,177	
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 835,719</b>	
<b>Major Construction Component Allowances**:</b>						
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>			
√ Prep ROW		6%	\$	50,143		
√ Traffic Control	Construction Phase Traffic Control	5%	\$	41,786		
√ Pavement Markings/Markers		3%	\$	25,072		
√ Roadway Drainage	Standard Internal System	30%	\$	250,716		
√ Illumination		6%	\$	50,143		
√ Special Drainage Structures	Minor Stream Crossing	\$250,000	\$	250,000		
√ Water	Minor Adjustments	6%	\$	50,143		
√ Sewer	Minor Adjustments	4%	\$	33,429		
√ Establish Turf / Erosion Control		3%	\$	25,072		
√ Basic Landscaping		3%	\$	25,072		
Other:		\$0	\$	-		
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal:</b>	<b>\$ 801,574</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,637,293</b>	
<b>Construction Contingency:</b>					<b>10%</b>	<b>\$ 163,729</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,802,000</b>	

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 1,802,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 324,360
<b>Mobilization</b>		6%	\$ 108,120
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 270,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,505,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Dalrock Rd. (2)	<b>This project consists of the reconstruction of Dalrock Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>1-N</b>
<b>Limits:</b>	105' NE. of Pecan Ln. to Princeton Rd.		
<b>Impact Fee Type:</b>	B+		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	7,663		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>						
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>	
105	Unclassified Street Excavation	23,840	cy	\$ 12.00	\$ 286,085	
205	6" Lime Stabilization (with Lime @ 27#/sy)	45,978	sy	\$ 4.00	\$ 183,912	
305	8" Concrete Pavement w/ 6" Curb	42,572	sy	\$ 38.00	\$ 1,617,744	
405	4" Topsoil	22,989	sy	\$ 5.00	\$ 114,945	
505	4' Concrete Sidewalk	61,304	sf	\$ 4.00	\$ 245,216	
605	Turn Lanes and Median Openings	5,540	sy	\$ 38.00	\$ 210,509	
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,658,412</b>	
<b>Major Construction Component Allowances**:</b>						
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>			
√ Prep ROW		6%	\$	159,505		
√ Traffic Control	Construction Phase Traffic Control	5%	\$	132,921		
√ Pavement Markings/Markers		3%	\$	79,752		
√ Roadway Drainage	Standard Internal System	30%	\$	797,524		
√ Illumination		6%	\$	159,505		
√ Special Drainage Structures	Minor Stream Crossing	\$250,000	\$	250,000		
√ Water	Minor Adjustments	6%	\$	159,505		
√ Sewer	Minor Adjustments	4%	\$	106,336		
√ Establish Turf / Erosion Control		3%	\$	79,752		
√ Basic Landscaping		3%	\$	79,752		
Other:		\$0	\$	-		
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal:</b>	<b>\$ 2,004,552</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 4,662,964</b>	
<b>Construction Contingency:</b>					<b>10%</b>	<b>\$ 466,296</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 5,130,000</b>	

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 5,130,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 923,400
<b>Mobilization</b>		6%	\$ 307,800
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 769,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 7,131,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Dalrock Rd. (3)	<b>This project consists of the construction of two additional lanes within the existing median.</b>	<b>1-0</b>
<b>Limits:</b>	Princeton Rd. to Lakeview Pkwy.		
<b>Impact Fee Type:</b>	A (1/3)		
<b>Ultimate Class:</b>	Major Thoroughfare		
<b>Length (lf):</b>	1,911		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
104	Unclassified Street Excavation	4,247	cy	\$ 12.00	\$ 50,960
204	6" Lime Stabilization (with Lime @ 27#/sy)	8,281	sy	\$ 4.00	\$ 33,124
304	10" Concrete Pavement w/ 6" Curb	7,856	sy	\$ 46.00	\$ 361,391
404	4" Topsoil	2,442	sy	\$ 5.00	\$ 12,209
504	4' Concrete Sidewalk	15,288	sf	\$ 4.00	\$ 61,152
604	Turn Lanes and Median Openings	1,381	sy	\$ 46.00	\$ 63,549
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 582,385</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	34,943	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	29,119	
√ Pavement Markings/Markers		3%	\$	17,472	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	17,472	
√ Basic Landscaping		3%	\$	17,472	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 116,477</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 698,862</b>
<b>Construction Contingency:</b>					<b>10% \$ 69,886</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 769,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 769,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 138,420
<b>Mobilization</b>		6%	\$ 46,140
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 954,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Princeton Rd.	<b>This project consists of the new 2-lane undivided collector extension of Princeton Rd. north of Liberty Grove Rd.</b>	<b>1-P</b>
<b>Limits:</b>	Existing Princeton Rd. to Liberty Grove Rd.		
<b>Impact Fee Type:</b>	C		
<b>Ultimate Class:</b>	Collector Thoroughfare		
<b>Length (lf):</b>	987		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
107	Unclassified Street Excavation	2,303	cy	\$ 12.00	\$ 27,636
207	6" Lime Stabilization (with Lime @ 27#/sy)	4,496	sy	\$ 4.00	\$ 17,985
307	8" Concrete Pavement w/ 6" Curb	4,277	sy	\$ 38.00	\$ 162,526
407	4" Topsoil	1,426	sy	\$ 5.00	\$ 7,128
507	4' Concrete Sidewalk	7,896	sf	\$ 4.00	\$ 31,584
607	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 246,860</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	14,812	
Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	7,406	
√ Roadway Drainage		30%	\$	74,058	
√ Illumination		6%	\$	14,812	
Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	14,812	
√ Sewer	Minor Adjustments	4%	\$	9,874	
√ Establish Turf / Erosion Control		3%	\$	7,406	
√ Basic Landscaping		3%	\$	7,406	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 150,584</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 397,444</b>
<b>Construction Contingency:</b>					<b>10% \$ 39,744</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 438,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 438,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 78,840
<b>Mobilization</b>		6%	\$ 26,280
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 131,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 675,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Chiesa Rd. (1)	<b>This project consists of the reconstruction of Chiesa Rd. as a 4-lane undivided secondary thoroughfare.</b>	<b>1-Q</b>
<b>Limits:</b>	Liberty Grove Rd. to Danridge Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (lf):</b>	7,379		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	19,677	cy	\$ 12.00	\$ 236,128
206	6" Lime Stabilization (with Lime @ 27#/sy)	38,535	sy	\$ 4.00	\$ 154,139
306	8" Concrete Pavement w/ 6" Curb	36,895	sy	\$ 46.00	\$ 1,697,170
406	4" Topsoil	11,478	sy	\$ 5.00	\$ 57,392
506	4' Concrete Sidewalk	59,032	sf	\$ 4.00	\$ 236,128
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,380,957</b>
<b>Major Construction Component Allowances**:</b>					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	142,857	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	119,048	
√ Pavement Markings/Markers		3%	\$	71,429	
√ Roadway Drainage	Standard Internal System	30%	\$	714,287	
√ Illumination		6%	\$	142,857	
Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	142,857	
√ Sewer	Minor Adjustments	4%	\$	95,238	
√ Establish Turf / Erosion Control		3%	\$	71,429	
√ Basic Landscaping		3%	\$	71,429	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 1,571,432</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,952,389</b>
<b>Construction Contingency:</b>					<b>\$ 395,239</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 4,348,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 4,348,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 782,640
<b>Mobilization</b>		6%	\$ 260,880
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 652,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 6,044,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Danridge Rd.	<b>This project consists of a new 2-lane undivided collector extension of Danridge Rd.</b>	<b>1-R</b>
<b>Limits:</b>	Maplewood Dr. to Traveler's Crossing		
<b>Impact Fee Type:</b>	C		
<b>Ultimate Class:</b>	Collector Thoroughfare		
<b>Length (lf):</b>	1,321		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
107	Unclassified Street Excavation	3,082	cy	\$ 12.00	\$ 36,988
207	6" Lime Stabilization (with Lime @ 27#/sy)	6,018	sy	\$ 4.00	\$ 24,072
307	8" Concrete Pavement w/ 6" Curb	5,724	sy	\$ 38.00	\$ 217,525
407	4" Topsoil	1,908	sy	\$ 5.00	\$ 9,541
507	4' Concrete Sidewalk	10,568	sf	\$ 4.00	\$ 42,272
607	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 330,397</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	19,824	
√ Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	9,912	
√ Roadway Drainage		30%	\$	99,119	
√ Illumination		6%	\$	19,824	
√ Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	19,824	
√ Sewer	Minor Adjustments	4%	\$	13,216	
√ Establish Turf / Erosion Control		3%	\$	9,912	
√ Basic Landscaping		3%	\$	9,912	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>\$ 201,542</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 531,939</b>
<b>Construction Contingency:</b>					<b>10% \$ 53,194</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 586,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 586,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 105,480
<b>Mobilization</b>		6%	\$ 35,160
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 175,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 902,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Freedom Ln.	<b>This project consists of a new 2-lane undivided collector extension of Freedom Ln.</b>	<b>1-S</b>
<b>Limits:</b>	Big A. Rd. to Lakeview Pkwy.		
<b>Impact Fee Type:</b>	C		
<b>Ultimate Class:</b>	Collector Thoroughfare		
<b>Length (lf):</b>	781		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
107	Unclassified Street Excavation	1,822	cy	\$ 12.00	\$ 21,868
207	6" Lime Stabilization (with Lime @ 27#/sy)	3,558	sy	\$ 4.00	\$ 14,232
307	8" Concrete Pavement w/ 6" Curb	3,384	sy	\$ 38.00	\$ 128,605
407	4" Topsoil	1,128	sy	\$ 5.00	\$ 5,641
507	4' Concrete Sidewalk	6,248	sf	\$ 4.00	\$ 24,992
607	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 195,337</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	11,720	
Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	5,860	
√ Roadway Drainage		30%	\$	58,601	
√ Illumination		6%	\$	11,720	
Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	11,720	
√ Sewer	Minor Adjustments	4%	\$	7,813	
√ Establish Turf / Erosion Control		3%	\$	5,860	
√ Basic Landscaping		3%	\$	5,860	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 119,155</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 314,492</b>
<b>Construction Contingency:</b>					<b>10% \$ 31,449</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 346,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 346,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 62,280
<b>Mobilization</b>		6%	\$ 20,760
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 103,800
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 533,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Lakeview Pkwy.	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare.</b>	<b>1-T, 2-L</b>
<b>Limits:</b>	Dalrock Rd. to E. City Limit		
<b>Impact Fee Type:</b>	A+ (1/3)		
<b>Ultimate Class:</b>	Major Thoroughfare		
<b>Length (lf):</b>	4,225		
<b>Service Area(s):</b>	1,2		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
102	Unclassified Street Excavation	9,389	cy	\$ 12.00	\$ 112,667
202	6" Lime Stabilization (with Lime @ 27#/sy)	18,308	sy	\$ 4.00	\$ 73,233
302	10" Concrete Pavement w/ 6" Curb	17,369	sy	\$ 46.00	\$ 798,994
402	4" Topsoil	5,399	sy	\$ 5.00	\$ 26,993
502	4' Concrete Sidewalk	33,800	sf	\$ 4.00	\$ 135,200
602	Turn Lanes and Median Openings	3,054	sy	\$ 46.00	\$ 140,499
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,287,586</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	77,255	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	64,379	
√ Pavement Markings/Markers		3%	\$	38,628	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	38,628	
√ Basic Landscaping		3%	\$	38,628	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 257,517</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,545,104</b>
<b>Construction Contingency:</b>					<b>10% \$ 154,510</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,700,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 1,700,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 306,000
<b>Mobilization</b>		6%	\$ 102,000
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,108,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	HL Collector #1	<b>This project consists of the construction of a new 2-lane undivided collector.</b>	<b>1-U</b>
<b>Limits:</b>	HL Collector #1		
<b>Impact Fee Type:</b>	HL-C3		
<b>Ultimate Class:</b>	Healthy Living Collector-3		
<b>Length (lf):</b>	1,160		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
114	Unclassified Street Excavation	2,964	cy	\$ 12.00	\$ 35,573
214	6" Lime Stabilization (with Lime @ 27#/sy)	5,800	sy	\$ 4.00	\$ 23,200
314	8" Concrete Pavement w/ 6" Curb	5,542	sy	\$ 38.00	\$ 210,604
414	4" Topsoil	2,256	sy	\$ 5.00	\$ 11,278
514	5' Concrete Sidewalk	5,800	sf	\$ 4.00	\$ 23,200
614	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 303,856</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	18,231	
√ Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	9,116	
√ Roadway Drainage		30%	\$	91,157	
√ Illumination		6%	\$	18,231	
√ Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	18,231	
√ Sewer	Minor Adjustments	4%	\$	12,154	
√ Establish Turf / Erosion Control		3%	\$	9,116	
√ Basic Landscaping		3%	\$	9,116	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 185,352</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 489,207</b>
<b>Construction Contingency:</b>					<b>10% \$ 48,921</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 539,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 539,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 97,020
<b>Mobilization</b>		6%	\$ 32,340
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 161,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 830,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2013 Roadway Impact Fee Study**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 9/25/2013

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	HL Collector #2	<b>This project consists of the construction of a new 2-lane undivided collector.</b>	<b>1-V</b>
<b>Limits:</b>	HL Collector #2		
<b>Impact Fee Type:</b>	HL-C2		
<b>Ultimate Class:</b>	Healthy Living Collector-2		
<b>Length (lf):</b>	1,160		
<b>Service Area(s):</b>	1		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
113	Unclassified Street Excavation	2,707	cy	\$ 12.00	\$ 32,480
213	6" Lime Stabilization (with Lime @ 27#/sy)	5,284	sy	\$ 4.00	\$ 21,138
313	8" Concrete Pavement w/ 6" Curb	5,027	sy	\$ 38.00	\$ 191,013
413	4" Topsoil	0	sy	\$ -	\$ -
513	11' Concrete Sidewalk	25,520	sf	\$ 4.00	\$ 102,080
613	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 346,711</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW	None Anticipated	6%	\$	20,803	
Traffic Control		0%	\$	-	
√ Pavement Markings/Markers	Standard Internal System	3%	\$	10,401	
√ Roadway Drainage		30%	\$	104,013	
√ Illumination		6%	\$	20,803	
Special Drainage Structures		0%	\$	-	
√ Water	Minor Adjustments	6%	\$	20,803	
√ Sewer	Minor Adjustments	4%	\$	13,868	
√ Establish Turf / Erosion Control		3%	\$	10,401	
√ Basic Landscaping		3%	\$	10,401	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 211,494</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 558,205</b>
<b>Construction Contingency:</b>					<b>10% \$ 55,820</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 615,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 615,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 110,700
<b>Mobilization</b>		6%	\$ 36,900
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 184,500
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 947,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Rowlett - 2016 Roadway Impact Fee Minor Update  
Capital Improvements Plan for Roadway Impact Fees  
Summary of Conceptual Level Project Cost Projections

**Roadway Improvements - Service Area 2**

#	Class	Project	Limits	Percent in Service Area	Project Cost	Project Cost in Service Area
2-A	B	Main St.	Lakeview Pkwy. to 310' W. of Rowlett Rd.	100%	\$ 5,181,000	\$ 5,181,000
2-B	B	Future Main-Century Connection	Main St. to Century Dr.	100%	\$ 942,000	\$ 942,000
2-C	A (1/3)	Miller Rd. (1)	Dexham Rd. to Rowlett Rd.	100%	\$ 5,128,000	\$ 5,128,000
2-D	A (1/3)	Miller Rd. (2)	Rowlett Rd. to PGBT SBFR	100%	\$ 2,433,000	\$ 2,433,000
2-E	A (1/3)	Miller Rd. (3)	PGBT NBFR to 360' E. of PGBT NBFR	100%	\$ 181,000	\$ 181,000
2-F	A	Miller Rd. (4)	360' E. of PGBT NBFR to Lake Ray Hubbard Bridge	100%	\$ 1,540,000	\$ 1,540,000
2-G	A	Miller Rd. (5)	Lake Ray Hubbard Bridge to 372' W. of Dalrock Rd.	100%	\$ 5,115,000	\$ 5,115,000
2-H	B+	Chiesa Rd. (2)	360' S. of Lakeview Pkwy. to Miller Rd.	100%	\$ 6,194,000	\$ 6,194,000
2-I	B+	Chiesa Rd. (3)	Miller Rd. to Dalrock Rd.	100%	\$ 5,878,000	\$ 5,878,000
2-J	A (1/3)	Dalrock Rd. (4)	Lakeview Pkwy. to Miller Rd.	100%	\$ 4,707,000	\$ 4,707,000
2-K	A (1/3)	Dalrock Rd. (5)	Miller Rd. to IH-30 WBFR	100%	\$ 2,577,000	\$ 2,577,000
1-T, 2-L	A+ (1/3)	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	50%	\$ 2,108,000	\$ 1,054,000
2-M	D-C	Melcer Dr.	Melcer Dr. Extension	100%	\$ 741,000	\$ 741,000
2-N	D-C	Martin Dr. (1)	Main St. to South End	100%	\$ 508,000	\$ 508,000
2-O	C	Martin Dr. (2)	Melcer Dr. to Main St.	100%	\$ 1,294,932	\$ 1,294,932
2-P	A (1/3)	Rowlett Rd.	Century Dr. to Kyle Rd.	100%	\$ 3,792,336	\$ 3,792,336
2-Q	SG-C5	SG Collector #1	SG Collector #1	100%	\$ 1,184,000	\$ 1,184,000
2-R	SG-C5	SG Collector #2	SG Collector #2	100%	\$ 310,000	\$ 310,000
2-S	SG-C5	SG Collector #3	SG Collector #3	100%	\$ 698,000	\$ 698,000
2-T	SG-C4	SG Collector #4	SG Collector #4	100%	\$ 633,000	\$ 633,000
2-U	SG-A+	SG Major Thoroughfare	SG Major Thoroughfare	100%	\$ 450,000	\$ 450,000
2-V	HL-C1	HL Collector #3	HL Collector #3	100%	\$ 590,000	\$ 590,000
2-W	BS-A	Bayside Arterial	IH-30 WBFR to Bayside Boulevard	100%	\$ 3,747,000	\$ 3,747,000
<b>Intersection Improvements</b>						
1		Intersection Improvement	Dalrock Rd. at Lakeview Pkwy.	50%	\$ 1,250,000	\$ 625,000
2		Intersection Improvement	Dalrock Rd. at Chiesa Rd.	100%	\$ 750,000	\$ 750,000
3		Signal Installation	Dexham Rd. at Miller Rd.	100%	\$ 250,000	\$ 250,000
<b>TOTAL</b>					<b>\$ 54,435,268</b>	<b>\$ 52,756,268</b>

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett. The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>
<b>Name:</b>	Main St.	<b>This project consists of the reconstruction of Main St. as a 4-lane undivided secondary thoroughfare.</b>	<b>2-A</b>
<b>Limits:</b>	Lakeview Pkwy. to 310' W. of Rowlett Rd.		
<b>Impact Fee Type:</b>	B		
<b>Ultimate Class:</b>	Secondary Thoroughfare		
<b>Length (If):</b>	3,058		
<b>Service Area(s):</b>	2		

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	8,155	cy	\$ 12.00	\$ 97,856
206	6" Lime Stabilization (with Lime @ 27#/sy)	15,970	sy	\$ 4.00	\$ 63,878
306	8" Concrete Pavement w/ 6" Curb	15,290	sy	\$ 46.00	\$ 703,340
406	4" Topsoil	4,757	sy	\$ 5.00	\$ 23,784
506	4' Concrete Sidewalk	24,464	sf	\$ 4.00	\$ 97,856
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 986,715</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	59,203	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	49,336	
√ Pavement Markings/Markers		3%	\$	29,601	
√ Roadway Drainage	Standard Internal System	30%	\$	296,014	
√ Illumination		6%	\$	59,203	
√ Special Drainage Structures	Crosses Long Branch Creek	\$250,000	\$	250,000	
√ Water	Minor Adjustments	6%	\$	59,203	
√ Sewer	Minor Adjustments	4%	\$	39,469	
√ Establish Turf / Erosion Control		3%	\$	29,601	
√ Basic Landscaping		3%	\$	29,601	
√ Other:	Railroad Crossing	\$1,500,000	\$	1,500,000	
<b>Allowance Subtotal:</b>					<b>\$ 2,401,232</b>
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,387,946</b>
<b>Construction Contingency:</b>					<b>10% \$ 338,795</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 3,727,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 3,727,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 670,860
<b>Mobilization</b>		6%	\$ 223,620
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	Existing Alignment	15%	\$ 559,050
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,181,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-B</b>
<b>Name:</b>	Future Main-Century Connection	<b>This project consists of the construction of a new 4-lane undivided secondary thoroughfare.</b>		
<b>Limits:</b>	Main St. to Century Dr.			
<b>Impact Fee Type:</b>	B			
<b>Ultimate Class:</b>	Secondary Thoroughfare			
<b>Length (If):</b>	588			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
106	Unclassified Street Excavation	1,568	cy	\$ 12.00	\$ 18,816
206	6" Lime Stabilization (with Lime @ 27#/sy)	3,071	sy	\$ 4.00	\$ 12,283
306	8" Concrete Pavement w/ 6" Curb	2,940	sy	\$ 46.00	\$ 135,240
406	4" Topsoil	915	sy	\$ 5.00	\$ 4,573
506	4' Concrete Sidewalk	4,704	sf	\$ 4.00	\$ 18,816
606	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 189,728</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	11,384	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	5,692	
√ Roadway Drainage	Standard Internal System	30%	\$	56,918	
√ Illumination		6%	\$	11,384	
√ Special Drainage Structures	Crosses Long Branch Creek	\$250,000	\$	250,000	
√ Water	Minor Adjustments	6%	\$	11,384	
√ Sewer	Minor Adjustments	4%	\$	7,589	
√ Establish Turf / Erosion Control		3%	\$	5,692	
√ Basic Landscaping		3%	\$	5,692	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 365,734</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 555,462</b>
<b>Construction Contingency:</b>					<b>10% \$ 55,546</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 612,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 612,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 110,160
<b>Mobilization</b>		6%	\$ 36,720
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 183,600
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 942,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-C</b>
<b>Name:</b>	Miller Rd. (1)	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare. This project includes \$2,445,660 for the 2008 construction of the existing 4 lanes.</b>		
<b>Limits:</b>	Dexham Rd. to Rowlett Rd.			
<b>Impact Fee Type:</b>	A (1/3)			
<b>Ultimate Class:</b>	Major Thoroughfare			
<b>Length (If):</b>	5,375			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
104	Unclassified Street Excavation	11,944	cy	\$ 12.00	\$ 143,333
204	6" Lime Stabilization (with Lime @ 27#/sy)	23,292	sy	\$ 4.00	\$ 93,167
304	10" Concrete Pavement w/ 6" Curb	22,097	sy	\$ 46.00	\$ 1,016,472
404	4" Topsoil	6,868	sy	\$ 5.00	\$ 34,340
504	4' Concrete Sidewalk	43,000	sf	\$ 4.00	\$ 172,000
604	Turn Lanes and Median Openings	3,886	sy	\$ 46.00	\$ 178,741
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,638,054</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	98,283	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	81,903	
√ Pavement Markings/Markers		3%	\$	49,142	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	49,142	
√ Basic Landscaping		3%	\$	49,142	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 327,611</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,965,664</b>
<b>Construction Contingency:</b>					<b>10% \$ 196,566</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,163,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 2,163,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 389,340
<b>Mobilization</b>		6%	\$ 129,780
<b>Previous City contribution</b>	2008 Miller Rd. Phase 1		\$ 2,445,660
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,128,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-D</b>
<b>Name:</b>	Miller Rd. (2)	<b>This project consists of the construction of two additional lanes in the existing median of the future 6-lane major thoroughfare. This project includes a 2004 Dallas County project from Skyline Rd. to Kirby Rd. The total project cost was \$2,898,410 of which the City contributed \$393,002.</b>		
<b>Limits:</b>	Rowlett Rd. to PGBT SBFR			
<b>Impact Fee Type:</b>	A (1/3)			
<b>Ultimate Class:</b>	Major Thoroughfare			
<b>Length (If):</b>	4,088			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
104	Unclassified Street Excavation	9,084	cy	\$ 12.00	\$ 109,013
204	6" Lime Stabilization (with Lime @ 27#/sy)	17,715	sy	\$ 4.00	\$ 70,859
304	10" Concrete Pavement w/ 6" Curb	16,806	sy	\$ 46.00	\$ 773,086
404	4" Topsoil	5,224	sy	\$ 5.00	\$ 26,118
504	4' Concrete Sidewalk	32,704	sf	\$ 4.00	\$ 130,816
604	Turn Lanes and Median Openings	2,955	sy	\$ 46.00	\$ 135,943
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,245,835</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	74,750	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	62,292	
√ Pavement Markings/Markers		3%	\$	37,375	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	37,375	
√ Basic Landscaping		3%	\$	37,375	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 249,167</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,495,002</b>
<b>Construction Contingency:</b>					<b>10% \$ 149,500</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,645,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 1,645,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 296,100
<b>Mobilization</b>		6%	\$ 98,700
<b>Previous City contribution</b>	2004 - Miller Rd.; Skyline Rd. to Kirby Rd.		\$ 393,002
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,433,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-E</b>
<b>Name:</b>	Miller Rd. (3)	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare.</b>		
<b>Limits:</b>	PGBT NBFR to 360' E. of PGBT NBFR			
<b>Impact Fee Type:</b>	A (1/3)			
<b>Ultimate Class:</b>	Major Thoroughfare			
<b>Length (If):</b>	361			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
104	Unclassified Street Excavation	802	cy	\$ 12.00	\$ 9,627
204	6" Lime Stabilization (with Lime @ 27#/sy)	1,564	sy	\$ 4.00	\$ 6,257
304	10" Concrete Pavement w/ 6" Curb	1,484	sy	\$ 46.00	\$ 68,269
404	4" Topsoil	461	sy	\$ 5.00	\$ 2,306
504	4' Concrete Sidewalk	2,888	sf	\$ 4.00	\$ 11,552
604	Turn Lanes and Median Openings	261	sy	\$ 46.00	\$ 12,005
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 110,016</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	6,601	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	5,501	
√ Pavement Markings/Markers		3%	\$	3,300	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	3,300	
√ Basic Landscaping		3%	\$	3,300	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 22,003</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 132,020</b>
<b>Construction Contingency:</b>					<b>10% \$ 13,202</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 146,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 146,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 26,280
<b>Mobilization</b>		6%	\$ 8,760
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 181,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Miller Rd. (4) 360' E. of PGBT NBFR to Lake Ray	<b>This project consists of the reconstruction of Miller Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>2-F</b>
Limits:	Hubbard Bridge		
Impact Fee Type:	B+		
Ultimate Class:	Secondary Thoroughfare		
Length (If):	1,749		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	5,441	cy	\$ 12.00	\$ 65,296
205	6" Lime Stabilization (with Lime @ 27#/sy)	10,494	sy	\$ 4.00	\$ 41,976
305	8" Concrete Pavement w/ 6" Curb	9,717	sy	\$ 38.00	\$ 369,233
405	4" Topsoil	5,247	sy	\$ 5.00	\$ 26,235
505	4' Concrete Sidewalk	13,992	sf	\$ 4.00	\$ 55,968
605	Turn Lanes and Median Openings	1,264	sy	\$ 38.00	\$ 48,046
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 606,755</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	36,405	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	30,338	
√ Pavement Markings/Markers		3%	\$	18,203	
√ Roadway Drainage	Standard Internal System	30%	\$	182,026	
√ Illumination		6%	\$	36,405	
√ Special Drainage Structures	2,975' Lake Ray Hubbard Crossing	?	?		
√ Water	Minor Adjustments	6%	\$	36,405	
√ Sewer	Minor Adjustments	4%	\$	24,270	
√ Establish Turf / Erosion Control		3%	\$	18,203	
√ Basic Landscaping		3%	\$	18,203	
Other:	Bridge Overpass	\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 400,458</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,007,213</b>
<b>Construction Contingency:</b>					<b>\$ 100,721</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,108,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,108,000
Engineering/Survey/Testing:		18%	\$ 199,440
Mobilization		6%	\$ 66,480
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 166,200
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,540,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Miller Rd. (5) Lake Ray Hubbard Bridge to 372' W. of Dalrock Rd.	<b>This project consists of the reconstruction of Miller Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>2-G</b>
Limits:			
Impact Fee Type:	B+		
Ultimate Class:	Secondary Thoroughfare		
Length (If):	5,374		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	16,719	cy	\$ 12.00	\$ 200,629
205	6" Lime Stabilization (with Lime @ 27#/sy)	32,244	sy	\$ 4.00	\$ 128,976
305	8" Concrete Pavement w/ 6" Curb	29,856	sy	\$ 38.00	\$ 1,134,511
405	4" Topsoil	16,122	sy	\$ 5.00	\$ 80,610
505	4' Concrete Sidewalk	42,992	sf	\$ 4.00	\$ 171,968
605	Turn Lanes and Median Openings	3,885	sy	\$ 38.00	\$ 147,628
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,864,323</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	111,859	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	93,216	
√ Pavement Markings/Markers		3%	\$	55,930	
√ Roadway Drainage	Standard Internal System	30%	\$	559,297	
√ Illumination		6%	\$	111,859	
√ Special Drainage Structures	1,115' Lake Ray Hubbard Crossing	?	?		
√ Water	Minor Adjustments	6%	\$	111,859	
√ Sewer	Minor Adjustments	4%	\$	74,573	
√ Establish Turf / Erosion Control		3%	\$	55,930	
√ Basic Landscaping		3%	\$	55,930	
√ Other:	Railroad Crossing		\$250,000	\$	250,000
<b>Allowance Subtotal:</b>					<b>\$ 1,480,453</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,344,776</b>
<b>Construction Contingency:</b>					<b>\$ 334,478</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 3,680,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,680,000
Engineering/Survey/Testing:		18%	\$ 662,400
Mobilization		6%	\$ 220,800
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 552,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,115,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Chiesa Rd. (2)	<b>This project consists of the reconstruction of Chiesa Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>2-H</b>
Limits:	360' S. of Lakeview Pkwy. to Miller		
Impact Fee Type:	B+		
Ultimate Class:	Secondary Thoroughfare		
Length (If):	6,600		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	20,533	cy	\$ 12.00	\$ 246,400
205	6" Lime Stabilization (with Lime @ 27#/sy)	39,600	sy	\$ 4.00	\$ 158,400
305	8" Concrete Pavement w/ 6" Curb	36,667	sy	\$ 38.00	\$ 1,393,333
405	4" Topsoil	19,800	sy	\$ 5.00	\$ 99,000
505	4' Concrete Sidewalk	52,800	sf	\$ 4.00	\$ 211,200
605	Turn Lanes and Median Openings	4,771	sy	\$ 38.00	\$ 181,308
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,289,641</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	137,378	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	114,482	
√ Pavement Markings/Markers		3%	\$	68,689	
√ Roadway Drainage	Standard Internal System	30%	\$	686,892	
√ Illumination		6%	\$	137,378	
√ Special Drainage Structures	Minor Stream Crossing	\$250,000	\$	250,000	
√ Water	Minor Adjustments	6%	\$	137,378	
√ Sewer	Minor Adjustments	4%	\$	91,586	
√ Establish Turf / Erosion Control		3%	\$	68,689	
√ Basic Landscaping		3%	\$	68,689	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 1,761,163</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 4,050,804</b>
<b>Construction Contingency:</b>					<b>10% \$ 405,080</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 4,456,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,456,000
Engineering/Survey/Testing:		18%	\$ 802,080
Mobilization		6%	\$ 267,360
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 668,400
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 6,194,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Chiesa Rd. (3)	<b>This project consists of the reconstruction of Chiesa Rd. as a 4-lane divided secondary thoroughfare.</b>	<b>2-1</b>
Limits:	Miller Rd. to Dalrock Rd.		
Impact Fee Type:	B+		
Ultimate Class:	Secondary Thoroughfare		
Length (lf):	6,414		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	19,955	cy	\$ 12.00	\$ 239,456
205	6" Lime Stabilization (with Lime @ 27#/sy)	38,484	sy	\$ 4.00	\$ 153,936
305	8" Concrete Pavement w/ 6" Curb	35,633	sy	\$ 38.00	\$ 1,354,067
405	4" Topsoil	19,242	sy	\$ 5.00	\$ 96,210
505	4' Concrete Sidewalk	51,312	sf	\$ 4.00	\$ 205,248
605	Turn Lanes and Median Openings	4,637	sy	\$ 38.00	\$ 176,198
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,225,115</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	133,507	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	111,256	
√ Pavement Markings/Markers		3%	\$	66,753	
√ Roadway Drainage	Standard Internal System	30%	\$	667,534	
√ Illumination		6%	\$	133,507	
√ Special Drainage Structures	Minor Stream Crossing	\$150,000	\$	150,000	
√ Water	Minor Adjustments	6%	\$	133,507	
√ Sewer	Minor Adjustments	4%	\$	89,005	
√ Establish Turf / Erosion Control		3%	\$	66,753	
√ Basic Landscaping		3%	\$	66,753	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 1,618,576</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,843,690</b>
<b>Construction Contingency:</b>					<b>10% \$ 384,369</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 4,229,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,229,000
Engineering/Survey/Testing:		18%	\$ 761,220
Mobilization		6%	\$ 253,740
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 634,350
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 5,878,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Dalrock Rd. (4)	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare.</b>	<b>2-J</b>
Limits:	Lakeview Pkwy. to Miller Rd.		
Impact Fee Type:	A (1/3)		
Ultimate Class:	Major Thoroughfare		
Length (If):	9,435		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	20,967	cy	\$ 12.00	\$ 251,600
204	6" Lime Stabilization (with Lime @ 27#/sy)	40,885	sy	\$ 4.00	\$ 163,540
304	10" Concrete Pavement w/ 6" Curb	38,788	sy	\$ 46.00	\$ 1,784,263
404	4" Topsoil	12,056	sy	\$ 5.00	\$ 60,279
504	4' Concrete Sidewalk	75,480	sf	\$ 4.00	\$ 301,920
604	Turn Lanes and Median Openings	6,821	sy	\$ 46.00	\$ 313,753
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 2,875,356</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	172,521	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	143,768	
√ Pavement Markings/Markers		3%	\$	86,261	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	86,261	
√ Basic Landscaping		3%	\$	86,261	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 575,071</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 3,450,427</b>
<b>Construction Contingency:</b>					<b>10% \$ 345,043</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 3,796,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,796,000
Engineering/Survey/Testing:		18%	\$ 683,280
Mobilization		6%	\$ 227,760
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 4,707,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Dalrock Rd. (5)	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare. This project was extended to the IH-30 WBFR in the 2016 update.</b>	<b>2-K</b>
Limits:	Miller Rd. to IH-30 WBFR		
Impact Fee Type:	A (1/3)		
Ultimate Class:	Major Thoroughfare		
Length (If):	5,164		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	11,476	cy	\$ 12.00	\$ 137,707
204	6" Lime Stabilization (with Lime @ 27#/sy)	22,377	sy	\$ 4.00	\$ 89,509
304	10" Concrete Pavement w/ 6" Curb	21,230	sy	\$ 46.00	\$ 976,570
404	4" Topsoil	6,598	sy	\$ 5.00	\$ 32,992
504	4' Concrete Sidewalk	41,312	sf	\$ 4.00	\$ 165,248
604	Turn Lanes and Median Openings	3,733	sy	\$ 46.00	\$ 171,725
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,573,751</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	94,425	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	78,688	
√ Pavement Markings/Markers		3%	\$	47,213	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	47,213	
√ Basic Landscaping		3%	\$	47,213	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 314,750</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,888,501</b>
<b>Construction Contingency:</b>					<b>10% \$ 188,850</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,078,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,078,000
Engineering/Survey/Testing:		18%	\$ 374,040
Mobilization		6%	\$ 124,680
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,577,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Lakeview Pkwy.	<b>This project consists of the construction of two additional lanes in the existing median of this future 6-lane major thoroughfare.</b>	<b>1-T, 2-L</b>
Limits:	Dalrock Rd. to E. City Limit		
Impact Fee Type:	A+ (1/3)		
Ultimate Class:	Major Thoroughfare		
Length (If):	4,225		
Service Area(s):	1, 2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	9,389	cy	\$ 12.00	\$ 112,667
202	6" Lime Stabilization (with Lime @ 27#/sy)	18,308	sy	\$ 4.00	\$ 73,233
302	10" Concrete Pavement w/ 6" Curb	17,369	sy	\$ 46.00	\$ 798,994
402	4" Topsoil	5,399	sy	\$ 5.00	\$ 26,993
502	4' Concrete Sidewalk	33,800	sf	\$ 4.00	\$ 135,200
602	Turn Lanes and Median Openings	3,054	sy	\$ 46.00	\$ 140,499
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 1,287,586</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	77,255	
√ Traffic Control	Construction Phase Traffic Control	5%	\$	64,379	
√ Pavement Markings/Markers		3%	\$	38,628	
Roadway Drainage	None Anticipated	0%	\$	-	
Illumination		0%	\$	-	
Special Drainage Structures	None Anticipated	0%	\$	-	
Water	None Anticipated	0%	\$	-	
Sewer	None Anticipated	0%	\$	-	
√ Establish Turf / Erosion Control		3%	\$	38,628	
√ Basic Landscaping		3%	\$	38,628	
Other:		\$0	\$	-	
<b>**Allowances based on % of Paving Construction Cost Subtotal</b>					<b>Allowance Subtotal: \$ 257,517</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 1,545,104</b>
<b>Construction Contingency:</b>					<b>10% \$ 154,510</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 1,700,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		18%	\$ 306,000
Mobilization		6%	\$ 102,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	\$ -
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 2,108,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Melcer Dr.	<b>This project consists of the 2-lane undivided extension of Melcer Dr.</b>	<b>2-M</b>
Limits:	Melcer Dr. Extension		
Impact Fee Type:	D-C		
Ultimate Class:	Downtown Collector		
Length (If):	1,052		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	2,455	cy	\$ 12.00	\$ 29,456
211	6" Lime Stabilization (with Lime @ 27#/sy)	4,792	sy	\$ 4.00	\$ 19,170
311	8" Concrete Pavement w/ 6" Curb	4,559	sy	\$ 38.00	\$ 173,229
411	4" Topsoil	1,520	sy	\$ 5.00	\$ 7,598
511	5' Concrete Sidewalk	10,520	sf	\$ 4.00	\$ 42,080
611	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 271,533</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	16,292	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	8,146	
√ Roadway Drainage	Standard Internal System	30%	\$	81,460	
√ Illumination		6%	\$	16,292	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	16,292	
√ Sewer	Minor Adjustments	4%	\$	10,861	
√ Establish Turf / Erosion Control		3%	\$	8,146	
√ Basic Landscaping		3%	\$	8,146	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 165,635</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 437,168</b>
<b>Construction Contingency:</b>					<b>10% \$ 43,717</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 481,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 481,000
Engineering/Survey/Testing:		18%	\$ 86,580
Mobilization		6%	\$ 28,860
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	\$ 144,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 741,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-N</b>
<b>Name:</b>	Martin Dr. (1)	<b>This project consists of the 2-lane undivided extension of Martin Dr.</b>		
<b>Limits:</b>	Main St. to South End			
<b>Impact Fee Type:</b>	D-C			
<b>Ultimate Class:</b>	Downtown Collector			
<b>Length (If):</b>	720			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
111	Unclassified Street Excavation	1,680	cy	\$ 12.00	\$ 20,160
211	6" Lime Stabilization (with Lime @ 27#/sy)	3,280	sy	\$ 4.00	\$ 13,120
311	8" Concrete Pavement w/ 6" Curb	3,120	sy	\$ 38.00	\$ 118,560
411	4" Topsoil	1,040	sy	\$ 5.00	\$ 5,200
511	5' Concrete Sidewalk	7,200	sf	\$ 4.00	\$ 28,800
611	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 185,840</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	11,150	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	5,575	
√ Roadway Drainage	Standard Internal System	30%	\$	55,752	
√ Illumination		6%	\$	11,150	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	11,150	
√ Sewer	Minor Adjustments	4%	\$	7,434	
√ Establish Turf / Erosion Control		3%	\$	5,575	
√ Basic Landscaping		3%	\$	5,575	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 113,362</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 299,202</b>
<b>Construction Contingency:</b>					<b>10% \$ 29,920</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 330,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 330,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 59,400
<b>Mobilization</b>		6%	\$ 19,800
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 99,000
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 508,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-0</b>
<b>Name:</b>	Martin Dr. (2)	<b>This completed project consisted of the two-lane extension of Martin Dr. This is a 2013 NCTCOG grant project. The total project cost is \$2,011,747 of which Rowlett contributed \$822,727 for the segment from Melcer Dr to Coyle St. The segment from Coyle St to Main St was completed since the 2013 study and was built with a City contribution of \$427,205 for a total of \$1,294,932.</b>		
<b>Limits:</b>	Melcer Dr. to Main St.			
<b>Impact Fee Type:</b>	C			
<b>Ultimate Class:</b>	Collector Thoroughfare			
<b>Length (lf):</b>	577			
<b>Service Area(s):</b>	2			

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>City Contribution to Construction Cost:</b>		-	\$1,294,932
<b>Engineering/Survey/Testing</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>			
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$1,294,932</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.  
 updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-P</b>
<b>Name:</b>	Rowlett Rd.	<b>This completed project consisted of the construction of two additional lanes in the median of Rowlett Rd. The total 2011 project cost is \$7,268,244 of which Rowlett contributed \$3,792,336.</b>		
<b>Limits:</b>	Century Dr. to Kyle Rd.			
<b>Impact Fee Type:</b>	A (1/3)			
<b>Ultimate Class:</b>	Major Thoroughfare			
<b>Length (lf):</b>	1,615			
<b>Service Area(s):</b>	2			

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>City Contribution to Construction Cost:</b>		-	<b>\$3,792,336</b>
<b>Engineering/Survey/Testing</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	No ROW Acquisition Costs included		
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$3,792,336</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-Q</b>
<b>Name:</b>	SG Collector #1	<b>This project consists of the construction of a new 2-lane undivided collector.</b>		
<b>Limits:</b>	SG Collector #1			
<b>Impact Fee Type:</b>	SG-C5			
<b>Ultimate Class:</b>	Signature Gateway Collector-5			
<b>Length (lf):</b>	1,452			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	3,388	cy	\$ 12.00	\$ 40,656
209	6" Lime Stabilization (with Lime @ 27#/sy)	6,615	sy	\$ 4.00	\$ 26,459
309	8" Concrete Pavement w/ 6" Curb	6,292	sy	\$ 38.00	\$ 239,096
409	4" Topsoil	0	sy	\$ -	\$ -
509	11' Concrete Sidewalk	31,944	sf	\$ 4.00	\$ 127,776
609	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 433,987</b>
<b>Major Construction Component Allowances**:</b>					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	26,039	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	13,020	
√ Roadway Drainage	Standard Internal System	30%	\$	130,196	
√ Illumination		6%	\$	26,039	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	26,039	
√ Sewer	Minor Adjustments	4%	\$	17,359	
√ Establish Turf / Erosion Control		3%	\$	13,020	
√ Basic Landscaping		3%	\$	13,020	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 264,732</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 698,719</b>
<b>Construction Contingency:</b>					<b>10% \$ 69,872</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 769,000</b>

<b>Impact Fee Project Cost Summary</b>			
Item Description	Notes:	Allowance	Item Cost
<b>Construction:</b>		-	\$ 769,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 138,420
<b>Mobilization</b>		6%	\$ 46,140
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 230,700
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 1,184,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-R</b>
<b>Name:</b>	SG Collector #2	<b>This project consists of the construction of a new 2-lane undivided collector.</b>		
<b>Limits:</b>	SG Collector #2			
<b>Impact Fee Type:</b>	SG-C5			
<b>Ultimate Class:</b>	Signature Gateway Collector-5			
<b>Length (lf):</b>	379			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
109	Unclassified Street Excavation	884	cy	\$ 12.00	\$ 10,612
209	6" Lime Stabilization (with Lime @ 27#/sy)	1,727	sy	\$ 4.00	\$ 6,906
309	8" Concrete Pavement w/ 6" Curb	1,642	sy	\$ 38.00	\$ 62,409
409	4" Topsoil	0	sy	\$ -	\$ -
509	11' Concrete Sidewalk	8,338	sf	\$ 4.00	\$ 33,352
609	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 113,279</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	6,797	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	3,398	
√ Roadway Drainage	Standard Internal System	30%	\$	33,984	
√ Illumination		6%	\$	6,797	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	6,797	
√ Sewer	Minor Adjustments	4%	\$	4,531	
√ Establish Turf / Erosion Control		3%	\$	3,398	
√ Basic Landscaping		3%	\$	3,398	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 69,100</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 182,379</b>
<b>Construction Contingency:</b>					<b>10% \$ 18,238</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 201,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 201,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 36,180
<b>Mobilization</b>		6%	\$ 12,060
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 60,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 310,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-S</b>
<b>Name:</b>	SG Collector #3	<b>This project consists of the construction of a new 2-lane undivided collector.</b>		
<b>Limits:</b>	SG Collector #3			
<b>Impact Fee Type:</b>	SG-C5			
<b>Ultimate Class:</b>	Signature Gateway Collector-5			
<b>Length (lf):</b>	854			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
109	Unclassified Street Excavation	1,993	cy	\$ 12.00	\$ 23,912
209	6" Lime Stabilization (with Lime @ 27#/sy)	3,890	sy	\$ 4.00	\$ 15,562
309	8" Concrete Pavement w/ 6" Curb	3,701	sy	\$ 38.00	\$ 140,625
409	4" Topsoil	0	sy	\$ -	\$ -
509	11' Concrete Sidewalk	18,788	sf	\$ 4.00	\$ 75,152
609	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 255,251</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	15,315	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	7,658	
√ Roadway Drainage	Standard Internal System	30%	\$	76,575	
√ Illumination		6%	\$	15,315	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	15,315	
√ Sewer	Minor Adjustments	4%	\$	10,210	
√ Establish Turf / Erosion Control		3%	\$	7,658	
√ Basic Landscaping		3%	\$	7,658	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 155,703</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 410,954</b>
<b>Construction Contingency:</b>					<b>10% \$ 41,095</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 453,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 453,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 81,540
<b>Mobilization</b>		6%	\$ 27,180
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 135,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 698,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-T</b>
<b>Name:</b>	SG Collector #4	<b>This project consists of the construction of a new 2-lane undivided collector.</b>		
<b>Limits:</b>	SG Collector #4			
<b>Impact Fee Type:</b>	SG-C4			
<b>Ultimate Class:</b>	Signature Gateway Collector-4			
<b>Length (If):</b>	890			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
108	Unclassified Street Excavation	2,472	cy	\$ 12.00	\$ 29,667
208	6" Lime Stabilization (with Lime @ 27#/sy)	4,846	sy	\$ 4.00	\$ 19,382
308	8" Concrete Pavement w/ 6" Curb	4,648	sy	\$ 38.00	\$ 176,616
408	4" Topsoil	1,236	sy	\$ 5.00	\$ 6,181
508	No sidewalk in ROW	0	sf	\$ -	\$ -
608	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 231,845</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	13,911	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	6,955	
√ Roadway Drainage	Standard Internal System	30%	\$	69,554	
√ Illumination		6%	\$	13,911	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	13,911	
√ Sewer	Minor Adjustments	4%	\$	9,274	
√ Establish Turf / Erosion Control		3%	\$	6,955	
√ Basic Landscaping		3%	\$	6,955	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 141,425</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 373,270</b>
<b>Construction Contingency:</b>					<b>10% \$ 37,327</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 411,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 411,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 73,980
<b>Mobilization</b>		6%	\$ 24,660
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 123,300
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 633,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

<b>Project Information:</b>		<b>Description:</b>	<b>Project No.</b>	<b>2-U</b>
<b>Name:</b>	SG Major Thoroughfare	<b>This project consists of the construction of a new 2-lane divided major thoroughfare.</b>		
<b>Limits:</b>	SG Major Thoroughfare			
<b>Impact Fee Type:</b>	SG-A+			
<b>Ultimate Class:</b>	Signature Gateway Major Thoroughfare			
<b>Length (If):</b>	464			
<b>Service Area(s):</b>	2			

<b>Roadway Construction Cost Projection</b>					
<b>No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Item Cost</b>
110	Unclassified Street Excavation	1,495	cy	\$ 12.00	\$ 17,941
210	6" Lime Stabilization (with Lime @ 27#/sy)	2,887	sy	\$ 4.00	\$ 11,548
310	8" Concrete Pavement w/ 6" Curb	2,681	sy	\$ 38.00	\$ 101,874
410	4" Topsoil	2,990	sy	\$ 5.00	\$ 14,951
510	5' Concrete Sidewalk	4,640	sf	\$ 4.00	\$ 18,560
610	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 164,875</b>
<b>Major Construction Component Allowances**:</b>					
<b>Item Description</b>	<b>Notes</b>	<b>Allowance</b>	<b>Item Cost</b>		
√ Prep ROW		6%	\$	9,892	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	4,946	
√ Roadway Drainage	Standard Internal System	30%	\$	49,462	
√ Illumination		6%	\$	9,892	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	9,892	
√ Sewer	Minor Adjustments	4%	\$	6,595	
√ Establish Turf / Erosion Control		3%	\$	4,946	
√ Basic Landscaping		3%	\$	4,946	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 100,574</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 265,448</b>
<b>Construction Contingency:</b>					<b>10% \$ 26,545</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 292,000</b>

<b>Impact Fee Project Cost Summary</b>			
<b>Item Description</b>	<b>Notes:</b>	<b>Allowance</b>	<b>Item Cost</b>
<b>Construction:</b>		-	\$ 292,000
<b>Engineering/Survey/Testing:</b>		18%	\$ 52,560
<b>Mobilization</b>		6%	\$ 17,520
<b>Previous City contribution</b>			
<b>Other</b>			
<b>ROW/Easement Acquisition:</b>	New Roadway Alignment	30%	\$ 87,600
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 450,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	HL Collector #3	<b>This project consists of the construction of a new 2-lane undivided collector.</b>	<b>2-V</b>
Limits:	HL Collector #3		
Impact Fee Type:	HL-C1		
Ultimate Class:	Healthy Living Collector-1		
Length (If):	700		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
112	Unclassified Street Excavation	2,022	cy	\$ 12.00	\$ 24,267
212	6" Lime Stabilization (with Lime @ 27#/sy)	3,967	sy	\$ 4.00	\$ 15,867
312	8" Concrete Pavement w/ 6" Curb	3,811	sy	\$ 38.00	\$ 144,822
412	4" Topsoil	0	sy	\$ -	\$ -
512	11' Concrete Sidewalk	7,700	sf	\$ 4.00	\$ 30,800
612	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 215,756</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	12,945	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	6,473	
√ Roadway Drainage	Standard Internal System	30%	\$	64,727	
√ Illumination		6%	\$	12,945	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	12,945	
√ Sewer	Minor Adjustments	4%	\$	8,630	
√ Establish Turf / Erosion Control		3%	\$	6,473	
√ Basic Landscaping		3%	\$	6,473	
Other:		\$0	\$	-	
<b>Allowance Subtotal:</b>					<b>\$ 131,611</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 347,366</b>
<b>Construction Contingency:</b>					<b>10% \$ 34,737</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 383,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 383,000
Engineering/Survey/Testing:		18%	\$ 68,940
Mobilization		6%	\$ 22,980
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	\$ 114,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 590,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**City of Rowlett**  
**2016 Roadway Impact Fee Minor Update**  
**Conceptual Level Project Cost Projection**

Kimley-Horn and Associates, Inc.

updated: 6/21/2016

Project Information:		Description:	Project No.
Name:	Bayside Arterial	<b>This project consists of the construction of a new 4-lane divided arterial.</b>	<b>2-W</b>
Limits:	IH-30 WBFR to Bayside Boulevard		
Impact Fee Type:	BS-A		
Ultimate Class:	Bayside Arterial		
Length (If):	1,350		
Service Area(s):	2		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
115	Unclassified Street Excavation	4,200	cy	\$ 12.00	\$ 50,400
215	6" Lime Stabilization (with Lime @ 27#/sy)	8,100	sy	\$ 4.00	\$ 32,400
315	8" Concrete Pavement w/ 6" Curb	7,500	sy	\$ 38.00	\$ 285,000
415	4" Topsoil	4,050	sy	\$ 5.00	\$ 20,250
515	5' Concrete Sidewalk	10,800	sf	\$ 5.00	\$ 54,000
615	Turn Lanes and Median Openings	0	sy	\$ -	\$ -
<b>Paving Construction Cost Subtotal:</b>					<b>\$ 442,050</b>
Major Construction Component Allowances**:					
Item Description	Notes	Allowance	Item Cost		
√ Prep ROW		6%	\$	26,523	
√ Traffic Control	None Anticipated	0%	\$	-	
√ Pavement Markings/Markers		3%	\$	13,262	
√ Roadway Drainage	Standard Internal System	30%	\$	132,615	
√ Illumination		6%	\$	26,523	
√ Special Drainage Structures	None Anticipated	0%	\$	-	
√ Water	Minor Adjustments	6%	\$	26,523	
√ Sewer	Minor Adjustments	4%	\$	17,682	
√ Establish Turf / Erosion Control		3%	\$	13,262	
√ Basic Landscaping		3%	\$	13,262	
√ Other:	Bridge Overpass		\$1,500,000	\$	1,500,000
<b>Allowance Subtotal:</b>					<b>\$ 1,769,651</b>
<b>Paving and Allowance Subtotal:</b>					<b>\$ 2,211,701</b>
<b>Construction Contingency:</b>					<b>10% \$ 221,170</b>
<b>Construction Cost TOTAL:</b>					<b>\$ 2,433,000</b>

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,433,000
Engineering/Survey/Testing:		18%	\$ 437,940
Mobilization		6%	\$ 145,980
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	\$ 729,900
<b>Impact Fee Project Cost TOTAL:</b>			<b>\$ 3,747,000</b>

**NOTE:** The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Rowlett.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

**Appendix B – CIP Service Units of Supply**

City of Rowlett - 2013 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area 1

9/25/2013

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1-A	Castle Dr.	Miles Rd. to Merritt Rd.	0.51	4	B	342	100%	625	1263	173	1,090	\$ 2,185,000	\$ 2,185,000
1-B	Hickox Rd. (1)	Rowlett Rd. to 235' NE. of Toler Rd.	0.59	4	B, B+	389	100%	625	1472	229	1243.06439	\$ 2,737,012.00	\$ 2,737,012.00
1-C	Hickox Rd. (2)	235' NE. of Toler Rd. to Merritt Rd.	0.76	4	B+	132	100%	700	2126	100	2,026	\$ 3,531,000	\$ 3,531,000
1-D	Merritt Rd.	N. City Limit to 860' SE. of Future Liberty Grove-Merritt Connector	1.52	4	B	312	100%	625	3811	475	3,336	\$ 2,926,087	\$ 2,926,087
1-E	Liberty Grove-Merritt Connector (1)	PGBT NBFR to 805' E. of PGBT NBFR	0.15	6	A	0	100%	700	642	0	642	\$ 1,204,000	\$ 1,204,000
1-F	Liberty Grove-Merritt Connector (2)	805' E. of PGBT NBFR to Liberty Grove Rd.	0.49	4	B	0	100%	625	1215	0	1,215	\$ 3,106,000	\$ 3,106,000
1-G	Liberty Grove Rd. (1)	Rosebud Dr. to PGBT SBFR	0.67	4	B	86	100%	625	1681	58	1,623	\$ 2,908,000	\$ 2,908,000
1-H	Liberty Grove Rd. (2)	PGBT NBFR to Merritt Rd.	0.16	4	B	1,375	100%	625	388	213	175	\$ 671,000	\$ 671,000
1-I	Liberty Grove Rd. (3)	Merritt Rd. to Chiesa Rd.	0.95	4	B	1,375	100%	625	2363	1,299	1,064	\$ 4,852,000	\$ 4,852,000
1-J	Liberty Grove Rd. (4)	Chiesa Rd. to Princeton Rd.	0.28	4	B	1,375	100%	625	706	388	318	\$ 365,293	\$ 365,293
1-K	Liberty Grove Rd. (5)	Broadmoor Ln. to Elm Grove Rd.	0.84	4	B	1,283	100%	625	2102	1,079	1,023	\$ 3,867,000	\$ 3,867,000
1-L	Elm Grove Rd.	N. City Limit to Liberty Grove Rd.	1.08	4	B	779	100%	625	2691	839	1,852	\$ 4,655,000	\$ 4,655,000
1-M	Dalrock Rd. (1)	Liberty Grove Rd. to 770' SE. of Lake North Rd.	0.46	4	B+	304	100%	700	1278	139	1,139	\$ 2,505,000	\$ 2,505,000
1-N	Dalrock Rd. (2)	105' NE. of Pecan Ln. to Princeton Rd.	1.45	4	B+	469	100%	700	4064	681	3,383	\$ 7,131,000	\$ 7,131,000
1-O	Dalrock Rd. (3)	Princeton Rd. to Lakeview Pkwy.	0.36	6	A (1/3)	855	100%	700	1520	309	1,211	\$ 954,000	\$ 954,000
1-P	Princeton Rd.	Existing Princeton Rd. to Liberty Grove Rd.	0.19	2	C	2,046	100%	500	187	383	-196	\$ 675,000	\$ 675,000
1-Q	Chiesa Rd. (1)	Liberty Grove Rd. to Danridge Rd.	1.40	4	B	431	100%	625	3494	602	2,892	\$ 6,044,000	\$ 6,044,000
1-R	Danridge Rd.	Maplewood Dr. to Traveler's Crossing	0.25	2	C	769	100%	500	250	192	58	\$ 902,000	\$ 902,000
1-S	Freedom Ln.	Big A. Rd. to Lakeview Pkwy.	0.15	2	C	0	100%	500	148	0	148	\$ 533,000	\$ 533,000
1-T, 2-L	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	6	A+ (1/3)	2,799	50%	700	1680	1,120	560	\$ 2,108,000	\$ 1,054,000
1-U	HL Collector #1	HL Collector #1	0.22	2	HL-C3		100%	425	187	0	187	\$ 830,000	\$ 830,000
1-V	HL Collector #2	HL Collector #2					100%			0		\$ 947,000	\$ 947,000
1		Dalrock Rd. at Lakeview Pkwy.					50%			0		\$ 1,250,000	\$ 625,000
2		Liberty Grove Rd. at Chiesa Rd.					100%			0		\$ 250,000	\$ 250,000
3		Princeton Rd. at Liberty Grove Rd.					100%			0		\$ 250,000	\$ 250,000
4		Merritt Rd. at Hickox Rd.					100%			0		\$ 250,000	\$ 250,000
5		Merritt Rd. at Castle Dr.					100%			0		\$ 250,000	\$ 250,000
6		Merritt Rd. at Liberty Grove Rd.					100%			0		\$ 450,000	\$ 450,000
7		Merritt Rd. at PGBT					100%			0		\$ 250,000	\$ 250,000
<b>SUBTOTAL</b>									<b>33,268</b>	<b>8,279</b>	<b>24,989</b>	<b>\$ 58,586,392</b>	<b>\$ 56,907,392</b>

2013 Roadway Impact Fee Study Cost Per Service Area \$ 22,500  
**TOTAL COST IN SERVICE AREA 1 \$ 56,929,892**

City of Rowlett - 2016 Roadway Impact Fee Minor Update

CIP Service Units of Supply

Service Area 2

6/21/2016

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
2-A	Main St.	Lakeview Pkwy. to 310' W. of Rowlett Rd.	0.58	4	B	445	100%	625	1,448	258	1,190	\$ 5,181,000	\$ 5,181,000
2-B	Future Main-Century Connection	Main St. to Century Dr.	0.11	4	B	0	100%	625	278	0	278	\$ 942,000	\$ 942,000
2-C	Miller Rd. (1)	Dexham Rd. to Rowlett Rd.	1.02	6	A (1/3)	1,298	100%	700	4,276	1,322	2,954	\$ 5,128,000	\$ 5,128,000
2-D	Miller Rd. (2)	Rowlett Rd. to PGBT SBFR	0.77	6	A (1/3)	1,298	100%	700	3,252	1,005	2,247	\$ 2,433,000	\$ 2,433,000
2-E	Miller Rd. (3)	PGBT NBFR to 360' E. of PGBT NBFR	0.07	6	A (1/3)	1,298	100%	700	287	89	198	\$ 181,000	\$ 181,000
2-F	Miller Rd. (4)	360' E. of PGBT NBFR to Lake Ray Hubbard Bridge	0.33	6	A	1,190	100%	700	1,391	394	997	\$ 1,540,000	\$ 1,540,000
2-G	Miller Rd. (5)	Lake Ray Hubbard Bridge to 372' W. of Dalrock Rd.	1.02	6	A	1,145	100%	700	4,275	1,166	3,109	\$ 5,115,000	\$ 5,115,000
2-H	Chiesa Rd. (2)	360' S. of Lakeview Pkwy. to Miller Rd.	1.25	4	B+	1,099	100%	700	3,500	1,374	2,126	\$ 6,194,000	\$ 6,194,000
2-I	Chiesa Rd. (3)	Miller Rd. to Dalrock Rd.	1.21	4	B+	1,099	100%	700	3,401	1,335	2,066	\$ 5,878,000	\$ 5,878,000
2-J	Dalrock Rd. (4)	Lakeview Pkwy. to Miller Rd.	1.79	6	A (1/3)	2,306	100%	700	7,505	4,121	3,384	\$ 4,707,000	\$ 4,707,000
2-K	Dalrock Rd. (5)	Miller Rd. to IH-30 WBFR	0.98	6	A (1/3)	3,024	100%	700	4,108	2,958	1,150	\$ 2,577,000	\$ 2,577,000
1-T, 2-L	Lakeview Pkwy.	Dalrock Rd. to E. City Limit	0.80	6	A+ (1/3)	331	50%	700	1,680	132	1,548	\$ 2,108,000	\$ 1,054,000
2-M	Melcer Dr.	Melcer Dr. Extension	0.20	2	D-C	0	100%	425	169	0	169	\$ 741,000	\$ 741,000
2-N	Martin Dr. (1)	Main St. to South End	0.14	2	D-C	0	100%	425	116	0	116	\$ 508,000	\$ 508,000
2-O	Martin Dr. (2)	Melcer Dr. to Main St.	0.11	2	C	0	100%	500	109	0	109	\$ 1,294,932	\$ 1,294,932
2-P	Rowlett Rd.	Century Dr. to Kyle Rd.	0.31	6	A (1/3)	2,190	100%	700	1,285	670	615	\$ 3,792,336	\$ 3,792,336
2-Q	SG Collector #1	SG Collector #1	0.28	2	SG-C5		100%	425	234	0	234	\$ 1,184,000	\$ 1,184,000
2-R	SG Collector #2	SG Collector #2	0.07	2	SG-C5		100%	425	61	0	61	\$ 310,000	\$ 310,000
2-S	SG Collector #3	SG Collector #3	0.16	2	SG-C5		100%	425	137	0	137	\$ 698,000	\$ 698,000
2-T	SG Collector #4	SG Collector #4	0.17	2	SG-C4		100%	425	143	0	143	\$ 633,000	\$ 633,000
2-U	SG Major Thoroughfare	SG Major Thoroughfare	0.09	2	SG-A+		100%	425	75	0	75	\$ 450,000	\$ 450,000
2-V	HL Collector #3	HL Collector #3	0.13	2	HL-C1		100%	425	113	0	113	\$ 590,000	\$ 590,000
2-W	Bayside Arterial	IH-30 WBFR to Bayside Boulevard	0.26	2	BS-A		100%	425	217	0	217	\$ 3,747,000	\$ 3,747,000
1	Intersection Improvement	Dalrock Rd. at Lakeview Pkwy.					50%					\$ 1,250,000	\$ 625,000
2	Intersection Improvement	Dalrock Rd. at Chiesa Rd.					100%					\$ 750,000	\$ 750,000
3	Signal Installation	Dexham Rd. at Miller Rd.					100%					\$ 250,000	\$ 250,000
<b>SUBTOTAL</b>									<b>38,061</b>	<b>14,824</b>	<b>23,237</b>	<b>\$ 58,182,268</b>	<b>\$ 56,503,268</b>

2013 Roadway Impact Fee Study and 2016 Roadway Impact Fee Minor Update Cost Per Service Area \$ 32,000

**TOTAL COST IN SERVICE AREA 2 \$ 56,535,268**

**Appendix C – Existing Roadway Facilities Inventory**

City of Rowlett - 2013 Roadway Impact Fee Study  
Existing Roadway Facilities Inventory

9/25/2013

Service Area 1

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI			
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Castle Dr./Dexham Rd.	Lakeview Pkwy.	395' N. of Hickox Rd.	5,185	0.98	2	2	4D	B+	4D	287	273	100%	650	650	1,277	1,277	281	268	995	1,008				
Castle Dr.	Miles Rd.	Merritt Rd.	2,670	0.51	1	1	2U-A	B	4U	190	152	100%	450	450	228	228	96	77	131	151				
Hickox Rd.	Castle Dr.	Bluebell Dr.	4,205	0.80	2	2	4D	B+	4D	198	191	100%	650	650	1,035	1,035	158	152	878	883				
Hickox Rd.	Bluebell Dr.	Bluebonnet Dr.	1,225	0.23	2	2	4U	B	4U	198	191	100%	500	500	232	232	46	44	186	188				
Hickox Rd.	Bluebonnet Dr.	235' NE. of Toler Rd.	1,360	0.26	1	1	4D	B+	4D	99	94	100%	650	650	167	167	26	24	142	143				
Hickox Rd.	235' NE. of Toler Rd.	Merritt Rd.	4,010	0.76	1	1	2U-A	B+	4D	69	64	100%	450	450	342	342	52	48	290	293				
Big A Rd.	Rowlett Rd.	End of Road	3,060	0.58	1	1	2U-A	C	2U	138	134	100%	450	450	261	261	80	78	181	183				
Rowlett Rd.	Castle Dr.	Lakeview Pkwy.	9,660	1.83	3	3	6D	A	6D	1,196	1,413	100%	700	700	3,842	3,842	2,187	2,585	1,655	1,257				
Merritt Rd.	N. City Limit	260' NW. of Castle Dr.	2,495	0.47	2	2	4D	B	4U	132	161	100%	650	650	614	614	62	76	552	538				
Merritt Rd.	260' NW. of Castle Dr.	Future Liberty Grove-Merritt Connector	4,695	0.89	1	1	2U-A	B	4U	129	183	100%	450	450	400	400	115	162	285	238				
Merritt Rd.	Future Liberty Grove-Merritt Connector	860' SE. of Future Liberty Grove-Merritt Connector	860	0.16	1	1	2U-A	B	4U	129	183	100%	450	450	73	73	21	30	52	44				
Merritt Rd.	860' SE. of Future Liberty Grove-Merritt Connector	PGBT SBFR	1,695	0.32	1	1	2U-A	C	2U	129	183	100%	450	450	144	144	41	59	103	86				
Merritt Rd.	PGBT NBFR	Liberty Grove Rd.	945	0.18	1	1	2U-A	C	2U	314	14	100%	450	450	81	81	56	3	24	78				
Liberty Grove Rd.	Rosebud Dr.	PGBT SBFR	3,550	0.67	1	1	2U-A	B	4U	32	54	100%	450	450	303	303	21	36	281	266				
Liberty Grove Rd.	PGBT SBFR	PGBT NBFR	305	0.06	2	2	4U	B	4U	789	169	100%	500	500	58	58	46	10	12	48				
Liberty Grove Rd.	PGBT NBFR	Muddy Creek	2,215	0.42	1	1	2U-A	B	4U	690	685	100%	450	450	189	189	290	287	-101	-98	101	98		
Lakeview Pkwy.	W. City Limit	E. City Limit	14,390	2.73	3	3	6D	A+	6D	1,755	1,670	50%	700	700	2,862	2,862	2,392	2,276	470	586				
Vinson Rd.	Elm Grove Rd.	N. City Limit	2,725	0.52	1	1	2U-A	C	2U	90	127	100%	450	450	232	232	46	66	186	166				
Elm Grove Rd.	N. City Limit	Vinson Rd.	255	0.05	1	1	2U-A	B	4U	155	149	100%	450	450	22	22	7	7	14	15				
Elm Grove Rd.	Vinson Rd.	695' NW. of Yeager Rd.	1,095	0.21	1	1	2U-A	B	4U	155	149	100%	450	450	93	93	32	31	61	62				
Elm Grove Rd.	695' NW. of Yeager Rd.	Liberty Grove Rd.	4,210	0.80	1	1	2U-A	B	4U	133	147	100%	450	450	359	359	106	117	253	241				
Waterview Pkwy.	Liberty Grove Rd.	Elm Grove Rd.	7,465	1.41	1	1	2U-CG	C	2U	547	654	100%	500	500	707	707	774	925	-67	-218	67	218		
Princeton Rd.	Raney Rd.	Old Princeton Rd.	4,675	0.89	1	1	2U-A	C	2U	75	75	100%	450	450	398	398	66	66	332	332				
Liberty Grove Rd.	Muddy Creek	Chiesa Rd.	2,880	0.55	1	1	2U-A	B	4U	690	685	100%	450	450	245	245	376	373	-131	-128	131	128		
Liberty Grove Rd.	Chiesa Rd.	Broadmoor Ln.	4,290	0.81	2	2	4D	B	4U	615	668	100%	650	650	1,056	1,056	500	543	557	514				
Liberty Grove Rd.	Broadmoor Ln.	Bent Tree Dr.	2,080	0.39	1	1	2U-A	B	4U	390	390	100%	450	450	177	177	154	153	24	24				
Liberty Grove Rd.	Bent Tree Dr.	Liberty Grove Elem. School	185	0.04	1	1	3U	B	4U	390	390	100%	550	550	70	70	14	14	6	6				
Liberty Grove Rd.	Liberty Grove Elem. School	280' NE. of Esquire Ln.	675	0.13	1	1	3U	B	4U	390	390	100%	550	550	70	70	50	50	20	21				
Liberty Grove Rd.	280' NE. of Esquire Ln.	Elm Grove Rd.	1,500	0.28	1	1	2U-A	B	4U	390	390	100%	450	450	128	128	111	111	17	17				
Chiesa Rd.	Liberty Grove Rd.	Danridge Rd.	7,380	1.40	1	1	2U-A	B	4U	204	227	100%	450	450	629	629	285	318	344	311				
Chiesa Rd.	Danridge Rd.	Lakeview Pkwy.	2,310	0.44	2	2	4D	A	6D	373	396	100%	650	650	569	569	163	173	406	395				
Dalrock Rd.	Liberty Grove Rd.	770' SE. of Lake North Rd.	2,260	0.43	1	1	2U-A	B+	4D	246	223	100%	450	450	193	193	105	95	87	97				
Dalrock Rd.	105' NE. of Pecan Ln.	Princeton Rd.	7,663	1.45	1	1	2U-A	B+	4D	443	412	100%	450	450	653	653	643	597	10	56				
Dalrock Rd.	Princeton Rd.	Lakeview Pkwy.	1,910	0.36	2	2	4D	A	6D	1,003	1,044	100%	650	650	470	470	363	378	108	93				
Lakeview Pkwy.	W. City Limit	Dalrock Rd.	7,025	1.33	3	3	6D	A+	6D	1,626	1,275	50%	700	700	1,397	1,397	1,082	848	315	549				
Lakeview Pkwy.	Dalrock Rd.	E. City Limit	4,225	0.80	2	2	4D	A+	6D	1,446	1,353	50%	650	650	520	520	579	541	-58	-21	58	21		
Scenic Dr.	Mallard Reserve Dr.	Lakeview Pkwy.	855	0.16	1	1	2U-CG	C	2U	50	50	100%	500	500	81	81	8	73	73					
<b>SUBTOTAL</b>			<b>128,188</b>	<b>24.28</b>											<b>20,127</b>	<b>20,127</b>	<b>11,433</b>	<b>11,631</b>	<b>8,694</b>	<b>8,496</b>	<b>357</b>	<b>465</b>		
															<b>40,253</b>		<b>23,064</b>		<b>17,189</b>		<b>822</b>			

City of Rowlett - 2016 Roadway Impact Fee Minor Update  
Existing Roadway Facilities Inventory

6/21/2016

Service Area 2

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI					
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Lakeview Pkwy.	W. City Limit	Dalrock Rd.	7,025	1.33	3	3	6D	A+	6D	1,626	1,275	50%	700	700	1,397	1,397	1,082	848	315	549						
Lakeview Pkwy.	Dalrock Rd.	E. City Limit	4,375	0.83	2	2	4D	A+	6D	1,446	1,353	50%	650	650	539	539	599	561	-61	-22	61	22				
Schrade Rd.	Chiesa Rd.	Dalrock Rd.	4,080	0.77	1	1	2U-A	C	2U	127	96	100%	450	450	348	348	98	74	249	274						
Miller Rd.	Lake Ray Hubbard Bridge	370 W. of Dalrock Rd.	6,415	1.21	1	1	2U-A	A	6D	580	586	100%	450	450	547	547	704	687	-158	-140	158	140				
Miller Rd.	370 W. of Dalrock Rd.	Dalrock Rd.	370	0.07	2	2	4D	A	6D	235	303	100%	650	650	91	91	16	21	75	70						
Garner Rd.	W. City Limit	Stanford St.	2,555	0.48	1	1	2U-A	C	2U	75	75	100%	450	450	218	218	36	36	181	181						
Garner Rd.	Chiesa Rd.	170 W. of Randi Rd.	2,275	0.43	1	1	2U-A	C	2U	75	75	100%	450	450	194	194	32	32	162	162						
Garner Rd.	170 W. of Randi Rd.	Dalrock Rd.	1,420	0.27	1	1	2U-CG	C	2U	75	75	100%	500	500	134	134	20	20	114	114						
Chiesa Rd.	Lakeview Pkwy.	Dalrock Rd.	13,375	2.53	1	1	2U-A	A	6D	461	638	100%	450	450	1,140	1,140	1,167	1,617	-27	-477	27	477				
Dalrock Rd.	Lakeview Pkwy.	590 S. of Chiesa Rd.	13,835	2.62	2	2	4D	A	6D	1,128	1,178	100%	650	650	3,406	3,406	2,957	3,086	450	321						
Dalrock Rd.	590 S. of Chiesa Rd.	I-30 WBFR	760	0.14	2	2	4D	A	6D	1,536	1,489	50%	650	650	94	94	111	107	-17	-14	17	14				
Scenic Dr.	Lakeview Pkwy.	200 S. of Pollard St.	2,175	0.41	2	2	4D	C	2U	163	168	100%	650	650	536	536	67	69	469	466						
Scenic Dr.	200 S. of Pollard St.	Woodlake Dr.	2,320	0.44	1	1	2U-CG	C	2U	101	100	100%	500	500	220	220	44	44	175	176						
Lakeview Pkwy.	W. City Limit	E. City Limit	14,390	2.73	3	3	6D	A+	6D	1,755	1,670	50%	700	700	2,862	2,862	2,392	2,276	470	586						
Industrial St.	725 W. of Martin Dr.	PGBT SBFR	3,010	0.57	1	1	2U-CG	C	2U	75	75	100%	500	500	285	285	43	43	242	242						
Melcer Dr.	Rowlett Rd.	Martin Dr.	1,575	0.30	1	1	2U-CG	C	2U	75	75	100%	500	500	149	149	22	22	127	127						
Main St.	Lakeview Pkwy.	310 W. of Rowlett Rd.	3,060	0.58	1	1	2U-A	B	4U	282	164	100%	450	450	261	261	163	95	96	166						
Main St.	310 W. of Rowlett Rd.	Rowlett Rd.	310	0.06	2	2	4U	B	4U	282	164	100%	500	500	59	59	17	10	42	49						
Main St.	Rowlett Rd.	280 W. of Commerce St.	645	0.12	1	1	2U-CG	B1	2D	282	164	100%	500	500	61	61	34	20	27	41						
Main St.	280 W. of Commerce St.	Ponder St.	720	0.14	1	1	2U-CG	B1	2D	282	164	100%	500	500	68	68	38	22	30	46						
Main St.	Ponder St.	Skyline Dr.	700	0.13	1	1	2U-CG	B1	2D	282	164	100%	500	500	66	66	37	22	29	45						
Main St.	Skyline Dr.	530 E. of Skyline Dr.	530	0.10	1	1	3U	B2	3U	282	164	100%	550	550	55	55	28	16	27	39						
Main St.	530 E. of Skyline Dr.	PGBT SBFR	1,360	0.26	1	1	2U-A	B2	3U	230	195	100%	450	450	116	116	59	50	57	66						
Main St.	PGBT SBFR	1,090 E. of PGBT	1,490	0.28	2	2	4U	C	2U	230	195	100%	500	500	282	282	65	55	217	227						
Main St.	1,090 E. of PGBT	E. City Limit	1,365	0.26	1	1	2U-CG	C	2U	230	195	100%	500	500	129	129	60	50	70	79						
Miller Rd.	Dexham Rd.	360 E. of PGBT NBFR	10,120	1.92	2	2	4D	A	6D	635	664	100%	650	650	2,492	2,492	1,216	1,272	1,276	1,220						
Miller Rd.	360 E. of PGBT NBFR	E. City Limit	4,240	0.80	1	1	2U-A	A	6D	682	509	100%	450	450	361	361	647	409	-186	-47	186	47				
Chaha Rd.	Rowlett Rd.	Chaha Rd.	2,350	0.45	1	1	2U-A	C	2U	148	213	100%	450	450	200	200	66	95	134	106						
Kirby Rd.	Chaha Rd.	PGBT SBFR	2,490	0.47	1	1	2U-A	C	2U	72	142	100%	450	450	212	212	34	67	178	145						
Dexham Rd.	Lakeview Pkwy.	Miller Rd.	5,710	1.08	1	1	2U-A	C	2U	227	184	100%	450	450	487	487	246	199	241	287						
Martin Dr.	Lakeview Pkwy.	Coyle St.	1,565	0.30	1	1	2U-CG	C	2U	75	75	100%	500	500	148	148	22	22	126	126						
Skyline Rd.	Main St.	Miller Rd.	3,410	0.65	1	1	2U-CG	B	4U	75	75	100%	500	500	323	323	48	48	274	274						
Rowlett Rd.	Lakeview Pkwy.	Miller Rd.	4,935	0.93	3	3	6D	A	6D	1,178	1,012	100%	700	700	1,963	1,963	1,101	946	862	1,017						
Rowlett Rd.	Miller Rd.	S. City Limit	10,205	1.93	2	2	4D	B+	4D	1,033	972	100%	650	650	2,513	2,513	1,996	1,879	516	633						
<b>SUBTOTAL</b>			<b>135,160</b>	<b>25.60</b>											<b>21,954</b>	<b>21,954</b>	<b>15,170</b>	<b>14,822</b>	<b>6,784</b>	<b>7,133</b>	<b>449</b>	<b>700</b>				
															<b>43,909</b>	<b>29,992</b>		<b>13,917</b>			<b>1,149</b>					

**Appendix D – Land Use Assumptions**

Jeff Whitacre, P.E., AICP  
 Kimley- Horn  
 801 Cherry Street,  
 Suite 950,  
 Fort Worth, TX 76102

**RE: Rowlett Impact Fee Updates**

Mr. Whitacre,

In order to facilitate the updating of the City or Rowlett Impact fees, the City has prepared the following land use assumption information for Kimley-Horn.

As requested we have provided:

- Current population in terms of persons and household,
- 10 year population growth in terms of persons and household,
- Final build out projections in terms of persons and household,
- Ten year growth for retail, basic, and service employment in square feet, and
- Total building out of retail, basic, and service employment in square feet.

Population

Population projection information was recently included in the Realize Rowlett Downtown report prepared by Ricker|Cunningham. Their projection is based on the comprehensive plan and potential build-out given market realities. The existing population data was pulled from the 2010 US census. Single family building permits issued since the census were used to estimate the current population and number of households. Please see Table 1 below.

Table 1 – Current and Projected Population Data

	<b>2010 Census Population</b>	<b>Existing population (Feb. 2013)<sup>1</sup></b>	<b>Projected 2023 Population<sup>2</sup></b>	<b>Build-Out Projection</b>
<b>Households</b>	18,371	18,513	22,310	28,600
<b>Persons</b>	56,199	56,633	65,366	85,800

<sup>1</sup>Based on 2010 census, permits issued for single family homes since 2010, and average 2010 Rowlett household size

<sup>2</sup>Based on Downtown Report by Ricker|Cunningham

As a note to the projected 2023 household population data, approximately 1,128 single family ownership units have either been platted or received zoning to date. These projects are all projected for

completion within the next ten years. This is approximately 1/3 of the ten year projected household growth that is already in the development process.

### Employment

Employment growth is another key factor in determining traffic and impact fees. The Downtown Report by Ricker|Cunningham included market analysis of Rowlett in regards to the trade area and presented growth in various fields by square feet. The report provided Rowlett capture numbers for the trade area. Unfortunately, no accurate data for existing square footage was found. As such, these numbers were omitted. Only the ten year growth and final projection numbers are presented here. Attachment A is the letter provided by Ricker|Cunningham further explaining the methodology behind the final build-out employment numbers. Rowlett has used scenario 1 as presented in the letter. Please see Table 2 below.

Table 2 – Employment Growth Projections

	<b>2023 Projected Increase Employment (sq ft)<sup>1</sup></b>	<b>Total Build-Out Employment (sq ft)<sup>2</sup></b>
<b>Retail</b>	+930,000	7,109,520
<b>Service</b>	+450,000	1,777,380
<b>Basic</b>	+650,000	2,539,800

<sup>1</sup>From Ricker|Cunningham Downtown Report for Rowlett

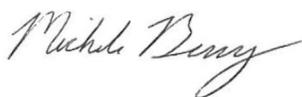
<sup>2</sup>Based on Realize Rowlett 2020 trade area estimates by Ricker|Cunningham, 25 percent Rowlett capture.

### Location of Growth

The location of growth is also important for calculating impact fees. Attachment B is the map of 10 year projected growth and Attachment C is the map showing final build out. These maps were informed by the Realize Rowlett 2020 Plan, current projects and development inquiries. From the maps it is clear that most new growth will be in service area 1, along PGBT. Apart from this large area there is opportunity for smaller projects, included infill and redevelopment projects throughout the City of Rowlett.

Please let us know if additional information is needed and we will be happy to provide it. We can also provide GIS shapefiles of the projected growth if that would be helpful.

Regards,



Michele Berry  
Planner II



12 February 2013

Ms. Michelle Berry  
Planner I  
Department of Public Works / Planning Division  
City of Rowlett  
4000 Main Street  
Rowlett, TX 750303-0099

Dear Ms. Berry:

On behalf of Ricker|Cunningham (RC), Real Estate Economists and Community Strategists, we are pleased to present the following forecast for the City of Rowlett. What follows are estimates of: total population, total employment, total number of dwelling units, and total square feet of employment space by category (basic – which we are assuming means office and industrial space, service – which we are assuming means service retail, and retail – which is all retail other than service) along with a description of our methodology. You will see that we have provided two separate estimates for each indicator. As you know, growth and development within the City has been and will continue to be influenced by a number of factors including: regulations (zoning), policies, and select market forces. Whereas we cannot know how these factors might change over time, we are providing a range of estimates based on assumptions associated with two distinctly different growth scenarios. The assumptions associated with each scenario accompany the figures. Please feel free to use whichever ones you believe most closely reflect current conditions within the City.

### **Methodology**

As you know, we have been engaged by the City of Rowlett consistently since 2008. To-date we have provided: independent financial analyses for two separate developments requesting City participation; market, financial and fiscal analyses of alternative land use concepts prepared in association with the update to your comprehensive plan; detailed market and financial analyses of potential development programs within four of the City's 13 priority investment areas; a review of proposed regulations (form-based code) from a market perspective; and, a fiscal analysis of the City's current zoning. We are currently working on the design of a deficit reduction model (fiscal impact) to be used in association with new development applications; and, we are about to begin more detailed market and financial analyses in a fifth priority investment area. Collectively this work has provided us with a thorough understanding of the City's existing: inventory of developed and undeveloped parcels; completed and planned infrastructure; regulations; policies; plans and vision. Our market work has provided us with an understanding of Rowlett's investment potential and ability to capture market share across a range of different land uses and product types. It is our understanding of both physical and market conditions which informed the estimates presented below.



**Conclusion**

If you have any questions regarding this submittal, please contact either Anne Ricker or Bill Cunningham at 303.458.5800. Both of these individuals are authorized to speak on behalf of Ricker|Cunningham.

Sincerely,

**Ricker|Cunningham**

Anne B. Ricker  
Principal  
[anne@rickercunningham.com](mailto:anne@rickercunningham.com)

Bill J. Cunningham  
Principal  
[bill@rickercunningham.com](mailto:bill@rickercunningham.com)

**Scenario No. 1: Bedroom Community**

	<b>Total @ Build-out</b>	<b>Total Population / Employment</b>
<b>Land Use:</b>		
Residential (Units)	28,600	85,800
Basic Employment Space	2,539,800	6,350
Retail - Service	1,777,380	4,445
Retail – Non-Service	7,109,520	17,775

\* Some figures are rounded.

Source: City of Rowlett; North Central Texas Council of Governments; and, Ricker|Cunningham.

**Assumptions:**

- There will be more emphasis on residential rather than non-residential development.
- Of the residential units that will complete the City’s inventory, the vast majority will be single family detached with a larger household size.
- New development will be more closely in-line with the zoning that existed prior to passage of the form-based code in the four (of 13) priority investment areas.
- Properties with a Planned Unit Developments (PUDs) designation will develop with a mix of residential and non-residential uses - approximately 80% residential and 20% non-residential.



- There will be no increase in density within existing established single family neighborhoods.
- There will be no extraordinary efforts made by the City to inform and direct development.
- There will be no proactive strategy for completing or improving infrastructure in either developed or undeveloped areas. Improvements will be piece-meal as new developments come forward.
- Retail (Service and Non-Service) Space per Employee – 400 square feet
- Office Space per Employee – 200 square feet
- Industrial Space per Employee – 500 square feet (Manufacturing), 350 square feet (Non-Manufacturing)

### Scenario No. 2: Live-Work Community

	Total @ Build-out	Total Population / Employment
<b>Land Use:</b>		
Residential (Units)	27,900	78,120
Basic Employment Space	4,180,400	10,450
Retail - Service	1,777,380	4,445
Retail – Non-Service	7,109,520	17,775

\* Some figures are rounded.

Source: City of Rowlett; North Central Texas Council of Governments; and, Ricker|Cunningham.

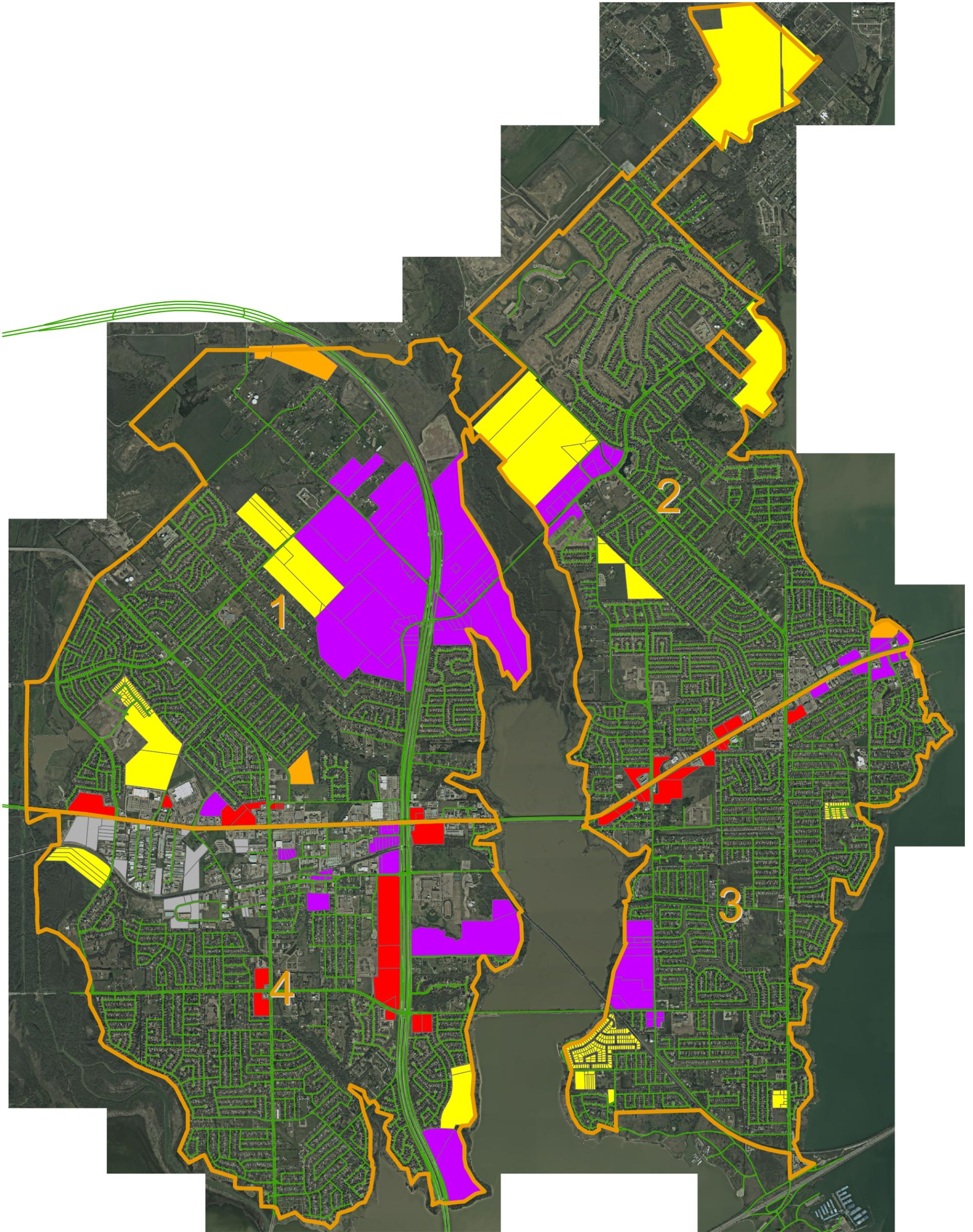
#### Assumptions:

- There will be a balanced emphasis on both residential and basic employment development (office and industrial space).
- Of the residential units that will complete the City’s inventory, there will be a greater diversity of product in both form (attached and detached) and price point.
- While the total number of dwelling units will be less than under the “bedroom community” scenario, the total population will be significantly less due to the higher number of units with fewer occupants.
- Densities within new developments will be moderate (in the middle of the range allowed for under the form-based code) in the priority investment areas.
- Properties with a Planned Unit Developments (PUDs) designation will develop with a mix of residential and non-residential uses - approximately 2/3 residential and 1/3 non-residential.
- Mixed-use developments will have as much residential square feet over first floor commercial as they will office square feet over first floor commercial. Note: These assumptions are at build-out and therefore ignore the allowance within the form-based code for first floor residential as an interim use.



- There will be no increase in density within existing established single family neighborhoods.
- There will be efforts made by the City to inform and direct development into select priority investment areas.
- There will be strategic efforts made to share (with the private sector) in the cost of improving infrastructure earlier rather than later.
- Retail (Service and Non-Service) Space per Employee – 400 square feet
- Office Space per Employee – 200 square feet
- Industrial Space per Employee – 500 square feet (Manufacturing), 350 square feet (Non-Manufacturing)

# Rowlett - 10 Year Growth



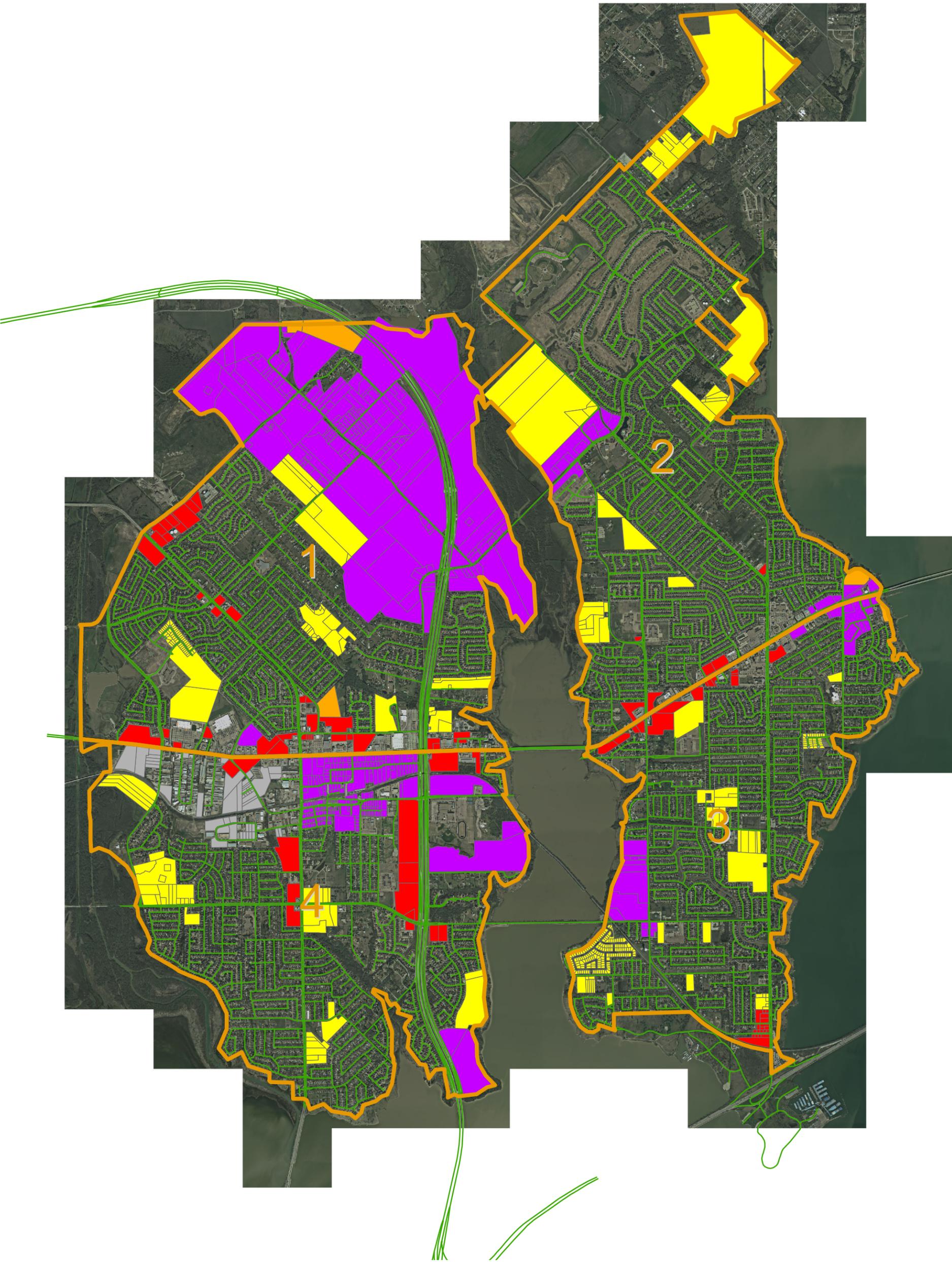
## Legend

- Existing Streets
- Service Areas
- Single Family
- Mixed Use
- Multi-Family
- Commercial
- Industrial



0 0.5 1 2 Miles

# Rowlett - Build Out



## Legend

- |  |  |
|--|--|
|  Service Areas    |  Multi-Family |
|  Existing Streets |  Commercial   |
|  Single Family    |  Industrial   |
|  Mixed Use        |  |



Percent of Expected Employment and Residential Growth Allocated to Service  
Areas by Category

		Service Area 1	Service Area 2	Service Area 3	Service Area 4
10 Year Growth	Retail	44%	7%	15%	34%
	Basic	65%	0%	0%	35%
	Service	50%	10%	15%	25%
	Households/Population	40%	40%	8%	12%
		Service Area 1	Service Area 2	Service Area 3	Service Area 4

KHA MODIFIED % to add up correctly to 100%

# Bayside

Bayside Land Partners plans for Bayside to become a mixed-use development utilizing the City's form-based codes. Bayside will include housing options for every stage of life, from condos right on up to large luxury homes, expansive green space areas with water-front parks, marinas and resort-style amenities!

*Approximately 1,750,000* square feet of commercial space.

*Approximately 3,000* residential units.

*8-10 year* build out.



## NORTH SIDE PROJECT AREA CONCEPT PLAN - 142 ACRES

**Urban Village District – 50 acres**  
 Mixed multi-family residential – 700 units  
 Office/medical office – 215,000 square feet  
 Commercial retail – 165,000 square feet

**New Neighborhood District – 92 acres**  
 Single family residential – 360 units

## SOUTH SIDE PROJECT AREA CONCEPT PLAN - 117 ACRES

**Urban Village District – 22 acres**  
 Mixed multi-family residential – 1,774 units  
 Office/medical office – 215,000 square feet  
 10-story condo tower – 100 units

**Special District – 95 acres**  
 Specialty retail – 310,000 square feet  
 Specialty restaurants – 150,000 square feet  
 Hotel (limited service) – 200,000 square feet  
 Resort hotel – 5000,000 square feet



“ROWLETT’S COMMITMENT TO BAYSIDE ENSURES THE CREATION OF A TRULY UNIQUE PLACE, WHICH WILL BE ENJOYED BY THIS GENERATION AND MANY MORE TO COME. WE ARE EXCITED TO BE ENTRUSTED WITH THIS LEGACY PROJECT FOR ROWLETT AND THE ENTIRE DFW METROPLEX!”

Kent Donahue - Bayside Land Partners

## 2016 Roadway Impact Fee Study Minor Update - Service Area 2

Land Use Category	Development Unit	Veh-Mi Per Dev-Unit	Maximum Impact Fee	% of Maximum	Adopted Impact Fee
<b>PORT AND TERMINAL</b>					
Truck Terminal	Acre	32.75	\$ 15,261.00	75%	\$ 11,429.50
<b>INDUSTRIAL</b>					
General Light Industrial	1,000 SF GFA	4.85	\$ 2,260.00	30%	\$ 677.00
General Heavy Industrial	1,000 SF GFA	3.40	\$ 1,584.00	75%	\$ 1,186.50
Industrial Park	1,000 SF GFA	4.30	\$ 2,003.00	30%	\$ 600.20
Warehousing	1,000 SF GFA	1.60	\$ 745.00	30%	\$ 223.20
Mini-Warehouse	1,000 SF GFA	1.30	\$ 605.00	75%	\$ 453.50
<b>RESIDENTIAL</b>					
Single-Family Detached Housing	Dwelling Unit	5.00	\$ 2,330.00	100%	\$ 2,330.00
Apartment/Multi-family	Dwelling Unit	3.10	\$ 1,444.00	97%	\$ 1,405.95
Residential Condominium/Townhome	Dwelling Unit	2.60	\$ 1,211.00	97%	\$ 1,179.10
Senior Adult Housing-Detached	Dwelling Unit	1.35	\$ 629.00	97%	\$ 612.30
Senior Adult Housing-Attached	Dwelling Unit	0.80	\$ 372.00	98%	\$ 362.70
Assisted Living	Beds	1.10	\$ 512.00	97%	\$ 498.55
<b>LODGING</b>					
Hotel	Room	1.90	\$ 885.00	30%	\$ 265.20
Motel / Other Lodging Facilities	Room	1.51	\$ 703.00	30%	\$ 210.60
<b>RECREATIONAL</b>					
Golf Driving Range	Tee	4.03	\$ 1,877.00	30%	\$ 562.40
Golf Course	Acre	0.97	\$ 452.00	30%	\$ 135.40
Recreational Community Center	1,000 SF GFA	4.67	\$ 2,176.00	30%	\$ 651.80
Ice Skating Rink	1,000 SF GFA	7.60	\$ 3,541.00	30%	\$ 1,060.80
Miniature Golf Course	Hole	1.06	\$ 493.00	30%	\$ 147.80
Multiplex Movie Theater	Screens	43.92	\$ 20,466.00	30%	\$ 6,131.20
Racquet / Tennis Club	Court	10.79	\$ 5,028.00	30%	\$ 1,506.20
<b>INSTITUTIONAL</b>					
Church	1,000 SF GFA	1.16	\$ 540.00	75%	\$ 404.50
Day Care Center	1,000 SF GFA	14.66	\$ 6,831.00	75%	\$ 5,116.00
Primary/Middle School (1-8)	Students	0.34	\$ 158.00	30%	\$ 47.40
High School	Students	0.27	\$ 125.00	30%	\$ 37.60
Junior / Community College	Students	0.25	\$ 116.00	30%	\$ 34.80
University / College	Students	0.44	\$ 205.00	30%	\$ 61.40
<b>MEDICAL</b>					
Clinic	1,000 SF GFA	19.58	\$ 9,124.00	30%	\$ 2,733.20
Hospital	Beds	4.95	\$ 2,306.00	30%	\$ 691.00
Nursing Home	Beds	0.83	\$ 386.00	30%	\$ 115.80
Animal Hospital/Veterinary Clinic	1,000 SF GFA	12.47	\$ 5,811.00	75%	\$ 4,352.00
<b>OFFICE</b>					
Corporate Headquarters Building	1,000 SF GFA	7.00	\$ 3,262.00	30%	\$ 977.20
General Office Building	1,000 SF GFA	7.45	\$ 3,471.00	30%	\$ 1,040.00
Medical-Dental Office Building	1,000 SF GFA	17.30	\$ 8,061.00	30%	\$ 2,415.00
Single Tenant Office Building	1,000 SF GFA	8.65	\$ 4,030.00	30%	\$ 1,207.40
Office Park	1,000 SF GFA	7.40	\$ 3,448.00	30%	\$ 1,033.00

## 2016 Roadway Impact Fee Study Minor Update - Service Area 2

Land Use Category	Development Unit	Veh-Mi Per Dev-Unit	Maximum Impact Fee	% of Maximum	Adopted Impact Fee
<b>COMMERCIAL</b>					
<b>Automobile Related</b>					
Automobile Care Center	1,000 SF Occ. GLA	6.54	\$ 3,047.00	75%	\$ 2,282.00
Automobile Parts Sales	1,000 SF GFA	10.98	\$ 5,116.00	75%	\$ 3,832.00
Gasoline/Service Station	Vehicle Fueling Position	4.82	\$ 2,246.00	75%	\$ 1,682.00
Gasoline/Service Station w/ Conv Market	Vehicle Fueling Position	3.53	\$ 1,644.00	75%	\$ 1,231.50
Gasoline/Service Station w/ Conv Market and Car Wash	Vehicle Fueling Position	3.68	\$ 1,714.00	75%	\$ 1,284.00
New Car Sales	1,000 SF GFA	6.67	\$ 3,108.00	75%	\$ 2,327.50
Quick Lubrication Vehicle Shop	Servicing Positions	10.01	\$ 4,664.00	75%	\$ 3,493.00
Self-Service Car Wash	Stall	1.99	\$ 927.00	75%	\$ 694.50
Tire Store	1,000 SF GFA	9.63	\$ 4,487.00	75%	\$ 3,360.50
<b>Dining</b>					
Fast Food Restaurant with Drive-Thru Window	1,000 SF GFA	40.61	\$ 18,924.00	75%	\$ 14,172.50
Fast Food Restaurant without Drive-Thru Window	1,000 SF GFA	31.39	\$ 14,627.00	75%	\$ 10,955.00
High Turnover (Sit-Down) Restaurant	1,000 SF GFA	15.26	\$ 7,111.00	30%	\$ 2,130.20
Quality Restaurant	1,000 SF GFA	10.06	\$ 4,687.00	30%	\$ 1,404.20
Coffee/Donut Shop with Drive-Thru Window	1,000 SF GFA	30.91	\$ 14,404.00	75%	\$ 10,787.50
<b>Other Retail</b>					
Free-Standing Discount Store	1,000 SF GFA	11.27	\$ 5,251.00	75%	\$ 3,933.00
Nursery (Garden Center)	1,000 SF GFA	8.57	\$ 3,993.00	75%	\$ 2,990.50
Home Improvement Superstore	1,000 SF GFA	3.96	\$ 1,845.00	75%	\$ 1,382.00
Pharmacy/Drugstore w/o Drive-Thru Window	1,000 SF GFA	12.75	\$ 5,941.00	75%	\$ 4,449.50
Pharmacy/Drugstore w/ Drive-Thru Window	1,000 SF GFA	17.00	\$ 7,922.00	75%	\$ 5,933.00
Shopping Center	1,000 SF GLA	7.89	\$ 3,676.00	75%	\$ 2,753.50
Supermarket	1,000 SF GFA	21.64	\$ 10,084.00	75%	\$ 7,552.00
Toy/Children's Superstore	1,000 SF GFA	11.24	\$ 5,237.00	75%	\$ 3,922.50
Department Store	1,000 SF GFA	4.03	\$ 1,877.00	75%	\$ 1,406.00
Video Rental Store	1,000 SF GFA	21.90	\$ 10,205.00	75%	\$ 7,643.00
<b>SERVICES</b>					
Walk-In Bank	1,000 SF GFA	12.38	\$ 5,769.00	75%	\$ 4,320.50
Drive-In Bank	Drive-in Lanes	24.70	\$ 11,510.00	75%	\$ 8,620.00
Hair Salon	1,000 SF GLA	1.73	\$ 806.00	75%	\$ 603.50

## 2016 Roadway Impact Fee Study Minor Update - Service Area 1

Land Use Category	Development Unit	Adopted Impact Fee
<b>PORT AND TERMINAL</b>		
Truck Terminal	Acre	\$ 11,429.50
<b>INDUSTRIAL</b>		
General Light Industrial	1,000 SF GFA	\$ 677.00
General Heavy Industrial	1,000 SF GFA	\$ 1,186.50
Industrial Park	1,000 SF GFA	\$ 600.20
Warehousing	1,000 SF GFA	\$ 223.20
Mini-Warehouse	1,000 SF GFA	\$ 453.50
<b>RESIDENTIAL</b>		
Single-Family Detached Housing	Dwelling Unit	\$ 3,490.00
Apartment/Multi-family	Dwelling Unit	\$ 1,405.95
Residential Condominium/Townhome	Dwelling Unit	\$ 1,179.10
Senior Adult Housing-Detached	Dwelling Unit	\$ 612.30
Senior Adult Housing-Attached	Dwelling Unit	\$ 362.70
Assisted Living	Beds	\$ 498.55
<b>LODGING</b>		
Hotel	Room	\$ 265.20
Motel / Other Lodging Facilities	Room	\$ 210.60
<b>RECREATIONAL</b>		
Golf Driving Range	Tee	\$ 562.40
Golf Course	Acre	\$ 135.40
Recreational Community Center	1,000 SF GFA	\$ 651.80
Ice Skating Rink	1,000 SF GFA	\$ 1,060.80
Miniature Golf Course	Hole	\$ 147.80
Multiplex Movie Theater	Screens	\$ 6,131.20
Racquet / Tennis Club	Court	\$ 1,506.20
<b>INSTITUTIONAL</b>		
Church	1,000 SF GFA	\$ 404.50
Day Care Center	1,000 SF GFA	\$ 5,116.00
Primary/Middle School (1-8)	Students	\$ 47.40
High School	Students	\$ 37.60
Junior / Community College	Students	\$ 34.80
University / College	Students	\$ 61.40
<b>MEDICAL</b>		
Clinic	1,000 SF GFA	\$ 2,733.20
Hospital	Beds	\$ 691.00
Nursing Home	Beds	\$ 115.80
Animal Hospital/Veterinary Clinic	1,000 SF GFA	\$ 4,352.00
<b>OFFICE</b>		
Corporate Headquarters Building	1,000 SF GFA	\$ 977.20
General Office Building	1,000 SF GFA	\$ 1,040.00
Medical-Dental Office Building	1,000 SF GFA	\$ 2,415.00
Single Tenant Office Building	1,000 SF GFA	\$ 1,207.40
Office Park	1,000 SF GFA	\$ 1,033.00

## 2016 Roadway Impact Fee Study Minor Update - Service Area 1

Land Use Category	Development Unit	Adopted Impact Fee
<b>COMMERCIAL</b>		
<b>Automobile Related</b>		
Automobile Care Center	1,000 SF Occ. GLA	\$ 2,282.00
Automobile Parts Sales	1,000 SF GFA	\$ 3,832.00
Gasoline/Service Station	Vehicle Fueling Position	\$ 1,682.00
Gasoline/Service Station w/ Conv Market	Vehicle Fueling Position	\$ 1,231.50
Gasoline/Service Station w/ Conv Market and Car Wash	Vehicle Fueling Position	\$ 1,284.00
New Car Sales	1,000 SF GFA	\$ 2,327.50
Quick Lubrication Vehicle Shop	Servicing Positions	\$ 3,493.00
Self-Service Car Wash	Stall	\$ 694.50
Tire Store	1,000 SF GFA	\$ 3,360.50
<b>Dining</b>		
Fast Food Restaurant with Drive-Thru Window	1,000 SF GFA	\$ 14,172.50
Fast Food Restaurant without Drive-Thru Window	1,000 SF GFA	\$ 10,955.00
High Turnover (Sit-Down) Restaurant	1,000 SF GFA	\$ 2,130.20
Quality Restaurant	1,000 SF GFA	\$ 1,404.20
Coffee/Donut Shop with Drive-Thru Window	1,000 SF GFA	\$ 10,787.50
<b>Other Retail</b>		
Free-Standing Discount Store	1,000 SF GFA	\$ 3,933.00
Nursery (Garden Center)	1,000 SF GFA	\$ 2,990.50
Home Improvement Superstore	1,000 SF GFA	\$ 1,382.00
Pharmacy/Drugstore w/o Drive-Thru Window	1,000 SF GFA	\$ 4,449.50
Pharmacy/Drugstore w/ Drive-Thru Window	1,000 SF GFA	\$ 5,933.00
Shopping Center	1,000 SF GLA	\$ 2,753.50
Supermarket	1,000 SF GFA	\$ 7,552.00
Toy/Children's Superstore	1,000 SF GFA	\$ 3,922.50
Department Store	1,000 SF GFA	\$ 1,406.00
Video Rental Store	1,000 SF GFA	\$ 7,643.00
<b>SERVICES</b>		
Walk-In Bank	1,000 SF GFA	\$ 4,320.50
Drive-In Bank	Drive-in Lanes	\$ 8,620.00
Hair Salon	1,000 SF GLA	\$ 603.50

## 2016 Roadway Impact Fee Study Minor Update - Service Area 2

Land Use Category	Development Unit	Adopted Impact Fee
<b>PORT AND TERMINAL</b>		
Truck Terminal	Acre	\$ 11,429.50
<b>INDUSTRIAL</b>		
General Light Industrial	1,000 SF GFA	\$ 677.00
General Heavy Industrial	1,000 SF GFA	\$ 1,186.50
Industrial Park	1,000 SF GFA	\$ 600.20
Warehousing	1,000 SF GFA	\$ 223.20
Mini-Warehouse	1,000 SF GFA	\$ 453.50
<b>RESIDENTIAL</b>		
Single-Family Detached Housing	Dwelling Unit	\$ 2,330.00
Apartment/Multi-family	Dwelling Unit	\$ 1,405.95
Residential Condominium/Townhome	Dwelling Unit	\$ 1,179.10
Senior Adult Housing-Detached	Dwelling Unit	\$ 612.30
Senior Adult Housing-Attached	Dwelling Unit	\$ 362.70
Assisted Living	Beds	\$ 498.55
<b>LODGING</b>		
Hotel	Room	\$ 265.20
Motel / Other Lodging Facilities	Room	\$ 210.60
<b>RECREATIONAL</b>		
Golf Driving Range	Tee	\$ 562.40
Golf Course	Acre	\$ 135.40
Recreational Community Center	1,000 SF GFA	\$ 651.80
Ice Skating Rink	1,000 SF GFA	\$ 1,060.80
Miniature Golf Course	Hole	\$ 147.80
Multiplex Movie Theater	Screens	\$ 6,131.20
Racquet / Tennis Club	Court	\$ 1,506.20
<b>INSTITUTIONAL</b>		
Church	1,000 SF GFA	\$ 404.50
Day Care Center	1,000 SF GFA	\$ 5,116.00
Primary/Middle School (1-8)	Students	\$ 47.40
High School	Students	\$ 37.60
Junior / Community College	Students	\$ 34.80
University / College	Students	\$ 61.40
<b>MEDICAL</b>		
Clinic	1,000 SF GFA	\$ 2,733.20
Hospital	Beds	\$ 691.00
Nursing Home	Beds	\$ 115.80
Animal Hospital/Veterinary Clinic	1,000 SF GFA	\$ 4,352.00
<b>OFFICE</b>		
Corporate Headquarters Building	1,000 SF GFA	\$ 977.20
General Office Building	1,000 SF GFA	\$ 1,040.00
Medical-Dental Office Building	1,000 SF GFA	\$ 2,415.00
Single Tenant Office Building	1,000 SF GFA	\$ 1,207.40
Office Park	1,000 SF GFA	\$ 1,033.00

## 2016 Roadway Impact Fee Study Minor Update - Service Area 2

Land Use Category	Development Unit	Adopted Impact Fee
<b>COMMERCIAL</b>		
<b>Automobile Related</b>		
Automobile Care Center	1,000 SF Occ. GLA	\$ 2,282.00
Automobile Parts Sales	1,000 SF GFA	\$ 3,832.00
Gasoline/Service Station	Vehicle Fueling Position	\$ 1,682.00
Gasoline/Service Station w/ Conv Market	Vehicle Fueling Position	\$ 1,231.50
Gasoline/Service Station w/ Conv Market and Car Wash	Vehicle Fueling Position	\$ 1,284.00
New Car Sales	1,000 SF GFA	\$ 2,327.50
Quick Lubrication Vehicle Shop	Servicing Positions	\$ 3,493.00
Self-Service Car Wash	Stall	\$ 694.50
Tire Store	1,000 SF GFA	\$ 3,360.50
<b>Dining</b>		
Fast Food Restaurant with Drive-Thru Window	1,000 SF GFA	\$ 14,172.50
Fast Food Restaurant without Drive-Thru Window	1,000 SF GFA	\$ 10,955.00
High Turnover (Sit-Down) Restaurant	1,000 SF GFA	\$ 2,130.20
Quality Restaurant	1,000 SF GFA	\$ 1,404.20
Coffee/Donut Shop with Drive-Thru Window	1,000 SF GFA	\$ 10,787.50
<b>Other Retail</b>		
Free-Standing Discount Store	1,000 SF GFA	\$ 3,933.00
Nursery (Garden Center)	1,000 SF GFA	\$ 2,990.50
Home Improvement Superstore	1,000 SF GFA	\$ 1,382.00
Pharmacy/Drugstore w/o Drive-Thru Window	1,000 SF GFA	\$ 4,449.50
Pharmacy/Drugstore w/ Drive-Thru Window	1,000 SF GFA	\$ 5,933.00
Shopping Center	1,000 SF GLA	\$ 2,753.50
Supermarket	1,000 SF GFA	\$ 7,552.00
Toy/Children's Superstore	1,000 SF GFA	\$ 3,922.50
Department Store	1,000 SF GFA	\$ 1,406.00
Video Rental Store	1,000 SF GFA	\$ 7,643.00
<b>SERVICES</b>		
Walk-In Bank	1,000 SF GFA	\$ 4,320.50
Drive-In Bank	Drive-in Lanes	\$ 8,620.00
Hair Salon	1,000 SF GLA	\$ 603.50

**MINUTES OF THE REGULAR MEETING  
OF THE CAPITAL IMPROVEMENT ADVISORY COMMITTEE  
OF THE CITY OF ROWLETT, TEXAS, HELD IN THE MUNICIPAL CENTER  
4000 MAIN STREET, AT 6:00 P.M., JULY 26, 2016**

**PRESENT:** Chairman Michael Lucas, Vice Chairman Jonas Tune, Commissioners Chris Kilgore, James Moseley, Lisa Estevez, Thomas Finney, Alternate Stephen Ritchey

**ABSENT:** Alternates Jason Berry, Kim Clark

**STAFF PRESENT:** Principal Planner Garrett Langford, Senior Planner Patricia Gottilly-Roberts, Planner I Katy Goodrich, Development Services Coordinator Lola Isom

**A. CALL TO ORDER**

---

Member Michael Lucas called the meeting to order at 6:00 p.m.

**1. Elect a Chairman and Vice Chairman.**

Member James Moseley made a motion to nominate Member Chris Kilgore as the Chairman. Member Michael Lucas seconded the motion. The nomination passed with a 6-0 vote.

Chairman Chris Kilgore made a motion to nominate Member James Moseley as the Vice Chairman. Member Michael Lucas seconded the motion. The nomination passed with a 6-0 vote.

**B. ITEMS FOR INDIVIDUAL CONSIDERATION**

---

**1. Minutes of the Capital Improvement Advisory Committee Meeting of November 12, 2013.**

Vice Chairman James Moseley made a motion to approve the minutes. Member Michael Lucas seconded the motion. The item passed with a 6-0 vote.

**2. Conduct a public hearing and make a recommendation to City Council regarding amendments to the Land Use Assumptions and Capital Improvements Plan under which roadway impact fees may be amended.**

Mr. Langford introduced Jeff Whitacre with Kimley-Horn who conducted a presentation over the amendments to the current impact fees. He provided a PowerPoint presentation, gave an overview of impact fees and the recoverable and non-recoverable costs, explained the role of the Capital Improvement Advisory Committee (CIAC), and explained that this particular update was

**MINUTES OF THE REGULAR MEETING  
OF THE CAPITAL IMPROVEMENT ADVISORY COMMITTEE  
OF THE CITY OF ROWLETT, TEXAS, HELD IN THE MUNICIPAL CENTER  
4000 MAIN STREET, AT 6:00 P.M., JULY 26, 2016**

to include the Bayside Development. Mr. Whitacre stated that Service Area 1 would not be changing with the proposal, but Service Area 2 would be revised to add one additional project, Bayside.

There was discussion amongst the Committee regarding the single-family fee decreasing, density, drainage, service areas, and the practice of waiving impact fees.

Chairman Chris Kilgore opened the public hearing.

No speakers came forward.

Chairman Chris Kilgore closed the public hearing.

Member Michael Lucas made a motion to recommend approval of the request. Vice Chairman James Moseley seconded the motion. The motion passed with a 6-0 vote.

**C. ADJOURNMENT**

---

Chairman Chris Kilgore adjourned the meeting at 6:20 p.m.

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Secretary

**2013 Roadway Impact Fee Study  
Service Area 1**

Land Use Category	Development Unit	Maximum Impact Fee	% of Maximum	Adopted Impact Fee
<b>PORT AND TERMINAL</b>				
Truck Terminal	Acre	\$28,001.00	41%	\$11,429.50
<b>INDUSTRIAL</b>				
General Light Industrial	1,000 SF GFA	\$4,146.00	16%	\$677.00
General Heavy Industrial	1,000 SF GFA	\$2,907.00	41%	\$1,186.50
Industrial Park	1,000 SF GFA	\$3,676.00	16%	\$600.20
Warehousing	1,000 SF GFA	\$1,368.00	16%	\$223.20
Mini-Warehouse	1,000 SF GFA	\$1,111.00	41%	\$453.50
<b>RESIDENTIAL</b>				
Single-Family Detached Housing	Dwelling Unit	\$4,275.00	82%	\$3,490.00
Apartment/Multi-family	Dwelling Unit	\$2,650.00	53%	\$1,405.95
Residential Condominium/Townhome	Dwelling Unit	\$2,223.00	53%	\$1,179.10
Senior Adult Housing-Detached	Dwelling Unit	\$1,154.00	53%	\$612.30
Senior Adult Housing-Attached	Dwelling Unit	\$684.00	53%	\$362.70
Assisted Living	Beds	\$940.00	53%	\$498.55
<b>LODGING</b>				
Hotel	Room	\$1,624.00	16%	\$265.20
Motel / Other Lodging Facilities	Room	\$1,291.00	16%	\$210.60
<b>RECREATIONAL</b>				
Golf Driving Range	Tee	\$3,445.00	16%	\$562.40
Golf Course	Acre	\$829.00	16%	\$135.40
Recreational Community Center	1,000 SF GFA	\$3,992.00	16%	\$651.80
Ice Skating Rink	1,000 SF GFA	\$6,498.00	16%	\$1,060.80
Miniature Golf Course	Hole	\$906.00	16%	\$147.80
Multiplex Movie Theater	Screens	\$37,551.00	16%	\$6,131.20
Racquet / Tennis Club	Court	\$9,225.00	16%	\$1,506.20
<b>INSTITUTIONAL</b>				
Church	1,000 SF GFA	\$991.00	41%	\$404.50
Day Care Center	1,000 SF GFA	\$12,534.00	41%	\$5,116.00
Primary/Middle School (1-8)	Students	\$290.00	16%	\$47.40
High School	Students	\$230.00	16%	\$37.60
Junior / Community College	Students	\$213.00	16%	\$34.80
University / College	Students	\$376.00	16%	\$61.40
<b>MEDICAL</b>				
Clinic	1,000 SF GFA	\$16,740.00	16%	\$2,733.20
Hospital	Beds	\$4,232.00	16%	\$691.00
Nursing Home	Beds	\$709.00	16%	\$115.80
Animal Hospital/Veterinary Clinic	1,000 SF GFA	\$10,661.00	41%	\$4,352.00
<b>OFFICE</b>				
Corporate Headquarters Building	1,000 SF GFA	\$5,985.00	16%	\$977.20
General Office Building	1,000 SF GFA	\$6,369.00	16%	\$1,040.00
Medical-Dental Office Building	1,000 SF GFA	\$14,791.00	16%	\$2,415.00
Single Tenant Office Building	1,000 SF GFA	\$7,395.00	16%	\$1,207.40
Office Park	1,000 SF GFA	\$6,327.00	16%	\$1,033.00
<b>COMMERCIAL</b>				
<b>Automobile Related</b>				
Automobile Care Center	1,000 SF Occ. GLA	\$5,591.00	41%	\$2,282.00
Automobile Parts Sales	1,000 SF GFA	\$9,387.00	41%	\$3,832.00
Gasoline/Service Station	Vehicle Fueling Position	\$4,121.00	41%	\$1,682.00
Gasoline/Service Station w/ Conv Market	Vehicle Fueling Position	\$3,018.00	41%	\$1,231.50
Gasoline/Service Station w/ Conv Market and Car Wash	Vehicle Fueling Position	\$3,146.00	41%	\$1,284.00
New Car Sales	1,000 SF GFA	\$5,702.00	41%	\$2,327.50
Quick Lubrication Vehicle Shop	Servicing Positions	\$8,558.00	41%	\$3,493.00
Self-Service Car Wash	Stall	\$1,701.00	41%	\$694.50
Tire Store	1,000 SF GFA	\$8,233.00	41%	\$3,360.50
<b>Dining</b>				
Fast Food Restaurant with Drive-Thru Window	1,000 SF GFA	\$34,721.00	41%	\$14,172.50
Fast Food Restaurant without Drive-Thru Window	1,000 SF GFA	\$26,838.00	41%	\$10,955.00
High Turnover (Sit-Down) Restaurant	1,000 SF GFA	\$13,047.00	16%	\$2,130.20
Quality Restaurant	1,000 SF GFA	\$8,601.00	16%	\$1,404.20
Coffee/Donut Shop with Drive-Thru Window	1,000 SF GFA	\$26,428.00	41%	\$10,787.50
<b>Other Retail</b>				
Free-Standing Discount Store	1,000 SF GFA	\$9,635.00	41%	\$3,933.00
Nursery (Garden Center)	1,000 SF GFA	\$7,327.00	41%	\$2,990.50
Home Improvement Superstore	1,000 SF GFA	\$3,385.00	41%	\$1,382.00
Pharmacy/Drugstore w/o Drive-Thru Window	1,000 SF GFA	\$10,901.00	41%	\$4,449.50
Pharmacy/Drugstore w/ Drive-Thru Window	1,000 SF GFA	\$14,535.00	41%	\$5,933.00
Shopping Center	1,000 SF GLA	\$6,745.00	41%	\$2,753.50
Supermarket	1,000 SF GFA	\$18,502.00	41%	\$7,552.00
Toy/Children's Superstore	1,000 SF GFA	\$9,610.00	41%	\$3,922.50
Department Store	1,000 SF GFA	\$3,445.00	41%	\$1,406.00
Video Rental Store	1,000 SF GFA	\$18,724.00	41%	\$7,643.00
<b>SERVICES</b>				
Walk-In Bank	1,000 SF GFA	\$10,584.00	41%	\$4,320.50
Drive-In Bank	Drive-in Lanes	\$21,118.00	41%	\$8,620.00
Hair Salon	1,000 SF GLA	\$1,479.00	41%	\$603.50

**2013 Roadway Impact Fee Study  
Service Area 2**

Land Use Category	Development Unit	Maximum Impact Fee	% of Maximum	Adopted Impact Fee
<b>PORT AND TERMINAL</b>				
Truck Terminal	Acre	\$22,859.00	50%	\$11,429.50
<b>INDUSTRIAL</b>				
General Light Industrial	1,000 SF GFA	\$3,385.00	20%	\$677.00
General Heavy Industrial	1,000 SF GFA	\$2,373.00	50%	\$1,186.50
Industrial Park	1,000 SF GFA	\$3,001.00	20%	\$600.20
Warehousing	1,000 SF GFA	\$1,116.00	20%	\$223.20
Mini-Warehouse	1,000 SF GFA	\$907.00	50%	\$453.50
<b>RESIDENTIAL</b>				
Single-Family Detached Housing	Dwelling Unit	\$3,490.00	100%	\$3,490.00
Apartment/Multi-family	Dwelling Unit	\$2,163.00	65%	\$1,405.95
Residential Condominium/Townhome	Dwelling Unit	\$1,814.00	65%	\$1,179.10
Senior Adult Housing-Detached	Dwelling Unit	\$942.00	65%	\$612.30
Senior Adult Housing-Attached	Dwelling Unit	\$558.00	65%	\$362.70
Assisted Living	Beds	\$767.00	65%	\$498.55
<b>LODGING</b>				
Hotel	Room	\$1,326.00	20%	\$265.20
Motel / Other Lodging Facilities	Room	\$1,053.00	20%	\$210.60
<b>RECREATIONAL</b>				
Golf Driving Range	Tee	\$2,812.00	20%	\$562.40
Golf Course	Acre	\$677.00	20%	\$135.40
Recreational Community Center	1,000 SF GFA	\$3,259.00	20%	\$651.80
Ice Skating Rink	1,000 SF GFA	\$5,304.00	20%	\$1,060.80
Miniature Golf Course	Hole	\$739.00	20%	\$147.80
Multiplex Movie Theater	Screens	\$30,656.00	20%	\$6,131.20
Racquet / Tennis Club	Court	\$7,531.00	20%	\$1,506.20
<b>INSTITUTIONAL</b>				
Church	1,000 SF GFA	\$809.00	50%	\$404.50
Day Care Center	1,000 SF GFA	\$10,232.00	50%	\$5,116.00
Primary/Middle School (1-8)	Students	\$237.00	20%	\$47.40
High School	Students	\$188.00	20%	\$37.60
Junior / Community College	Students	\$174.00	20%	\$34.80
University / College	Students	\$307.00	20%	\$61.40
<b>MEDICAL</b>				
Clinic	1,000 SF GFA	\$13,666.00	20%	\$2,733.20
Hospital	Beds	\$3,455.00	20%	\$691.00
Nursing Home	Beds	\$579.00	20%	\$115.80
Animal Hospital/Veterinary Clinic	1,000 SF GFA	\$8,704.00	50%	\$4,352.00
<b>OFFICE</b>				
Corporate Headquarters Building	1,000 SF GFA	\$4,886.00	20%	\$977.20
General Office Building	1,000 SF GFA	\$5,200.00	20%	\$1,040.00
Medical-Dental Office Building	1,000 SF GFA	\$12,075.00	20%	\$2,415.00
Single Tenant Office Building	1,000 SF GFA	\$6,037.00	20%	\$1,207.40
Office Park	1,000 SF GFA	\$5,165.00	20%	\$1,033.00
<b>COMMERCIAL</b>				
<b>Automobile Related</b>				
Automobile Care Center	1,000 SF Occ. GLA	\$4,564.00	50%	\$2,282.00
Automobile Parts Sales	1,000 SF GFA	\$7,664.00	50%	\$3,832.00
Gasoline/Service Station	Vehicle Fueling Position	\$3,364.00	50%	\$1,682.00
Gasoline/Service Station w/ Conv Market	Vehicle Fueling Position	\$2,463.00	50%	\$1,231.50
Gasoline/Service Station w/ Conv Market and Car Wash	Vehicle Fueling Position	\$2,568.00	50%	\$1,284.00
New Car Sales	1,000 SF GFA	\$4,655.00	50%	\$2,327.50
Quick Lubrication Vehicle Shop	Servicing Positions	\$6,986.00	50%	\$3,493.00
Self-Service Car Wash	Stall	\$1,389.00	50%	\$694.50
Tire Store	1,000 SF GFA	\$6,721.00	50%	\$3,360.50
<b>Dining</b>				
Fast Food Restaurant with Drive-Thru Window	1,000 SF GFA	\$28,345.00	50%	\$14,172.50
Fast Food Restaurant without Drive-Thru Window	1,000 SF GFA	\$21,910.00	50%	\$10,955.00
High Turnover (Sit-Down) Restaurant	1,000 SF GFA	\$10,651.00	20%	\$2,130.20
Quality Restaurant	1,000 SF GFA	\$7,021.00	20%	\$1,404.20
Coffee/Donut Shop with Drive-Thru Window	1,000 SF GFA	\$21,575.00	50%	\$10,787.50
<b>Other Retail</b>				
Free-Standing Discount Store	1,000 SF GFA	\$7,866.00	50%	\$3,933.00
Nursery (Garden Center)	1,000 SF GFA	\$5,981.00	50%	\$2,990.50
Home Improvement Superstore	1,000 SF GFA	\$2,764.00	50%	\$1,382.00
Pharmacy/Drugstore w/o Drive-Thru Window	1,000 SF GFA	\$8,899.00	50%	\$4,449.50
Pharmacy/Drugstore w/ Drive-Thru Window	1,000 SF GFA	\$11,866.00	50%	\$5,933.00
Shopping Center	1,000 SF GLA	\$5,507.00	50%	\$2,753.50
Supermarket	1,000 SF GFA	\$15,104.00	50%	\$7,552.00
Toy/Children's Superstore	1,000 SF GFA	\$7,845.00	50%	\$3,922.50
Department Store	1,000 SF GFA	\$2,812.00	50%	\$1,406.00
Video Rental Store	1,000 SF GFA	\$15,286.00	50%	\$7,643.00
<b>SERVICES</b>				
Walk-In Bank	1,000 SF GFA	\$8,641.00	50%	\$4,320.50
Drive-In Bank	Drive-in Lanes	\$17,240.00	50%	\$8,620.00
Hair Salon	1,000 SF GLA	\$1,207.00	50%	\$603.50