CITY OF COLLEGE STATION

ROADWAY IMPACT FEE STUDY

NOVEMBER 2016

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EFFECTIVE: DECEMBER 1, 2016

Kimley»Horn

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CITY OF COLLEGE STATION, TEXAS
ROADWAY IMPACT FEE STUDY

CITY OF COLLEGE STATION

November 2016

Prepared for the City of College Station

Prepared by:

Kimley-Horn and Associates, Inc.

801 Cherry Street, Unit 11, Suite 950

Fort Worth, TX 76102

Phone 817 335 6511

TBPE Firm Registration Number: F-928

11/11/2016

STATE OF TEXAS
JEFFREY A. WHITACRE
102469
LICENSED
PROFESSIONAL ENGINEER

Project Number: 061271413

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EXECUTIVE SUMMARY

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. They originated and evolved in Florida, California, and other fast-growing municipalities and counties, primarily in the Southern and Western United States. Across the country, they are used to fund police and fire facilities, parks, schools, roads and utilities. In Texas, the legislature has allowed their use for water, wastewater, roadway and drainage facilities. This study serves as the initial study to implement Roadway Impact Fees in the City of College Station, Texas.

In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs. In the case of roadway impact fees, the infrastructure need is the increased capacity on arterial and major collector roadways that serve the overall transportation system. The purpose of the 2016 Roadway Impact Fee Study is to identify the fee per unit of new development necessary to fund these improvements in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code.

Impact Fees are a one-time fee, and are charged only against new development. They are based on the cost of the capacity improvements necessary to accommodate new growth. For roadway impact fee purposes, the City is broken into four (4) service areas. A service area is a geographic area within which a unique maximum impact fee is determined. All fees collected within the service area must be spent on eligible improvements within the same service area.

Impact fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. Impact fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can be used only within the same service area. Finally, fees must be utilized within 10 years of collection, or must be refunded with interest.

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption on Impact Fees. An Advisory Committee is required to review the Land Use Assumptions and CIP used in calculating the maximum fee, and to provide its funding for consideration by the City Council. The City Council must then conduct a public hearing on the Land Use Assumptions and CIP before considering an Impact Fee ordinance.

The Impact Fee ordinance is considered separately from the Land Use Assumptions and CIP. The Advisory Committee must review the Impact Fee ordinance and provide its findings to the City Council. Following receipt of the report by the Advisory Committee, the City Council is required to conduct at least one public hearing on the Impact Fee ordinance prior to adoption.

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 Land Use Equivalency Table.

The resulting maximum fees per vehicle mile and examples of typical developments for the 2016 Roadway Impact Fee Study are:

Service Areas	A	B	C	D
2016 Roadway Impact Fee Study Maximum Assessible Fee Per Vehicle-Mile	$ 1,061	$ 1,072	$ 2,556	$ 4,004
Example Developments - Maximum Assessable Roadway Impact Fee				
Single Family Dwelling	$ 4,244	$ 4,288	$ 10,224	$ 16,016
10,000 Sq. Ft. Shopping Center	$ 51,989	$ 52,528	$ 125,244	$ 196,196
5,000 Sq. Ft. Office	$ 31,618	$ 31,946	$ 76,169	$ 119,319
5,000 Sq. Ft. Fast Food Restaurant with Drive-Thru	$ 173,261	$ 175,058	$ 417,395	$ 653,853

I. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure political subdivisions 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 Roadway improvements or facility expansions necessitated by and attributable to the new development."

Accordingly, The City of College Station has developed its Land Use Assumptions and Capital Improvements Plan (CIP) with which to implement Roadway Impact Fees. The City retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2016 Roadway Impact Fee Study. This report includes details of the Roadway Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the Roadway Impact Fee Capital Improvements Plan, and the Land Use Equivalency Table.

This report references two of the basic inputs to the Roadway Impact Fee:

1) Land Use Assumptions

2) Roadway Impact Fee Capital Improvements Plan (CIP)

Information from these two components is used extensively throughout the remainder of the report.

There is a detailed discussion of the methodology for the computation of impact fees. This discussion is broken into three components:

1) Methodology for Roadway Impact Fees

2) Roadway Impact Fee Calculation

3) Plan for Financing and the Ad Valorem Tax Credit

The components of the Computation Method for Roadway Impact Fee include development of:

- Service Areas
- Service Units
- Cost Per Service Unit
- Roadway Impact Fee CIP Costing Methodology
- Summary of Roadway Impact Fee CIP Costs
- Service Unit Calculation

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit
- Service Unit Demand Per Unit of Development

The report also includes a section concerning the Plan for Awarding the Roadway Impact Fee Credit. This plan details the maximum assessable impact fee per service unit the City of College Station may apply under Chapter 395 of the Texas Local Government Code.

The final section of the report is the Conclusion, which presents the findings of the study's analysis and summarizes the report.

II. LAND USE ASSUMPTIONS

A. Purpose and Overview

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for population and employment growth projections within a political subdivision. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and population in the service area. The land use assumptions assist the City of College Station in determining the need and timing of capital improvements to serve future development.

The residential and non-residential estimates and projections were compiled in accordance with the following categories:

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

Population: Number of people, based on persons per dwelling unit factors.

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 which primarily serve households and whose 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 offices.

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

B. Land Use Assumptions Methodology

The residential and non-residential growth projections formulated in this report were performed using reasonable and generally accepted planning principles. The following factors were considered in developing these projections:

- Character, type, density, and quantity of existing development;
- Current zoning plans;
- Future Land Use Plan;
- Growth trends;
- Location of undeveloped parcels;
- Physical restrictions (i.e. flood plains, railroads); and
- Physical development capacity of College Station.

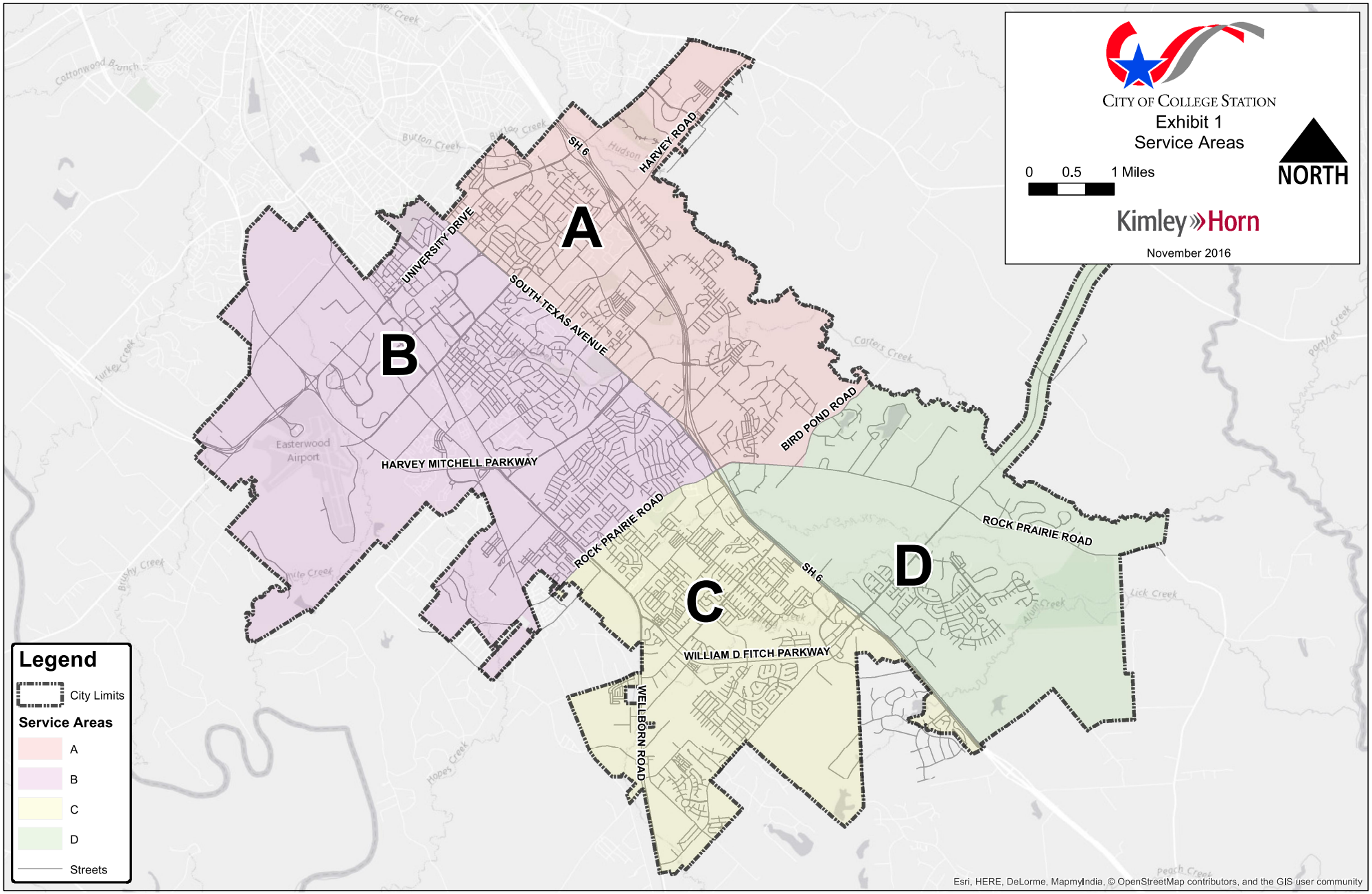
Existing developed parcels were identified and no growth was assumed in these developed parcels. For the remaining undeveloped areas, assumptions based upon the City's Future Land Use Plan, Brazos Central Appraisal District (BCAD) parcel data, and an aerial survey were used to estimate the ultimate holding capacity of residential and employment development within the City Limits. To project future development in the ten year window, portions of the known development areas within the City were assumed to be developed by the year 2026.

Research of historical building permits was performed to compare the projected growth of these known developments with previous growth trends in the City of College Station over the last ten years. During the last ten years, approximately 12,599 residential units and 6.67 million square feet of employment were developed. It is projected that the next ten years of development will be reasonably close to these estimates.

C. Roadway Impact Fee Service Areas

The geographic boundary of the proposed impact fee service areas for transportation facilities is shown in Exhibit 1. The City of College Station is currently divided into four (4) service areas. The service areas were based upon input from the City of College Station staff and City Council. The service areas east/west boundary is Texas Avenue while a combination of Rock Prairie Road, Graham Road, and Bird Pond Road compose the north/south boundaries. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded from this study.

It should be noted that at locations where service area boundaries follow a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits are included in the service area.


City of College Station
Exhibit 1
Service Areas
0 0.5 1 Miles
NORTH
Kimley»Horn
November 2016
A
B
C
D
SH 6
HARVEY ROAD
UNIVERSITY DRIVE
SOUTH TEXAS AVENUE
BIRD POND ROAD
HARVEY MITCHELL PARKWAY
ROCK PRAIRIE ROAD
WILLIAM D FITCH PARKWAY
WELLBORN ROAD
Easterwood Airport
Legend
City Limits
Service Areas
A
B
C
D
Streets
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D. Land Use Assumptions Summary

Table 1 summarizes the residential and employment 10-year growth projections. Note that employment figures for Texas A&M University were not included because they are exempt from impact fees. These values were derived based on the identification of undeveloped parcels, the City's Future Land Use Plan, historical building permit data, and input from City of College Station staff.

Table 1. Residential and Employment 10-Year Projections

Service Area	Residential		Employment		
	Single Family	Multi-Family	Basic	Service	Retail
	Dwelling Units		Sq. Ft.	Sq. Ft.	Sq. Ft.
A	459	1,520	80,000	1,133,000	320,000
B	587	2,251	100,000	559,000	604,000
C	2,316	861	307,000	483,000	729,000
D	1,552	24	348,000	495,000	625,000
Sub-Total	4,914	4,656	835,000	2,670,000	2,278,000
Total	9,570		5,783,000		

III. ROADWAY IMPACT FEE CAPITAL IMPROVEMENTS PLAN

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

- Recently completed projects with excess capacity available to serve new growth (previous bond projects);
- Projects currently under construction; and
- Selection of growth necessitated projects needed to complete the City's Master Thoroughfare Plan

The CIP includes thoroughfare roadway facilities as well as intersection improvements. All of the thoroughfare facilities are part of the currently adopted Master Thoroughfare Plan. Minor collectors are not identified as impact fee eligible projects because these facilities are intended to primarily serve specific developments and not serve regional transportation purposes.

The CIP for Roadway Impact Fees for the 2016 – 2026 Impact Fee Study are listed in Tables 2.A – 2.D and mapped in Exhibits 2.A – 2.D. The table shows the length of each project as well as the facility's Master Thoroughfare Plan classification. The CIP was developed in conjunction with input from the City of College Station staff and represents those projects that will be needed to accommodate the growth projected in Table 1.

Table 2.A. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area A

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA A	A-1	MAJ2	Pavilion Ave. Extension	Sebesta Rd. to SH 6 NBFR	0.48	100%
	A-2	MAJ2	Dartmouth St. Extension	Emerald Pkwy. to S Texas Ave.	0.48	100%
	A-3	MAJ2	Lassie Ln. Extension	Sterling St. to Manuel Dr.	0.06	100%
	A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	0.68	50%
	A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	0.45	50%
	A-6	MAJ4	Harvey Rd.	Appomattox Dr. to Boonville Rd. (CL)	2.18	100%
	A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	1.33	50%
	A-8	MIN4	Linda Lane	Harvey Rd. to 560' SE of Harvey Rd. (CL)	0.11	100%
	I-1	S Texas Ave. and Deacon Dr. Signal				50%
	I-2	Holleman Rd. and S. Texas Ave. Improvement				50%
	I-3	S Texas Ave. and Walton Dr. Signal				50%
	I-4	University Dr. and University Towne Center Signal				100%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.

Table 2.B. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area B

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA B	A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	0.68	50%
	B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr. to SH 6	0.48	50%
	B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	0.64	50%
	B-4	MAJ2	Rock Prairie Rd. (3)	360' W. of Great Oaks Dr. (CL) to Holleman Dr.	0.74	100%
	B-5	MIN4	Holleman Dr. (1)	Rock Prairie Rd. to N Graham Rd.	0.31	100%
	B-6	MIN4	Holleman Dr. (2)	N Dowling Rd. to Rock Prairie Rd.	1.54	100%
	B-7	MAJ6 (1/3)	Wellborn Rd.	University Dr. to Harvey Mitchell Pkwy.	2.40	100%
	B-8	MAJ2	Luther St.	Penberthy Rd. to Marion Pugh Dr.	0.27	100%
	B-9	MIN4	Penberthy Rd.	Goerge Bush Dr. to Luther St.	0.40	100%
	B-10	MAJ2	Turkey Creek Rd.	S Traditions Dr. to Raymond Stotzer Pkwy.	0.63	100%
	B-11	MAJ2	F and B Rd.	Turkey Creek Rd. to Harvey Mitchell Pkwy.	0.46	100%
	B-12	MAJ6 (1/3)	University Dr.	Harvey Mitchell Pkwy. to Wellborn Rd.	1.31	100%
	I-1	S Texas Ave. and Deacon Dr. Signal				50%
	I-2	Holleman Rd. and S. Texas Ave. Improvement				50%
	I-3	S Texas Ave. and Walton Dr. Signal				50%
	I-5	Wellborn Rd. and George Bush Dr.				100%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.

Table 2.C. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area C

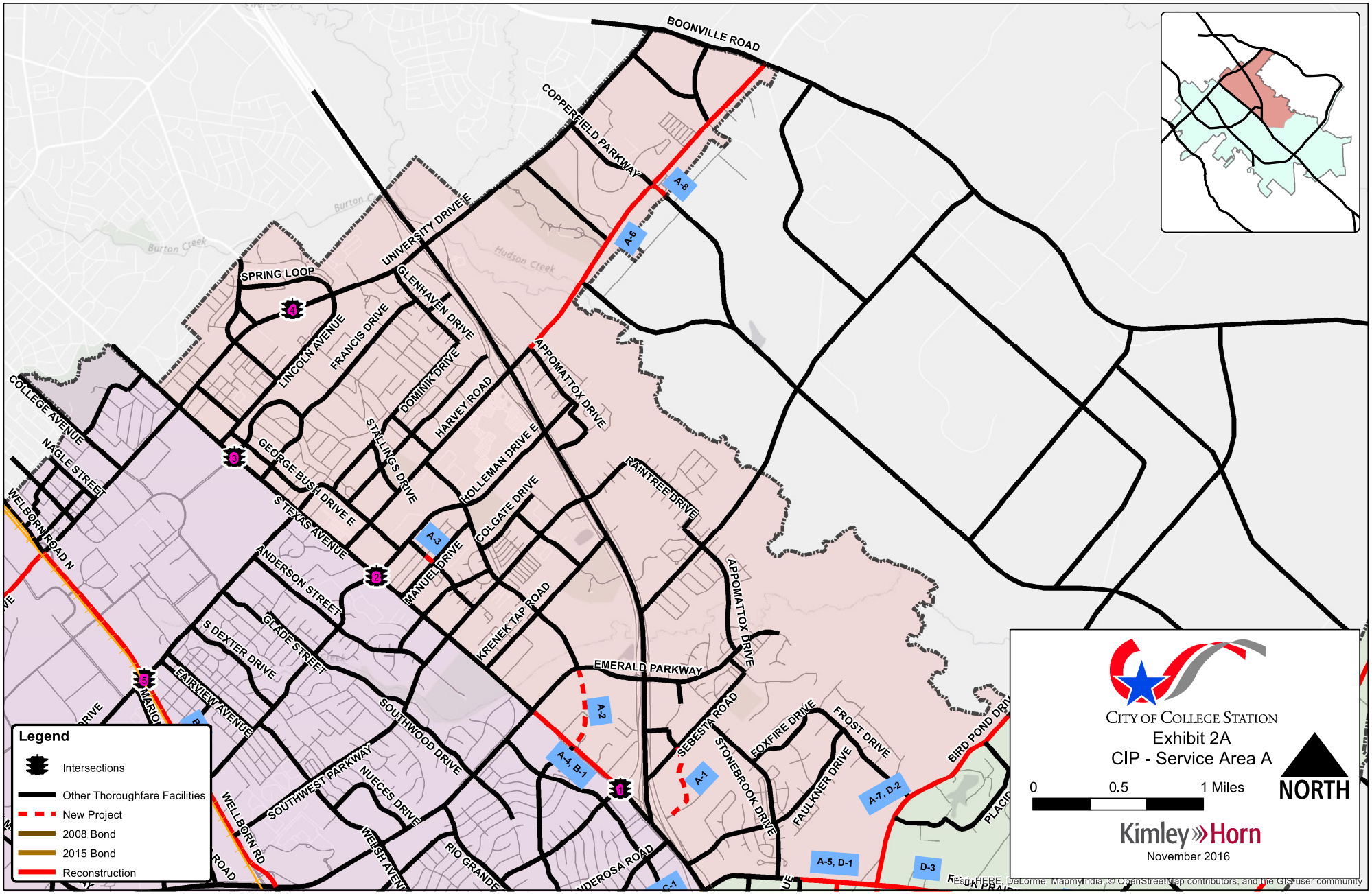
Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA C	B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr. to SH 6	0.48	50%
	B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	0.64	50%
	C-3	MAJ2	N Graham Rd.	Old Wellborn Rd. to 2,075' W of Old Wellborn Rd. (CL)	0.39	100%
	C-4	MAJ4	Wellborn Rd. (1)	Capstone Dr. to Greens Prairie Rd.	1.24	100%
	C-5	MAJ4	Wellborn Rd. (2)	Greens Prairie Rd. to 540' S of Greens Prairie Trl.	1.13	100%
	C-6	MIN4	Capstone/Barron Realignment	Wellborn Rd. to 210' W of Piccadilly Cir.	0.31	100%
	C-7	MIN4	Barron Rd. (1)	210' W of Piccadilly Cir. to Barron Cut Off Rd.	0.13	100%
	C-8	MIN4 (1/2)	Barron Rd. (2)	Barron Cut Off Rd. to William D Fitch Pkwy.	0.13	100%
	C-9	MIN4	Barron Rd. (3)	William D Fitch Pkwy. to Decatur Dr.	1.27	100%
	C-10	MIN4 (1/2)	WS Phillips Pkwy. (1)	Barron Rd. to 1740' S of Barron Cut Off Rd.	0.52	100%
	C-11	MIN4 (1/2)	WS Phillips Pkwy. (2)	1740' S of Barron Cut Off Rd. to Odell Ln.	0.44	100%
	C-12	MAJ2	Etonburg	Barron Cut Off Rd. to McCullough Rd. Extension	0.33	100%
	C-13	MAJ2	McCullough Rd. Extension	2530' E of Wellborn Rd. to WS Phillips Pkwy.	0.60	100%
	C-14	MAJ2	S. Dowling/McCullough	I & G Rd. to 2485' E of I & G Rd.	0.47	100%
	C-15	MAJ2	Future 2 Lane Major Collector	S. Dowling/McCullough to Greens Prairie Rd. Extension	0.27	100%
	C-16	MAJ2	Greens Prairie Rd. Extension (1)	I & G Rd. to 565' E of I & G Rd. (CL)	0.11	100%
	C-17	MAJ2	Greens Prairie Rd. Extension (2)	995' W of Welborn Rd. (CL) to Wellborn Rd.	0.19	100%
	C-18	MIN4	Greens Prairie Rd. (1)	Wellborn Rd. to Royder Rd.	0.08	100%
	C-19	MAJ2	Greens Prairie Rd. (2)	Royder Rd. to 750' E of Turnberry Cir.	0.64	100%
	C-20	MAJ2	Greens Prairie Rd. (3)	750' E of Turnberry Cir. to Greens Prairie Trl.	0.52	100%
	C-21	MIN4	Royder Rd.	Greens Prairie Rd. to 885' S of Greens Prairie Trl.	1.07	100%
	C-22	MIN4	Greens Prairie Trl. (1)	Wellborn Rd. to 1000' W of Woodlake Dr.	1.28	100%
	C-23	MIN4	Greens Prairie Rd. (4)	465' E of Future Etonburg to Arrington Rd.	1.44	100%
	C-24	MIN4	WS Phillips Pkwy. Extension	Greens Prairie Rd. to Arrington Rd.	1.54	100%
	C-25	MAJ2	Victoria Ave.	Southern Plantation Dr. to William D Fitch Pkwy.	0.48	100%
	I-6	William D Fitch Pkwy. and Victoria Ave. Signal				100%
	I-7	Wellborn Rd. and S Dowling Rd. Signal				100%

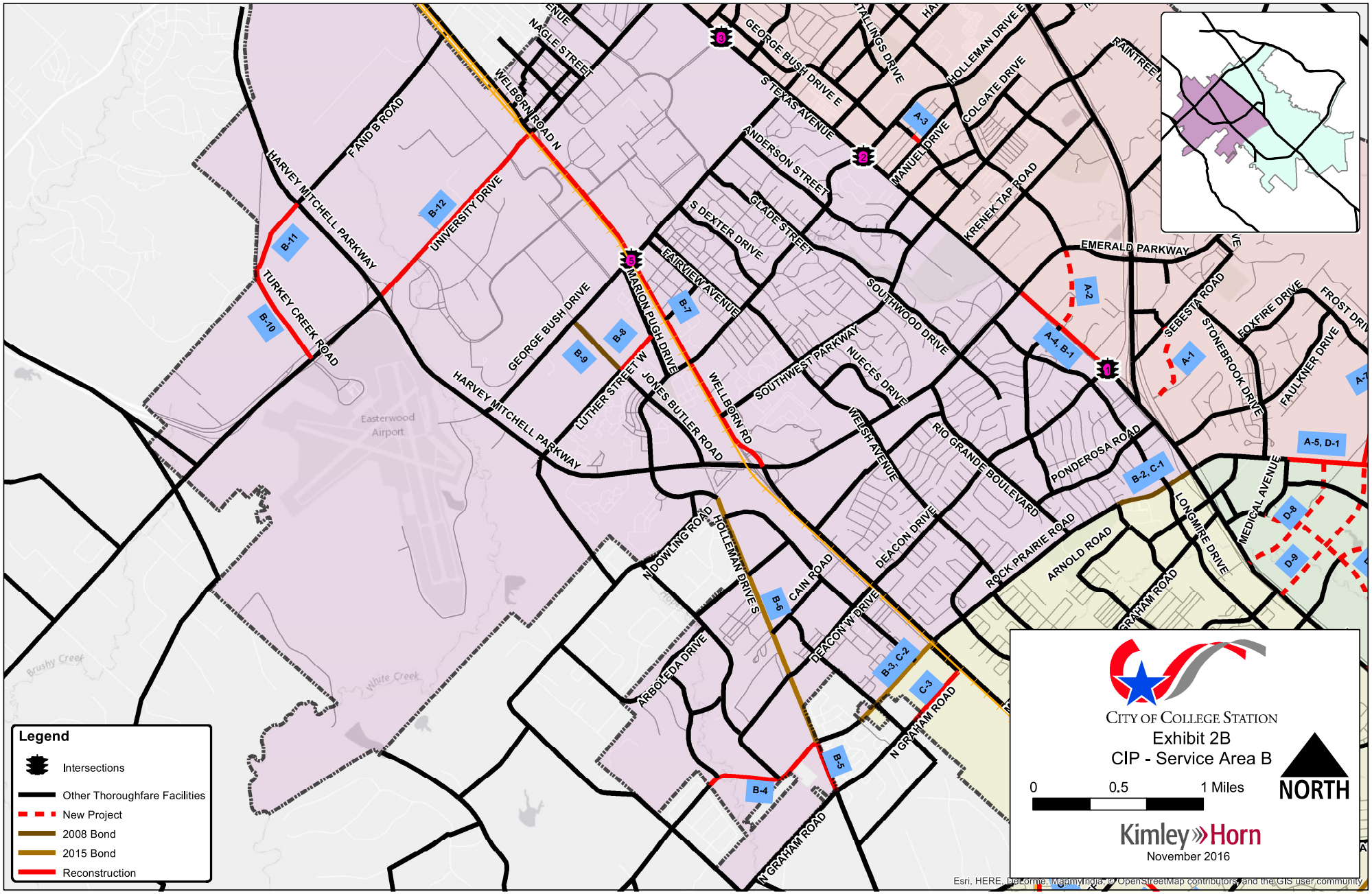
Notes: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.

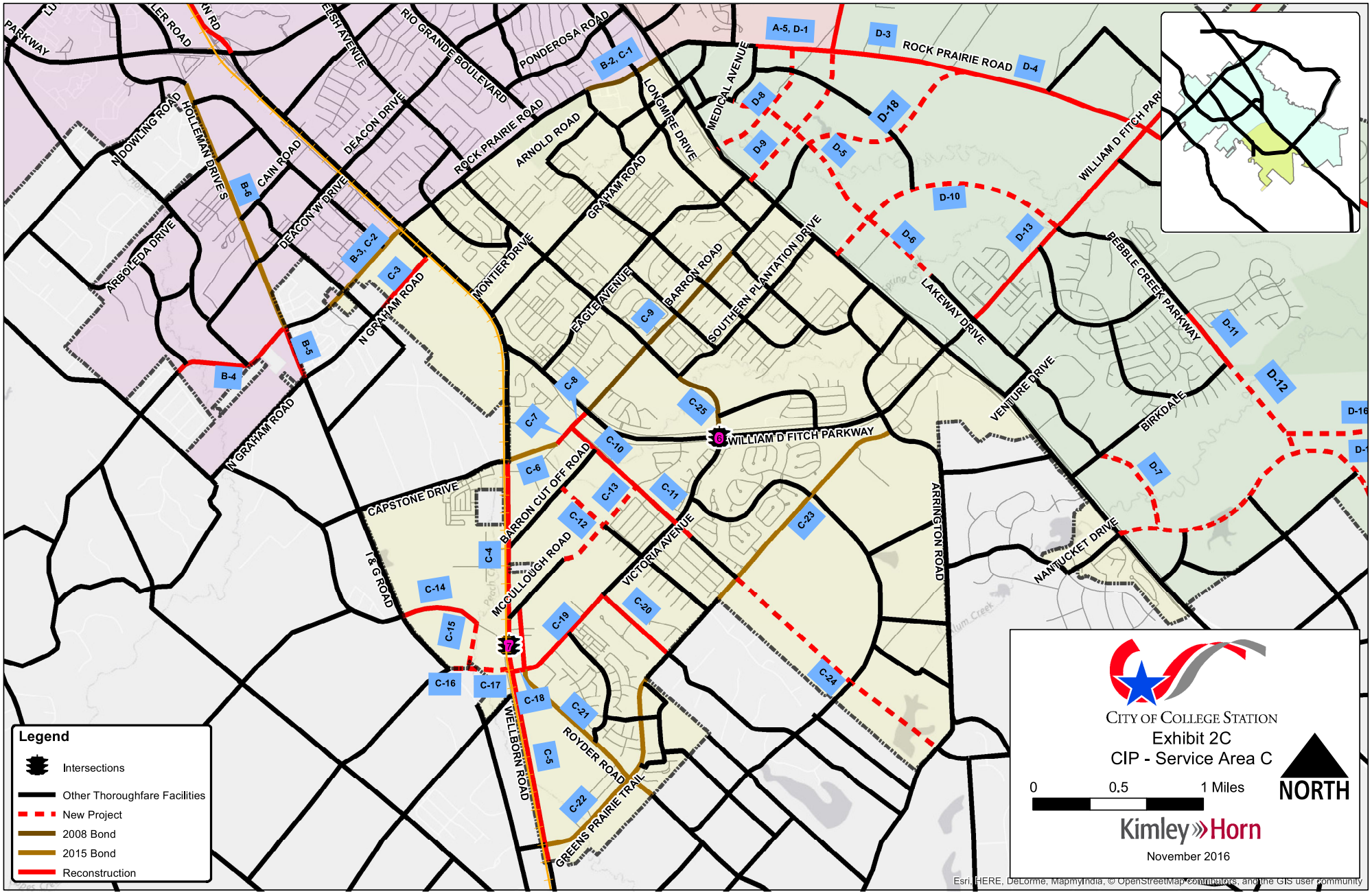
Table 2.D. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area D

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA D	A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	0.45	50%
	A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	1.33	50%
	D-3	MAJ4	Rock Prairie Rd. (2)	Bird Pond Rd. to Bradley Rd.	0.68	100%
	D-4	MIN4	Rock Prairie Rd. (3)	Bradley Rd. to 2,610' E of Campbell Ct. (CL)	3.21	100%
	D-5	MAJ2	Lakeway Dr. (1)	Medical Ave. to Pebble Creek Pkwy.	1.10	100%
	D-6	MAJ2	Lakeway Dr. (2)	Pebble Creek Pkwy. to 1,910' N of William D. Fitch Pkwy.	0.49	100%
	D-7	MAJ2	Lakeway Dr. (3)	940' S of Technology Way to Future Nantucket Dr.	0.61	100%
	D-8	MAJ2	Ritchey Rd.	SH 6 NBFR to Rock Prairie Rd.	0.79	100%
	D-9	MIN4	Bird Pond Rd. Extension	SH 6 to Rock Prairie Rd.	0.94	100%
	D-10	MAJ2	Pebble Creek Pkwy. (1)	SH 6 NBFR to William D. Fitch Pkwy.	1.52	100%
	D-11	MAJ2	Pebble Creek Pkwy. (2)	Royal Adelade Dr. to St. Andrews Dr.	0.36	100%
	D-12	MAJ2	Pebble Creek Pkwy. (3)	St. Andrews Dr. to Future Nantucket Dr.	0.69	100%
	D-13	MAJ6 (1/3)	William D. Fitch Pkwy. (1)	Lakeway Dr. to Rock Prairie Rd.	1.51	100%
	D-14	MAJ6	William D. Fitch Pkwy. (2)	Rock Prairie Rd. to 9,700' E of Tonkaway Lake Rd. (CL)	3.74	100%
	D-15	MIN4	Future Nantucket Dr.	SH 6 to East City Limits	2.60	100%
	D-16	MAJ2	Future East-West Major Collector	Pebble Creek Pkwy. to East City Limits	1.11	100%
	D-17	MAJ2	Future North-South Major Collector	Future East-West Major Collector to Future Nantucket Dr.	0.63	100%
	D-18	MIN4	Barron Rd. Extension	Lakeway Dr. to Rock Prairie Rd.	1.14	100%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.


BOONVILLE ROAD
COPPERFIELD PARKWAY
UNIVERSITY DRIVE E
SPRING LOOP
GLENHAVEN DRIVE
LINCOLN AVENUE
FRANCIS DRIVE
DOMINIK DRIVE
HARVEY ROAD
APPOMATTOX DRIVE
COLLEGE AVENUE
NAGLE STREET
GEORGE BUSH DRIVE E
STALLINGS DRIVE
HOLLEMAN DRIVE E
RAINTREE DRIVE
WELBORN ROAD N
S TEXAS AVENUE
COLGATE DRIVE
ANDERSON STREET
MANUEL DRIVE
KRENEK TAP ROAD
APPOMATTOX DRIVE
GLADE STREET
S DEXTER DRIVE
EMERALD PARKWAY
FAIRVIEW AVENUE
SOUTHWOOD DRIVE
SEBESTA ROAD
FOXFIRE DRIVE
FROST DRIVE
BIRD POND DRIVE
SOUTHWEST PARKWAY
NUECES DRIVE
STONEBROOK DRIVE
FAULKNER DRIVE
WELLBORN RD
WELSH AVENUE
RIO GRANDE
A-8
A-6
A-3
A-2
A-4, B-1
A-1
A-7, D-2
A-5, D-1
D-3
Legend
Intersections
Other Thoroughfare Facilities
New Project
2008 Bond
2015 Bond
Reconstruction
City of College Station
Exhibit 2A
CIP - Service Area A
0
0.5
1 Miles
NORTH
Kimley»Horn
November 2016
Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community


City of College Station
Exhibit 2B
CIP - Service Area B
0
0.5
1 Miles
NORTH
Kimley»Horn
November 2016
Legend
Intersections
Other Thoroughfare Facilities
New Project
2008 Bond
2015 Bond
Reconstruction
Easterwood Airport
Brushy Creek
White Creek
HARVEY MITCHELL PARKWAY
F AND B ROAD
UNIVERSITY DRIVE
TURKEY CREEK ROAD
GEORGE BUSH DRIVE
WELLBORN ROAD N
NAGLE STREET
GEORGE BUSH DRIVE E
S TEXAS AVENUE
ANDERSON STREET
S DEXTER DRIVE
GLADE STREET
FAIRVIEW AVENUE
MARION PUGH DRIVE
LUTHER STREET W
JONES BUTLER ROAD
WELLBORN RD
SOUTHWEST PARKWAY
NUECES DRIVE
SOUTHWOOD DRIVE
WELSH AVENUE
RIO GRANDE BOULEVARD
DEACON DRIVE
DEACON W DRIVE
CAIN ROAD
HOLLEMAN DRIVE S
N DOWLING ROAD
ARBOLEDA DRIVE
N GRAHAM ROAD
ROCK PRAIRIE ROAD
ARNOLD ROAD
GRAHAM ROAD
PONDEROSA ROAD
LONGMIRE DRIVE
MEDICAL AVENUE
EMERALD PARKWAY
KRENEK TAP ROAD
MANUEL DRIVE
COLGATE DRIVE
HOLLEMAN DRIVE E
TALLINGS DRIVE
RAINTREE
SEBESTA ROAD
STONEBROOK DRIVE
FOXFIRE DRIVE
FAULKNER DRIVE
FROST DRIVE
B-10
B-11
B-12
B-9
B-8
B-7
B-6
B-5
B-4
B-3, C-2
C-3
B-2, C-1
A-3
A-2
A-4, B-1
A-1
A-5, D-1
D-8
D-9


City of College Station
Exhibit 2C
CIP - Service Area C
0
0.5
1 Miles
NORTH
Kimley»Horn
November 2016
Legend
Intersections
Other Thoroughfare Facilities
New Project
2008 Bond
2015 Bond
Reconstruction
ROCK PRAIRIE ROAD
WILLIAM D FITCH PARKWAY
RIO GRANDE BOULEVARD
PONDEROSA ROAD
ELSH AVENUE
DEACON DRIVE
DEACON W DRIVE
HOLLEMAN DRIVE S
N DOWLING ROAD
CAIN ROAD
ARBOLEDA DRIVE
N GRAHAM ROAD
ARNOLD ROAD
GRAHAM ROAD
LONGMIRE DRIVE
MEDICAL AVENUE
MONTIER DRIVE
EAGLE AVENUE
BARRON ROAD
SOUTHERN PLANTATION DRIVE
LAKEWAY DRIVE
PEBBLE CREEK PARKWAY
VENTURE DRIVE
BIRKDALE
NANTUCKET DRIVE
ARRINGTON ROAD
CAPSTONE DRIVE
BARRON CUT OFF ROAD
MCCULLOUGH ROAD
VICTORIA AVENUE
I & G ROAD
WELLBORN ROAD
ROYDER ROAD
GREENS PRAIRIE TRAIL
A-5, D-1
D-3
D-4
D-18
D-8
D-9
D-5
D-10
D-13
D-6
D-11
D-12
D-16
D-7
B-2, C-1
B-3, C-2
C-3
B-6
B-5
B-4
C-9
C-8
C-7
C-25
C-10
C-6
C-13
C-11
C-12
C-23
C-4
C-14
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C-16
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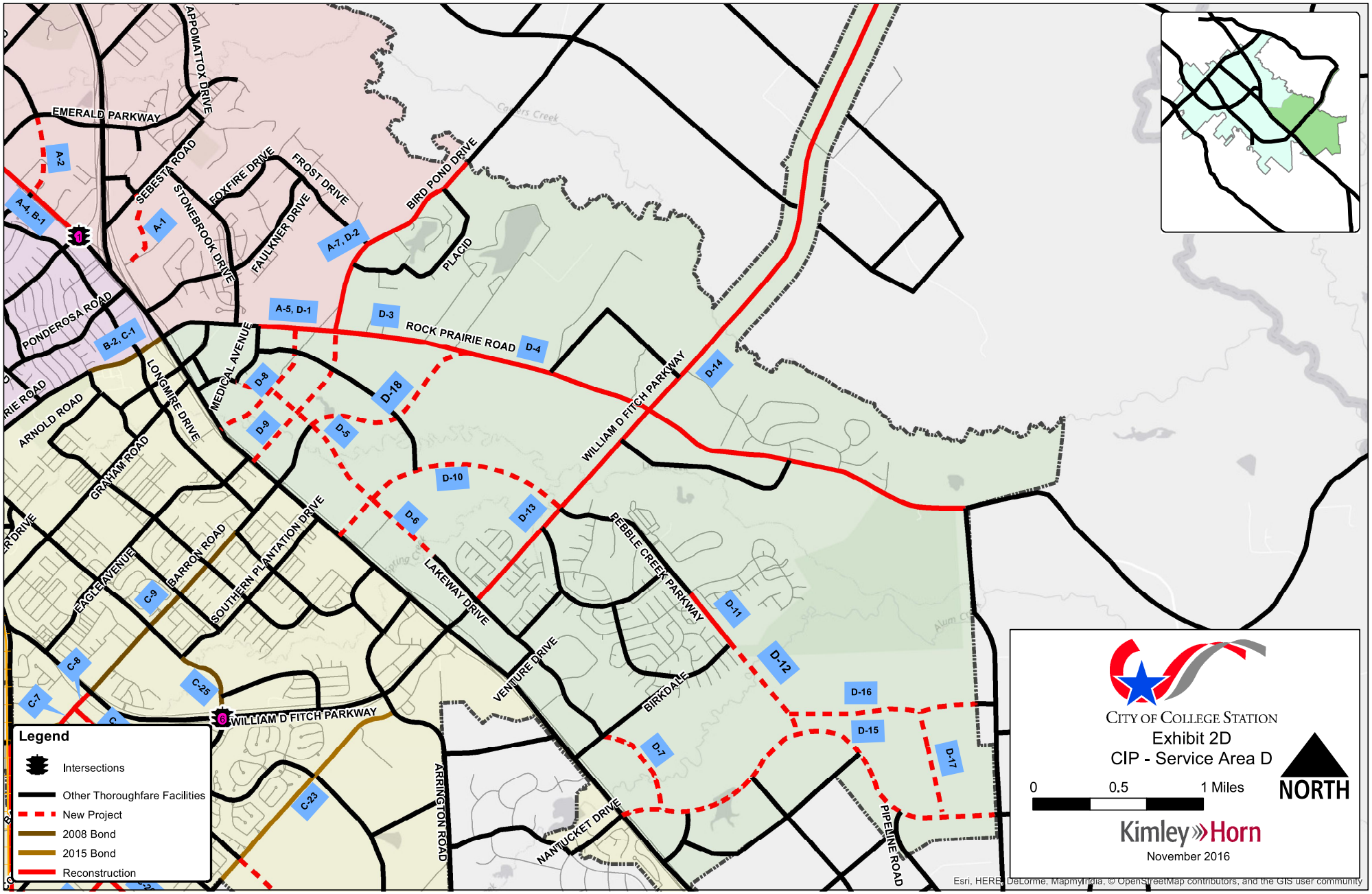
C-18
C-21
C-5
C-22
C-24
6
7


City of College Station
Exhibit 2D
CIP - Service Area D
0
0.5
1 Miles
NORTH
Kimley»Horn
November 2016
Legend
Intersections
Other Thoroughfare Facilities
New Project
2008 Bond
2015 Bond
Reconstruction
EMERALD PARKWAY
APPOMATTOX DRIVE
SEBESTA ROAD
STONEBROOK DRIVE
FOXFIRE DRIVE
FROST DRIVE
FAULKNER DRIVE
BIRD POND DRIVE
PLACID
PONDEROSA ROAD
ROCK PRAIRIE ROAD
MEDICAL AVENUE
LONGMIRE DRIVE
ARNOLD ROAD
GRAHAM ROAD
WILLIAM D FITCH PARKWAY
SOUTHERN PLANTATION DRIVE
BARRON ROAD
EAGLE AVENUE
LAKEWAY DRIVE
PEBBLE CREEK PARKWAY
VENTURE DRIVE
BIRKDALE
ARRINGTON ROAD
NANTUCKET DRIVE
PIPELINE ROAD
A-2
A-4, B-1
A-1
A-7, D-2
A-5, D-1
D-3
D-4
D-14
D-8
D-9
D-5
D-18
D-10
D-6
D-13
D-11
D-12
D-16
D-15
D-17
D-7
B-2, C-1
C-9
C-8
C-7
C-25
C-23

IV. COMPUTATION METHOD FOR ROADWAY IMPACT FEES

A. Service Areas

The four (4) service areas used in the 2016 Roadway Impact Fee Study are shown in the previously referenced Exhibit 1. These service areas cover the entire corporate boundary of the City of College Station. Chapter 395 of the Texas Local Government Code specifies that "the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles." In the City of College Station service area boundaries were set using approximately a four (4) mile limit.

B. Service Units

The "service unit" is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2016 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile.

Vehicle-Mile: The capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.

Total Vehicle-Miles of Supply: Based on the total length (miles), number of lanes, and capacity (vehicles per hour) provided.

Total Vehicle-Miles of Demand: Based on the 10-year growth projections. The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2016 Roadway Impact Fee Study are based upon generally accepted thoroughfare capacity criteria. Tables 3A and 3B show the service volumes as a function of the facility classification and type.

Table 3A. Service Volumes for Proposed Facilities
(used in Appendix B – Roadway Impact Fee CIP Service Units of Supply)

Facility Classification	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
MAJ6 – Major Arterial 6-Lane	Divided	750
MAJ4 – Major Arterial 4-Lane	Divided	650
MIN4 – Minor Arterial 4- Lane	Divided	625
MAJ2 – Major Collector 2-Lane	Undivided	550

Table 3B. Service Volumes for Existing Facilities
(used in Appendix C – Existing Roadway Facilities Inventory)

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e., gravel, dirt, etc.)	150
2U	Two lane undivided	425
2D	Two lane divided	500
2U-TX	High Speed, Limited Access Two Lane	950
3U	Three lane undivided (TWLTL)	550
4U	Four lane undivided	525
4D	Four lane divided	650
4D-TX	High Speed, Limited Access Four Lane	950
5U	Five lane undivided (TWLTL)	600
5U-TX	High Speed, Limited Access Five Lane	950
6D	Six lane divided	750
6D-TX	High Speed, Limited Access Six Lane	950
7U	Seven lane undivided (TWLTL)	650
7U-TX	High Speed, Limited Access Seven Lane	950

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. Thus, it is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel. The cost per service unit is calculated for each service area based on the roadway projects within that service area.

The second component of the cost per service unit is the determination of 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. As noted earlier, the units of demand are vehicle-miles of travel.

D. Roadway Impact Fee CIP Costing Methodology

All of the project costs for an arterial or major collector facility which serves the overall transportation system are eligible to be included in the Roadway Impact Fee Capital Improvements 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 Improvements Plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the Roadway Impact Fee 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 cost 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 College Station staff, TxDOT driven projects have been included in the CIP as a 20% portion of the total cost where the City anticipates contributing a portion of the total project costs. The following is a detailed description of the costing worksheet/methodology for the Roadway Impact Fee CIP.

1. Overview of Roadway Impact Fee CIP Costing Worksheets

For each project a specific costing worksheet was developed (see Appendix A). Each worksheet contains project information, construction pay items, construction component allowances, and a summary of costs and allowances. An example of the costing sheets can be seen below.

City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/13/2016

Project Information

Project Information: Description: Project No. **A-1**

Name:	Pavilion Ave. Extension
Limits:	Sebesta Rd. to SH 6 NBFR
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	2,545
Service Area(s):	A

This project consists of the construction of a new two-lane major collector.

Construction Pay Items

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	8,059	cy	$ 9.00	$ 72,533
211	6" Lime Stabilization (with Lime @ 36#/sy)	15,836	sy	$ 4.50	$ 71,260
311	8" Concrete Pavement and Curb	15,270	sy	$ 48.00	$ 732,960
411	4" Topsoil	3,959	sy	$ 3.25	$ 12,866
511	6' Concrete Sidewalk	30,540	sf	$ 5.00	$ 152,700
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,042,319**

Construction Component Allowances

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 31,270
√	Roadway Drainage	Standard Internal System	30%	$ 312,696
√	Illumination		6%	$ 62,539
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 31,270
√	Sewer	Minor Adjustments	2%	$ 20,846
√	Landscaping and Irrigation		4%	$ 41,693
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 500,313**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,542,632**
Construction Contingency:	10%	$ 154,263
Mobilization	5%	$ 77,132
Prep ROW	1%	$ 15,426
Construction Cost TOTAL:		**$ 1,790,000**

Summary of Costs and Allowances

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,790,000**
Engineering/Survey/Testing:		16%	$ 286,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 358,000
		Impact Fee Project Cost TOTAL:	**$ 2,434,000**

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 College Station.

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

2. Project Information

In order to correctly estimate the cost of a roadway project, several attributes are first identified:

- Project Number – Identifies which Service Area the project is in with a corresponding number. The corresponding number does not represent any prioritizations and is used only to identify projects. For example, Project C-15 is in Service Area C and is the 15th project on the list.
- Name – A unique identifier for each project.
- Limits – Represents the beginning and ending location for each project.
- Impact Fee Class – The costing class to be used in the analysis. The impact fee class provides the width for the various elements in the roadway. The construction costs are variable, based on the proposed Thoroughfare Plan classification of the roadway. For example, MAJ4 stands for Major Arterial 4-lane. A MAJ4 Impact Fee Class means the entire roadway is to be constructed. Additional classifications are utilized in cases where a portion of the facility currently exists and the road is only to be widened. The following notations are used for these projects:
  - "(1/2)" for facilities where half the facility still needs to be constructed;
  - "(1/3)" for future six-lane arterials facilities where two additional median lanes are needed
- Ultimate Class – The functional classification on College Station's Thoroughfare Plan.
- Length (ft) – The distance measured in feet that is used to cost out the project.
- Service Area(s) – Represents the service area where the project is located.
- Description – Used to describe the project type assumed in the costing such as a widening or reconstruction.

3. Construction Pay Items

A typical roadway project consists of a number of costs, including the following: planning, survey, design engineering, permitting, right-of way acquisition, and construction and inspection. 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. The pay items for both concrete and asphalt roads are shown in Table 4.

Table 4. Construction Cost Pay Items

Concrete Pay Items	Asphalt Pay Items
• Unclassified street excavation • Lime Stabilization • Concrete pavement and curb • Topsoil • Sidewalk • Turn lanes and median openings	• Unclassified street excavation • Lime Stabilization • Type C asphalt top layer • Type B asphalt base layers • Sidewalk • Curb and gutter • Turn lanes and median openings

4. Construction Component Allowances

A percentage of the paving construction cost is allotted for various major construction component allowances, as appropriate. These allowances include traffic control, pavement markings and signage, roadway drainage, illumination, minor water and sewer adjustments, landscaping and irrigation. These allowance percentages are also based on historical data.

In addition, lump sum dollar allowances are provided for special drainage structures, railroad crossings, and intersection improvements where needs are anticipated. The paving and allowance subtotal is given a ten percent (10%) contingency, five percent (5%) mobilizations, and either five (5%) or one percent (1%) preparation of right-of-way to determine the construction cost total based on whether or not the project is new or existing.

5. Summary of Cost and Allowances

To determine the total Impact Fee Project Cost, sixteen percent (16%) of the construction cost total is added for engineering, surveying, and testing.

Percentages are also allotted ROW/easement acquisition. ROW/easement acquisition was based on whether the project was an existing alignment or future alignment. For an existing alignment, the ROW/easement acquisition cost was provided an allotment equal to 10% of the construction cost total. For a new alignment, the ROW/easement acquisition cost was equal to 20% of the construction cost total. The value for ROW/easement acquisition is an

estimated contribution allocation and does not represent actual ROW/easement acquisition needs. TxDOT facilities assumed no ROW/easement acquisition was allotted.

The Impact Fee Project Cost Total is then the Construction Cost Total plus engineering, surveying, testing, and inspection; plus ROW/easement acquisition. Based upon discussions with City of College Station staff, state highway projects were included with a projected contribution of twenty percent (20%) of the total project. In addition, some projects already have been identified for contributions other than the City. These project's costs are reduced to account for other contribution sources.

E. Summary of Roadway Impact Fee CIP Costs

Tables 5.A – 5.D are the 10-Year Roadway Impact Fee CIP project lists for each service area with planning level project costs. Individual project cost worksheets 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 project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted.

The Roadway Impact Fee CIP establishes the list of projects for which Impact Fees may be utilized. Projects not included in the Roadway Impact Fee CIP are not eligible to receive impact fee funding. The cost projections utilized in this study should not be utilized for the City's construction CIP.

Table 5.A – 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Cost in Service Area
SA A	A-1	MAJ2	Pavilion Ave. Extension	Sebesta Rd. to SH 6 NBFR	$ 2,434,000
	A-2	MAJ2	Dartmouth St. Extension	Emerald Pkwy. to S Texas Ave.	$ 1,224,000
	A-3	MAJ2	Lassie Ln. Extension	Sterling St. to Manuel Dr.	$ 302,000
	A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	$ 166,000
	A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	$ 1,666,500
	A-6	MAJ4	Harvey Rd.	Appomattox Dr. to Boonville Rd. (CL)	$ 3,249,600
	A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	$ 5,594,000
	A-8	MIN4	Linda Lane	Harvey Rd. to 560' SE of Harvey Rd. (CL)	$ 785,000
	I-1	S Texas Ave. and Deacon Dr. Signal			$ 75,000
	I-2	Holleman Rd. and S. Texas Ave. Improvement			$ 750,000
	I-3	S Texas Ave. and Walton Dr. Signal			$ 150,000
	I-4	University Dr. and University Towne Center Signal			$ 300,000
				Service Area Project Cost Subtotal	**$ 16,696,100**
				2016 Roadway Impact Fee Study Cost Per Service Area	**$ 22,125**
				Total Cost in SERVICE AREA A	**$ 16,718,225**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of College Station.

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

Table 5.B – 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area B

Service Area	Proj. #	Class	Roadway	Limits	Cost in Service Area
SA B	A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	$ 166,000
	B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr. to SH 6	$ 1,967,862
	B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	$ 2,492,500
	B-4	MAJ2	Rock Prairie Rd. (3)	360' W. of Great Oaks Dr. (CL) to Holleman Dr.	$ 3,714,000
	B-5	MIN4	Holleman Dr. (1)	Rock Prairie Rd. to N Graham Rd.	$ 2,317,000
	B-6	MIN4	Holleman Dr. (2)	N Dowling Rd. to Rock Prairie Rd.	$ 10,305,000
	B-7	MAJ6 (1/3)	Wellborn Rd.	University Dr. to Harvey Mitchell Pkwy.	$ 1,165,400
	B-8	MAJ2	Luther St.	Penberthy Rd. to Marion Pugh Dr.	$ 1,346,000
	B-9	MIN4	Penberthy Rd.	Goerge Bush Dr. to Luther St.	$ 3,006,373
	B-10	MAJ2	Turkey Creek Rd.	S Traditions Dr. to Raymond Stotzer Pkwy.	$ 3,141,000
	B-11	MAJ2	F and B Rd.	Turkey Creek Rd. to Harvey Mitchell Pkwy.	$ 2,298,000
	B-12	MAJ6 (1/3)	University Dr.	Harvey Mitchell Pkwy. to Wellborn Rd.	$ 534,200
	I-1	S Texas Ave. and Deacon Dr. Signal			$ 75,000
	I-2	Holleman Rd. and S. Texas Ave. Improvement			$ 750,000
	I-3	S Texas Ave. and Walton Dr. Signal			$ 150,000
	I-5	Wellborn Rd. and George Bush Dr.			$ 1,190,232
				Service Area Project Cost Subtotal	**$ 34,618,567**
				2016 Roadway Impact Fee Study Cost Per Service Area	**$ 22,125**
				Total Cost in SERVICE AREA B	**$ 34,640,692**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of College Station.

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

Table 5.C – 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area C

Service Area	Proj. #	Class	Roadway	Limits	Cost in Service Area
SA C	B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr. to SH 6	$ 1,967,862
	B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	$ 2,492,500
	C-3	MAJ2	N Graham Rd.	Old Wellborn Rd. to 2,075' W of Old Wellborn Rd. (CL)	$ 1,967,000
	C-4	MAJ4	Wellborn Rd. (1)	Capstone Dr. to Greens Prairie Rd.	$ 1,281,800
	C-5	MAJ4	Wellborn Rd. (2)	Greens Prairie Rd. to 540' S of Greens Prairie Trl.	$ 1,172,000
	C-6	MIN4	Capstone/Barron Realignment	Wellborn Rd. to 210' W of Piccadilly Cir.	$ 2,289,000
	C-7	MIN4	Barron Rd. (1)	210' W of Piccadilly Cir. to Barron Cut Off Rd.	$ 939,000
	C-8	MIN4 (1/2)	Barron Rd. (2)	Barron Cut Off Rd. to William D Fitch Pkwy.	$ 494,000
	C-9	MIN4	Barron Rd. (3)	William D Fitch Pkwy. to Decatur Dr.	$ 7,801,145
	C-10	MIN4 (1/2)	WS Phillips Pkwy. (1)	Barron Rd. to 1740' S of Barron Cut Off Rd.	$ 1,939,000
	C-11	MIN4 (1/2)	WS Phillips Pkwy. (2)	1740' S of Barron Cut Off Rd. to Odell Ln.	$ 1,634,000
	C-12	MAJ2	Etonburg	Barron Cut Off Rd. to McCullough Rd. Extension	$ 1,665,000
	C-13	MAJ2	McCullough Rd. Extension	2530' E of Wellborn Rd. to WS Phillips Pkwy.	$ 3,037,000
	C-14	MAJ2	S. Dowling/McCullough	I & G Rd. to 2485' E of I & G Rd.	$ 2,350,000
	C-15	MAJ2	Future 2 Lane Major Collector	S. Dowling/McCullough to Greens Prairie Rd. Extension	$ 1,372,000
	C-16	MAJ2	Greens Prairie Rd. Extension (1)	I & G Rd. to 565' E of I & G Rd. (CL)	$ 541,000
	C-17	MAJ2	Greens Prairie Rd. Extension (2)	995' W of Welborn Rd. (CL) to Wellborn Rd.	$ 1,346,000
	C-18	MIN4	Greens Prairie Rd. (1)	Wellborn Rd. to Royder Rd.	$ 561,000
	C-19	MAJ2	Greens Prairie Rd. (2)	Royder Rd. to 750' E of Turnberry Cir.	$ 3,213,000
	C-20	MAJ2	Greens Prairie Rd. (3)	750' E of Turnberry Cir. to Greens Prairie Trl.	$ 2,592,000
	C-21	MIN4	Royder Rd.	Greens Prairie Rd. to 885' S of Greens Prairie Trl.	$ 4,930,000
	C-22	MIN4	Greens Prairie Trl. (1)	Wellborn Rd. to 1000' W of Woodlake Dr.	$ 6,960,000
	C-23	MIN4	Greens Prairie Rd. (4)	465' E of Future Etonburg to Arrington Rd.	$ 4,230,000
	C-24	MIN4	WS Phillips Pkwy. Extension	Greens Prairie Rd. to Arrington Rd.	$ 11,500,000
	C-25	MAJ2	Victoria Ave.	Southern Plantation Dr. to William D Fitch Pkwy.	$ 1,828,530
	I-6	William D Fitch Pkwy. and Victoria Ave. Signal			$ 776,335
	I-7	Wellborn Rd. and S Dowling Rd. Signal			$ 300,000
				Service Area Project Cost Subtotal	**$ 71,179,172**
				2016 Roadway Impact Fee Study Cost Per Service Area	**$ 22,125**
				Total Cost in SERVICE AREA C	**$ 71,201,297**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of College Station.

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

Table 5.D – 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections – Service Area D

Service Area	Proj. #	Class	Roadway	Limits	Cost in Service Area
SA D	A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	$ 1,666,500
	A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	$ 5,594,000
	D-3	MAJ4	Rock Prairie Rd. (2)	Bird Pond Rd. to Bradley Rd.	$ 5,046,000
	D-4	MIN4	Rock Prairie Rd. (3)	Bradley Rd. to 2,610' E of Campbell Ct. (CL)	$ 23,733,000
	D-5	MAJ2	Lakeway Dr. (1)	Medical Ave. to Pebble Creek Pkwy.	$ 8,703,000
	D-6	MAJ2	Lakeway Dr. (2)	Pebble Creek Pkwy. to 1,910' N of William D. Fitch Pkwy.	$ 2,946,000
	D-7	MAJ2	Lakeway Dr. (3)	940' S of Technology Way to Future Nantucket Dr.	$ 4,022,000
	D-8	MAJ2	Ritchey Rd.	SH 6 NBFR to Rock Prairie Rd.	$ 3,964,000
	D-9	MIN4	Bird Pond Rd. Extension	SH 6 to Rock Prairie Rd.	$ 8,894,000
	D-10	MAJ2	Pebble Creek Pkwy. (1)	SH 6 NBFR to William D. Fitch Pkwy.	$ 9,100,000
	D-11	MAJ2	Pebble Creek Pkwy. (2)	Royal Adelade Dr. to St. Andrews Dr.	$ 896,000
	D-12	MAJ2	Pebble Creek Pkwy. (3)	St. Andrews Dr. to Future Nantucket Dr.	$ 4,886,000
	D-13	MAJ6 (1/3)	William D. Fitch Pkwy. (1)	Lakeway Dr. to Rock Prairie Rd.	$ 4,392,000
	D-14	MAJ6	William D. Fitch Pkwy. (2)	Rock Prairie Rd. to 9,700' E of Tonkaway Lake Rd. (CL)	$ 40,890,000
	D-15	MIN4	Future Nantucket Dr.	SH 6 to East City Limits	$ 19,735,000
	D-16	MAJ2	Future East-West Major Collector	Pebble Creek Pkwy. to East City Limits	$ 5,772,000
	D-17	MAJ2	Future North-South Major Collector	Future East-West Major Collector to Future Nantucket Dr.	$ 3,176,000
	D-18	MIN4	Barron Rd. Extension	Lakeway Dr. to Rock Prairie Rd.	$ 12,930,000
				Service Area Project Cost Subtotal	**$ 166,345,500**
				2016 Roadway Impact Fee Study Cost Per Service Area	**$ 22,125**
				Total Cost in SERVICE AREA D	**$ 166,367,625**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of College Station.

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

F. Service Unit Calculation

The basic service unit for the computation of College Station'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 period.

The growth in vehicle-miles from 2016 to 2026 is based upon projected changes in residential units and employment for the period. In order to determine this growth, estimates of residential units, basic employment, service employment, and retail employment for 2016 were made, along with growth projections for each of these demographic statistics through 2026. The Land Use Assumptions section of this report details the growth estimates used for impact fee determination.

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

For non-residential land uses, the process is similar. The Land Use Assumptions section of this report provides the existing and projected number of building square footages for three (3) categories of employment – 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, 9th Edition*. This characteristic 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 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, 9th Edition* and information from the Texas Metropolitan Planning Organizations (MPOs) and the National Household Travel Survey (NHTS). The *ITE Trip Generation Manual, 9th 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. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. 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 trip generation rates 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 Texas MPOs, requirements in Chapter 395, and other generally accepted planning principles.

The computation of the *transportation demand factor* is based on the following equation:

$$TDF = T * (1 - P_b) * L$$

Variables:

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips), and
L = Average Trip Length (miles),

Origin-Destination reduction of 50% had already been applied when determining the trip length. From here, adjustments were made to the *transportation demand factor* based upon planning principles and engineering judgement for each land use.

The maximum trip length was 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, and the service areas within College Station are approximated with a four (4) mile distance.

For residential, basic, and service land uses, trip lengths go beyond the service area boundary and were capped at four miles based on the max trip length. For retail land use, this max trip length was cut in half and assumed to be the radius of a service area. Specific land uses were adjusted if the trip length were anticipated to be shorter than the four or two miles discussed above.

Table 6 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land use categories. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 6. Transportation Demand Factor Calculations

Variable	Residential		Basic	Service	Retail
	Single Family	Multi Family			
T	1.00	0.62	0.97	1.49	3.71
P_b	0%	0%	0%	0%	34%
L_{max} *	4.0	4.0	4.0	4.0	2.0
TDF	4.00	2.48	3.88	5.96	4.90

* L_{max} is less than 4 miles for retail land use; therefore this lower trip length is used for calculating the TDF for these land uses.

Variables:

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips),
L_{max} = Maximum Trip Length (miles),

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in Table 7. This table shows the total growth in vehicle-miles by service area between the years 2016 and 2026. These estimates and projections lead to the Vehicle-Miles of Travel for the 10-year period.

Table 7. 10-Year Growth Projections

2016- 2026 Growth Projections[1]

SERVICE AREA	RESIDENTIAL VEHICLE-MILES					NON-RESIDENTIAL SQUARE FEET[5]			TRANS. DEMAND FACTOR[6]			NON-RESIDENTIAL VEHICLE-MILES[10]				TOTAL VEHICLE MILES[11]
	Single Family Units	Trip Rate TDF[2]	Multi-Family Units	Trip Rate TDF[3]	VEHICLE MILES[4]	BASIC	SERVICE	RETAIL	BASIC[7]	SERVICE[8]	RETAIL[9]	BASIC	SERVICE	RETAIL	TOTAL	
		1.00		*0.62*					*0.97*	*1.49*	*3.71*					
A	459	4.00	1,520	2.48	5,606	80,000	1,133,000	320,000	3.88	5.96	4.90	310	6,753	1,568	8,631	14,237
B	587		2,251		7,930	100,000	559,000	604,000				388	3,332	2,960	6,680	14,610
C	2,316		861		11,399	307,000	483,000	729,000				1,191	2,879	3,572	7,642	19,041
D	1,552		24		6,268	348,000	495,000	625,000				1,350	2,950	3,063	7,363	13,631
Totals	**4,914**		**4,656**		**31,203**	**835,000**	**2,670,000**	**2,278,000**				**3,239**	**15,914**	**11,163**	**30,316**	**61,519**

VEHICLE-MILES OF INCREASE (2016 - 2026)

SERVICE AREA	VEH-MILES
A	14,237
B	14,610
C	19,041
D	13,631

Notes:

[1] From *City of College Station 2016 Land Use Assumptions for Roadway Impact Fees*
[3] Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and *trip generation rate*
[2] Transportation Demand Factor for each Service Area (from LUVMET) using Apartment/Multi-family land use and trip generation rate
[4] Calculated by multiplying TDF by the number of dwelling units
[5] From *City of College Station 2016 Land Use Assumptions for Roadway Impact Fees*
[6] *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use
[7] 'Basic' corresponds to General Light Industrial land use and *trip generation rate*
[8] 'Service' corresponds to General Office land use and *trip generation rate*
[9] 'Retail' corresponds to Shopping Center land use and *trip generation rate*
[10] Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
[11] Residential plus non-residential vehicle-mile totals for each Service Area

V. ROADWAY IMPACT FEE CALCULATION

A. Maximum Assessable Impact Fee Per Service Unit

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible Roadway 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 8 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. The calculation of the maximum assessable impact fee is shown in Table 9.

Table 8. Maximum Assessable Roadway Impact Fee Computation

Line	Title	Description
1	*Total Vehicle-Miles of Capacity Added by the Roadway Impact Fee CIP*	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from Appendix B – CIP Units of Supply)

Each project identified in the 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 each service area.

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

A number of facilities identified in the 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	*Total Vehicle-Miles of Existing Deficiencies*	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from Appendix C – 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	*Net Amount of Vehicle-Miles of Capacity Added*	A measurement of the amount of vehicle-miles added by the Roadway Impact Fee CIP that will not be utilized by existing demand (Line 1 – Line 2 – Line 3)

This calculation identifies the portion of the Roadway Impact Fee CIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	*Total Cost of the Roadway Impact Fee CIP within the Service Area*	The total cost of the projects within each service area (from Table 5: 10-Year Roadway Impact Fee Capital Improvements Plan with Conceptual Level Cost Opinions)

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

6	*Cost of Net Capacity Supplied*	The total Roadway Impact Fee CIP cost (Line 5) prorated by the ratio of Net Capacity Added (Line 4) to Total Capacity Added (Line 1). [(Line 4 / Line 1) * (Line 5)]

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 CIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	*Cost to Meet Existing Needs and Usage*	The difference between the Total Cost of the Roadway Impact Fee CIP (Line 5) and the Cost of the Net Capacity supplied (Line 6). (Line 5 – Line 6)

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.

8	*Total Vehicle-Miles of New Demand over Ten Years*	Based upon the growth projection provided in the Land Use Assumptions, an estimate of the number of new vehicle-miles within the service area over the next ten years. (from Table 7)

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

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

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.

11	*Cost of Roadway Impact Fee CIP Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (Line 6) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (Line 9).

This value is 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 Financing and the Ad Valorem Tax Credit

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

(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 capital improvements plan…"

The plan is summarized, as prepared by NewGen Strategies in Appendix D and Appendix E, Plan for Awarding the Transportation Impact Fee Credit. The following table summarizes the portions of Table 8 that utilize this credit calculation.

Table 8 (Cont'd). Maximum Assessable Roadway Impact Fee Computation

Line	Title	Description
12	*Financing Costs*	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
13	*Interest Earnings*	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
14	*Cost of the Roadway Impact Fee CIP and Financing Attributable to New Growth*	The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, and Interest Earnings. (Line 11 + Line 12 + Line 13)
15	*Pre-Credit Maximum Fee Per Service Unit*	Found by dividing the Cost of the TIP and Financing Attributable to New Growth (Line 14) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 14 / Line 8)
16	*Credit for Ad Valorem Taxes*	A credit for the portion of ad valorem taxes projected to be generated by the new service units, as per Section 395.014 of the Local Government Code. (from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
17	*Recoverable Cost of the Roadway Impact Fee CIP and Financing*	The difference between the Cost of the TIP and Financing Attributable to New Growth (Line 14) and the Credit for Ad Valorem Taxes (Line 16). (Line 14 + Line 16)
18	*Maximum Assessable Fee Per Service Unit*	Found by dividing the Recoverable Cost of the TIP and Financing (Line 17) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 17 / Line 8)

C. Maximum Assessable Impact Fee Determination

The impact fee determination method employed by NewGen Strategies and Solutions, LLC is developed through a financial based model, which fully recognizes the requirements of Chapter 395, including the recognition of cash and/or debt financing, interest earnings, fund balances, and applicable credits associated with the use of ad valorem taxes. In developing the components of the financial model several assumptions must be made, including the following:

- Financing
  - Method of financing (i.e. cash or debt financing)
  - The level of financing (e.g. 80% debt / 20% cash)
  - Cost of financing
  - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Ad Valorem Tax Revenue Used to Fund Impact Fee Transportation Improvements

The assumptions employed in the maximum assessable impact fee determination provide a reasonable basis for forecasting, however, it must be emphasized that these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of impact fees through the Impact Fee Advisory Committee (IFAC), and allows for the option to update or revise impact fees to reflect the actual implementation of the impact fee program.

Once the cost of capacity added that is attributable to growth (Table 8 - line 11) is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Based on discussions with City staff, it is assumed that the City will debt finance 80% of the future project costs and cash finance 20%. For debt financing, the cost of financing is based on the City staff's estimates of future debt costs for bonds issued with 20-

year terms, as shown in Appendix E. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

Currently, the exact timing and annual level of capital expenditures over the 10-year forecast is indeterminate; therefore, it is assumed that capital expenditures will occur in equal amounts over the 10-year program period. It is also assumed that for debt financed capital projects, the City will generally expend debt proceeds over a 2-year timeframe. For the calculation of the maximum assessable impact fee, debt is assumed to be issued in equal amounts for each year. Because of the 10-year forecast limitation, and in order to recognize the full amount of debt to be issued for the cost of capacity added that is attributable to growth during the 10-year period, a portion of year 9 and all of year 10 bond proceeds are assumed to be spent fully in year 10.

Because debt is issued over 20-year terms and impact fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. Because of the generation of the fund balance, excess monies will be available for interest earnings. Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order to recognize that interest earnings are used to fund transportation improvements, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 0.71% based on the City's average annual return on current investments as of March 31, 2016.

As with the timing and level of the capital expenditures over the 10-year forecast, the timing and annual level of service unit growth over the 10-year program period is indeterminate at the present time. As such, it is assumed that service unit growth will be consistent over the 10-year forecast.

Chapter 395 requires a plan for awarding either a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the Roadway Impact Fee CIP. As an alternative, a credit equal to 50% of the total cost of implementing the Roadway

Impact Fee CIP may be used. The City has elected to pursue the determination of a credit for the portion of ad valorem tax revenues generated by new service units during the program period that are used for payment of improvements that are included in the Roadway Impact Fee CIP. It should be noted that the credit is not a determination to recognize the total ad valorem tax revenue generated by new service units, but is only a credit for the portion of ad valorem tax revenue that is used for payment of improvements that are included in the Roadway Impact Fee CIP. Theoretically, the credit determination could be zero (0) if the City does not utilize any of the new service unit ad valorem tax revenue to fund improvements that are included in the Roadway Impact Fee CIP. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the cash funded projects (20% of new improvement costs included in the Roadway Impact Fee CIP) could potentially be funded by ad valorem tax revenue.

Since payments made through ad valorem tax revenue will consist of not only the revenue generated by new service units in the defined service area, but also existing property owners throughout the City, the portion attributable to the new service units in the defined service area must be isolated, as illustrated in the credit calculation in Appendix E.

The following summarizes the financial model's determination of the maximum assessable impact fee:

- Recoverable Impact Fee Transportation Improvements Costs (Table 8, line 11)
- Plus: Financing Costs (Table 8, line 12)
- Less: Interest Earnings (Table 8, line 13)
- Cost of the Roadway Impact Fee CIP and Financing Attributable (Table 8, line 14)
- Pre-Credit Recoverable Costs for Impact Fee (Table 8, line 15)
- Less: Credit for Ad Valorem Revenues (Table 8, line 16)
- Maximum Recoverable Costs for Impact Fee (Table 8, line 17)
- Maximum Assessable Fee per Service Unit (Table 8, line 18)

Table 9. Maximum Assessable Roadway Impact Fee

	SERVICE AREA:	A	B	C	D
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, **APPENDIX B)**	13,867	32,452	35,363	55,396
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, **APPENDIX B**)	3,824	17,235	4,910	13,749
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, **APPENDIX C**)	824	3,852	391	509
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	9,219	11,365	30,062	41,138
5	TOTAL COST OF THE ROADWAY IMPACT FEE CIP WITHIN SERVICE AREA (FROM **TABLES 5A TO 5E**)	$ 16,718,225	$ 34,640,692	$ 71,201,297	$ 166,367,625
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	$ 11,114,539	$ 12,131,501	$ 60,528,049	$ 123,547,393
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	$ 5,603,686	$ 22,509,191	$ 10,673,248	$ 42,820,232
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM **TABLE 7** AND **LAND USE ASSUMPTIONS**)	14,237	14,610	19,041	13,631
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	154.4%	128.5%	63.3%	33.1%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	100.0%	100.0%	63.3%	33.1%
11	COST OF ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	$ 11,114,539	$ 12,131,501	$ 38,314,255	$ 40,894,187
12	FINANCING COSTS (FROM **APPENDIX D)**	$ 5,060,262	$ 4,529,516	$ 13,662,974	$ 17,484,873
13	INTEREST EARNINGS (FROM **APPENDIX D**)	$ (906,150)	$ (760,714)	$ (2,354,300)	$ (3,172,804)
14	COST OF THE ROADWAY IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO NEW GROWTH (LINE 11 + LINE 12 + LINE 13)	$ 15,268,651	$ 15,900,303	$ 49,622,929	$ 55,206,256
15	PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 14 / LINE 8)	$ 1,072	$ 1,088	$ 2,606	$ 4,050
16	CREDIT FOR AD VALOREM TAXES (FROM **APPENDIX D**)	$ (166,710)	$ (232,443)	$ (957,823)	$ (626,934)
17	RECOVERABLE COST OF ROADWAY IMPACT FEE CIP AND FINANCING (LINE 14 + LINE 16)	$ 15,101,941	$ 15,667,860	$ 48,665,106	$ 54,579,323
18	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 17 / LINE 8)	$ 1,061	$ 1,072	$ 2,556	$ 4,004

D. 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 will utilize the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in Table 10. This table lists the predominant land uses that may occur within the City of College Station. 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 local uses are found in this table. The descriptions for each land use are presented in Table 11. 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 in Table 10, 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 definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 9th Edition*, the latest edition. 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. However, for land uses not contained within the 9th Edition of the *ITE Trip Generation Manual,* an alternative service unit demand could be calculated by completing a trip generation study based on the procedure identified in the *ITE Trip Generation Handbook.*

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on land use and limited to the service area size of 4 miles, as explained in Chapter IV, section F – Service Unit Calculation.

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 to compute the number of service units attributed to each land use category. 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 10 - 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	Adj. Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL								
Truck Terminal	030	Acre	6.55			6.55	4.00	26.20
INDUSTRIAL								
General Light Industrial	110	1,000 SF GFA	0.97			0.97	4.00	3.88
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	4.00	2.72
Industrial Park	130	1,000 SF GFA	0.85			0.85	4.00	3.40
Warehousing	150	1,000 SF GFA	0.32			0.32	4.00	1.28
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	4.00	1.04
RESIDENTIAL								
Single-Family Detached Housing	210	Dwelling Unit	1.00			1.00	4.00	4.00
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	4.00	2.48
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	4.00	2.08
Mobile Home Park / Manufactured Housing	240	Dwelling Unit	0.59			0.59	4.00	2.36
Senior Adult Housing-Detached	251	Dwelling Unit	0.27			0.27	4.00	1.08
Senior Adult Housing-Attached	252	Dwelling Unit	0.25			0.25	4.00	1.00
Assisted Living	254	Beds	0.22			0.22	4.00	0.88
LODGING								
Hotel	310	Room	0.60			0.60	2.00	1.20
Motel / Other Lodging Facilities	320	Room	0.47			0.47	2.00	0.94
RECREATIONAL								
Golf Driving Range	432	Tee	1.25			1.25	2.00	2.50
Golf Course	430	Acre	0.30			0.30	2.00	0.60
Recreational Community Center	495	1,000 SF GFA	2.74			2.74	2.00	5.48
Ice Skating Rink	465	1,000 SF GFA	2.36			2.36	2.00	4.72
Miniature Golf Course	431	Hole	0.33			0.33	2.00	0.66
Multiplex Movie Theater	445	Screens	13.64			13.64	2.00	27.28
Racquet / Tennis Club	491	Court	3.35			3.35	2.00	6.70
INSTITUTIONAL								
Church	560	1,000 SF GFA	0.55			0.55	2.00	1.10
Day Care Center	565	1,000 SF GFA	12.34	44%	B	6.91	2.00	13.82
Primary/Middle School (1-8)	522	Students	0.16			0.16	2.00	0.32
High School	530	Students	0.13			0.13	2.00	0.26
Junior / Community College	540	Students	0.12			0.12	2.00	0.24
University / College	550	Students	0.17			0.17	2.00	0.34
MEDICAL								
Clinic	630	1,000 SF GFA	5.18			5.18	3.77	19.53
Hospital	610	1,000 SF GFA	0.93			0.93	3.77	3.51
Nursing Home	620	Beds	0.22			0.22	3.77	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	3.00	9.90
OFFICE								
Corporate Headquarters Building	714	1,000 SF GFA	1.41			1.41	4.00	5.64
General Office Building	710	1,000 SF GFA	1.49			1.49	4.00	5.96
Medical-Dental Office Building	720	1,000 SF GFA	3.57			3.57	3.77	13.46
Single Tenant Office Building	715	1,000 SF GFA	1.74			1.74	4.00	6.96
Office Park	750	1,000 SF GFA	1.48			1.48	4.00	5.92

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

Table 10 (Cont'd). 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	Adj. Trip Length (mi)	Veh-Mi Per Dev-Unit
COMMERCIAL								
Automobile Related								
Automobile Care Center	942	1,000 SF Occ. GLA	3.11	40%	B	1.87	2.00	3.74
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	2.00	6.82
Gasoline/Service Station	944	Vehicle Fueling Position	13.87	42%	A	8.04	0.60	4.82
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	13.51	56%	B	5.94	0.60	3.56
Gasoline/Service Station w/ Conv Market and Car Wash	946	Vehicle Fueling Position	13.86	56%	A	6.10	0.60	3.66
New Car Sales	841	1,000 SF GFA	2.62	20%	B	2.10	2.00	4.20
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	2.00	6.22
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	0.60	1.99
Automated Car Wash	948	Stall	14.12	40%	B	8.47	0.60	5.08
Tire Store	848	1,000 SF GFA	4.15	28%	A	2.99	2.00	5.98
Dining								
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.65	50%	A	16.33	2.00	32.66
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	26.15	50%	B	13.08	2.00	26.16
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.85	43%	A	5.61	2.00	11.22
Quality Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	2.00	8.38
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	42.80	70%	A	12.84	2.00	25.68
Other Retail								
Free-Standing Discount Store	815	1,000 SF GFA	4.98	30%	C	3.49	2.00	6.98
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	2.00	9.72
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	2.00	2.42
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.40	53%	A	3.95	2.00	7.90
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	9.91	49%	A	5.05	2.00	10.10
Shopping Center	820	1,000 SF GLA	3.71	34%	A	2.45	2.00	4.90
Supermarket	850	1,000 SF GFA	9.48	36%	A	6.07	2.00	12.14
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	2.00	6.98
Department Store	875	1,000 SF GFA	1.87	30%	B	1.31	2.00	2.62
Video Rental Store	896	1,000 SF GFA	13.60	50%	B	6.80	2.00	13.60
SERVICES								
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	33.24	47%	A	17.62	1.70	29.95
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	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

Table 11 - Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
PORT AND TERMINAL		
Truck Terminal	030	Point of good transfer between trucks or between trucks and rail
INDUSTRIAL		
General Light Industrial	110	Emphasis on activities other than manufacturing; typically employing fewer than 500 workers
General Heavy Industrial	120	Primary activity is conversion of raw materials or parts into finished products
Industrial Park	130	Area containing a number of industries or related facilities
Warehousing	150	Devoted to storage of materials but may included office and maintenance areas
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Apartment/Multi-family	220	At least 4 rental dwelling units per building
Residential Condominium/Townhome	230	Single-family ownership units that have at least one other single-family owned unit within the same building
Mobile Home Park / Manufactured Housing	240	Consists of manufactured homes that are sited and installed on permanent foundations
Senior Adult Housing-Detached	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Attached	252	Consists of attached independent living developments that include limited social or recreation services
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities
LODGING		
Hotel	310	Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services
Motel / Other Lodging Facilities	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
RECREATIONAL		
Golf Driving Range	432	Facilities with driving tees for practice; may provide individual or group lessons; may have prop shop and/or refreshment facilities
Golf Course	430	May include municipal courses and private country clubs; may have driving ranges, pro shops, and restaurant/banquet facilities
Recreational Community Center	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
Ice Skating Rink	465	Rinks for ice skating and related sports; may contain spectator areas and refreshment facilities
Miniature Golf Course	431	One or more individual putting courses; category should not be used when part of a larger entertainment center(with batting cages, video game centers, etc)
Multiplex Movie Theater	445	Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area.
Racquet / Tennis Club	491	Indoor or outdoor facilities specifically designed for playing tennis
INSTITUTIONAL		
Church	560	Churches and houses of worship
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Primary/Middle School (1-8)	522	Serves students who have not yet entered high school
High School	530	Serves students who have completed middle or junior high school
Junior / Community College	540	Two-year junior, community, or technical colleges
University / College	550	Four-year universities or colleges that may or may not offer graduate programs
MEDICAL		
Clinic	630	Facilities with limited diagnostic and outpatient care
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Animal Hospital/Veterinary Clinic	640	Rest and convalescent homes with residents who do little or no driving
OFFICE		
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
General Office Building	710	Office buildings which house multiple tenants
Medical-Dental Office Building	720	Multi-tenant building with offices for physicians and/or dentists
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system

Table 11 (Cont'd). Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
COMMERCIAL		
Automobile Related		
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstering
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Gasoline/Service Station	944	Gasoline sales without convenience store or car wash; may include repair
Gasoline/Service Station w/ Conv Market	945	Gasoline sales with convenience store where the primary business is gasoline sales
Gasoline/Service Station w/ Conv Market and Car Wa	946	Gasoline sales with convenience store and car washes where the primary business is gasoline sales
New Car Sales	841	New car dealerships, typically with automobile servicing, part sales, and used car sales
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Self-Service Car Wash	947	Has stalls for driver to park and wash the vehicle
Automated Car Wash	948	Facilities that provide mechanical cleaning for the exterior of vehicles
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Dining		
Fast Food Restaurant with Drive-Thru Window	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
Fast Food Restaurant without Drive-Thru Window	933	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Quality Restaurant	931	Restaurants with turnover rates of one hour or longer; typically require reservations
Coffee/Donut Shop with Drive-Thru Window	937	Coffee and Donut restaurants with drive-through windows, hold long store hours and have limited indoor seating
Other Retail		
Free-Standing Discount Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Nursery (Garden Center)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Pharmacy/Drugstore w/o Drive-Thru Window	880	Facilities that primarily sell prescription and non-prescription drugs without a drive-through window
Pharmacy/Drugstore w/ Drive-Thru Window	881	Facilities that primarily sell prescription and non-prescription drugs with a drive-through window
Shopping Center	820	Integrated group of commercial establishments; planning, owned, and managed as a unit
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM
Toy/Children's Superstore	864	Businesses specializing in child-oriented merchandise
Department Store	875	Free-standing stores that specialize in the sale of apparel, footwear, bedding, home products, jewelry, etc.
Video Rental Store	896	Businesses specializing in the rental of home movies and video games
SERVICES		
Walk-In Bank	911	Banks with their own parking lots, no drive-in lanes but contain non-drive-through ATMs
Drive-In Bank	912	Banking facilities to conduct financial transactions from the vehicle; also usually apart of walk-in bank
Hair Salon	918	Facilities that specialize in cosmetic and beauty services including hair cutting and styling

VI. 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 in Service Area A

Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	From Table 10 [Land Use – Vehicle-Mile Equivalency Table] Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 4.00
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	From Table 9, Line 18 [Maximum Assessable Fee Per Service Unit] Service Area A: $1,061
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 4.00 * $1,061 Maximum Assessable Impact Fee = $4,244

Example 2:
Development Type – 125,000 square foot Home Improvement Superstore in Service Area C

Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	From Table 10 [Land Use – Vehicle-Mile Equivalency Table] 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: 2.42
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	From Table 9, Line 18 [Maximum Assessable Fee Per Service Unit] Service Area C: $2,556
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 125 * 2.42* $2,556 Maximum Assessable Impact Fee = $773,190

VII. ADOPTION AND ADMINISTRATION OF ROADWAY IMPACT FEES

A. Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. An Impact Fee Advisory Committee (IFAC) is required to review the Land Use Assumptions and Roadway Impact Fees CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. This IFAC also reviews the Roadway Impact Fee ordinance and provides its findings to the City Council. The composition of the IFAC is required to adequately represent the building and development communities. The City Council then conducts a first public hearing on the Land Use Assumptions and Roadway Impact Fee CIP and a second public hearing on the Roadway Impact Fee Ordinance.

Following policy adoption, the IFAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the Roadway Impact Fees CIP at any time within five years of adoption. Finally, the IFAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

B. Collection and Use of Transportation Impact Fees

Roadway Impact Fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can be used only within the same service area. Finally, fees must be utilized within 10 years of collection, or must be refunded with interest.

VIII. CONCLUSION

The City of College Station 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 College Station, as shown in the previously referenced Table 9.

This document serves as a guide to the assessment of Roadway Impact Fees pertaining to future development, and the City's need for transportation improvements to accommodate that growth. Following the public hearing process, the City Council may establish an impact fee amount to be collected, up to the calculated maximum and establish the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this analysis are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Impact Fee Capital Improvements Plan are appropriately incorporated into the development of the maximum assessable Roadway Impact Fee.

Below is the listing of the 2016 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

Service Areas	A	B	C	D
2016 Roadway Impact Fee Study Maximum Assessible Fee Per Vehicle-Mile	$ 1,061	$ 1,072	$ 2,556	$ 4,004

IX. APPENDICES

A. Conceptual Level Project Cost Projections

SERVICE AREA A
SERVICE AREA B
SERVICE AREA C
SERVICE AREA D

B. Roadway Impact Fee CIP Service Units of Supply

C. Existing Roadway Facilities Inventory

D. Plan for Awarding the Transportation Impact Fee Credit Summary

E. Plan for Awarding the Transportation Impact Fee Credit Supporting Exhibits

Appendix A – Conceptual Level Project Cost Projections

City of College Station - 2016 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area A

#	IF Class	Project	Limits		Status	Percent in Service Area	Project Cost	Total Cost in Service Area
			From	To				
A-1	MAJ2	Pavilion Ave. Extension	Sebesta Rd.	SH 6 NBFR	New	100	$ 2,434,000	$ 2,434,000
A-2	MAJ2	Dartmouth St. Extension	Emerald Pkwy.	S Texas Ave.	New	100	$ 1,224,000	$ 1,224,000
A-3	MAJ2	Lassie Ln. Extension	Sterling St.	Manuel Dr.	New	100	$ 302,000	$ 302,000
A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy.	Deacon Dr.	Widening	50	$ 332,000	$ 166,000
A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave.	Bird Pond Rd.	Reconstruction	50	$ 3,333,000	$ 1,666,500
A-6	MAJ4	Harvey Rd.	Appomattox Dr.	Boonville Rd. (CL)	Reconstruction	100	$ 3,249,600	$ 3,249,600
A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd.	4,830' NE of Bird Pond Estates (CL)	Reconstruction	50	$ 11,188,000	$ 5,594,000
A-8	MIN4	Linda Lane	Harvey Rd.	560' SE of Harvey Rd. (CL)	Reconstruction	100	$ 785,000	$ 785,000
I-1	S Texas Ave. and Deacon Dr. Signal					50	$ 150,000	$ 75,000
I-2	Holleman Rd. and S. Texas Ave. Improvement					50	$ 1,500,000	$ 750,000
I-3	S Texas Ave. and Walton Dr. Signal					50	$ 300,000	$ 150,000
I-4	University Dr. and University Towne Center Signal					100	$ 300,000	$ 300,000
						TOTAL	$ 25,097,600	$ 16,696,100

NOTE: These 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 College Station. These 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 College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	A-1
Name:	Pavilion Ave. Extension	**This project consists of the construction of a new major collector.**		
Limits:	Sebesta Rd. to SH 6 NBFR			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,545			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	8,059	cy	$ 9.00	$ 72,533
211	6" Lime Stabilization (with Lime @ 36#/sy)	15,836	sy	$ 4.50	$ 71,260
311	8" Concrete Pavement and Curb	15,270	sy	$ 48.00	$ 732,960
411	4" Topsoil	3,959	sy	$ 3.25	$ 12,866
511	6' Concrete Sidewalk	30,540	sf	$ 5.00	$ 152,700
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,042,319**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 31,270
√	Roadway Drainage	Standard Internal System	30%	$ 312,696
√	Illumination		6%	$ 62,539
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 31,270
√	Sewer	Minor Adjustments	2%	$ 20,846
√	Landscaping and Irrigation		4%	$ 41,693
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 500,313**

Paving and Allowance Subtotal:		**$ 1,542,632**
Construction Contingency:	10%	$ 154,263
Mobilization	5%	$ 77,132
Prep ROW	1%	$ 15,426
Construction Cost TOTAL:		**$ 1,790,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,790,000**
Engineering/Survey/Testing:		16%	$ 286,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 358,000
		Impact Fee Project Cost TOTAL:	**$ 2,434,000**

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 College Station.

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

City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	A-2
Name:	Dartmouth St. Extension	**This project consists of the construction of a new major collector. The City anticipates to contribute 50% of the cost.**		
Limits:	Emerald Pkwy. to S Texas Ave.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,560			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	8,107	cy	$ 9.00	$ 72,960
211	6" Lime Stabilization (with Lime @ 36#/sy)	15,929	sy	$ 4.50	$ 71,680
311	8" Concrete Pavement and Curb	15,360	sy	$ 48.00	$ 737,280
411	4" Topsoil	3,982	sy	$ 3.25	$ 12,942
511	6' Concrete Sidewalk	30,720	sf	$ 5.00	$ 153,600
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,048,462**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 31,454
√	Roadway Drainage	Standard Internal System	30%	$ 314,539
√	Illumination		6%	$ 62,908
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 31,454
√	Sewer	Minor Adjustments	2%	$ 20,969
√	Landscaping and Irrigation		4%	$ 41,938
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 503,262**

Paving and Allowance Subtotal:		**$ 1,551,724**
Construction Contingency:	10%	$ 155,172
Mobilization	5%	$ 77,586
Prep ROW	1%	$ 15,517
Construction Cost TOTAL:		**$ 1,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,800,000**
Engineering/Survey/Testing:		16%	$ 288,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 360,000
Impact Fee Project Cost TOTAL (50% City Contribution)			**$ 1,224,000**

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 College Station.

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

City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	A-3
Name:	Lassie Ln. Extension	**This project consists of the construction of a new major collector.**		
Limits:	Sterling St. to Manuel Dr.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	315			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	998	cy	$ 9.00	$ 8,978
211	6" Lime Stabilization (with Lime @ 36#/sy)	1,960	sy	$ 4.50	$ 8,820
311	8" Concrete Pavement and Curb	1,890	sy	$ 48.00	$ 90,720
411	4" Topsoil	490	sy	$ 3.25	$ 1,593
511	6' Concrete Sidewalk	3,780	sf	$ 5.00	$ 18,900
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 129,010**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 3,870
√	Roadway Drainage	Standard Internal System	30%	$ 38,703
√	Illumination		6%	$ 7,741
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 3,870
√	Sewer	Minor Adjustments	2%	$ 2,580
√	Landscaping and Irrigation		4%	$ 5,160
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 61,925**

Paving and Allowance Subtotal:		**$ 190,935**
Construction Contingency:	10%	$ 19,093
Mobilization	5%	$ 9,547
Prep ROW	1%	$ 1,909
Construction Cost TOTAL:		**$ 222,000**

**Allowances based on % of Paving Construction Cost Subtotal

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 222,000**
Engineering/Survey/Testing:		16%	$ 35,520
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 44,400
		Impact Fee Project Cost TOTAL:	**$ 302,000**

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 College Station.

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

City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **A-4, B-1**

Name:	S Texas Ave.
Limits:	Harvey Mitchell Pkwy. to Deacon Dr.
Impact Fee Class:	MAJ6 (1/3)
Ultimate Class:	Major Arterial 6-Lane (1/3)
Length (lf):	3,615
Service Area(s):	A, B

This project consists of the widening of the current roadway to a six-lane major arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,623	cy	$ 9.00	$ 50,610
202	2" Asphalt (Type C)	9,640	sy	$ 7.75	$ 74,710
302	4" Asphalt Base (Type B)	9,640	sy	$ 11.50	$ 110,860
402	6" Asphalt Base (Type B)	10,443	sy	$ 21.00	$ 219,310
502	12" Lime Stabilization (with Lime @ 50#/sy)	10,845	sy	$ 8.00	$ 86,760
602	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	0	sf	$ 4.50	$ -
702	Machine Laid Curb & Gutter	7,230	lf	$ 10.00	$ 72,300
802	Turn Lanes and Median Openings	3,414	sy	$ 48.25	$ 164,734
				Paving Construction Cost Subtotal:	**$ 779,284**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 38,964
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 23,379
√	Roadway Drainage	Standard Internal System	30%	$ 233,785
√	Illumination		6%	$ 46,757
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 23,379
√	Sewer	Minor Adjustments	2%	$ 15,586
√	Landscaping and Irrigation		4%	$ 31,171
	Miscellaneous:		$0	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 413,020**

Paving and Allowance Subtotal:		**$ 1,192,304**
Construction Contingency:	10%	$ 119,230
Mobilization	5%	$ 59,615
Prep ROW	5%	$ 59,615
Construction Cost TOTAL:		**$ 1,431,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,431,000**
Engineering/Survey/Testing:		16%	$ 228,960
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 332,000**

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 College Station.

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **A-5, D-1**

Name:	Rock Prairie Rd. (1)
Limits:	Medical Ave. to Bird Pond Rd.
Impact Fee Class:	MAJ4
Ultimate Class:	Major Arterial 4-Lane
Length (lf):	2,380
Service Area(s):	A, D

This project consists of the reconstruction of the current roadway to a four-lane divided major arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	9,520	cy	$ 9.00	$ 85,680
203	8" Lime Stabilization (with Lime @ 36#/sy)	18,511	sy	$ 6.00	$ 111,067
303	10" Concrete Pavement and Curb	17,453	sy	$ 54.00	$ 942,480
403	4" Topsoil	7,140	sy	$ 3.25	$ 23,205
503	6' Concrete Sidewalk	28,560	sf	$ 5.00	$ 142,800
603	Turn Lanes and Median Openings	2,248	sy	$ 60.00	$ 134,867
				Paving Construction Cost Subtotal:	**$ 1,440,098**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 72,005
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 43,203
√	Roadway Drainage	Standard Internal System	30%	$ 432,030
√	Illumination		6%	$ 86,406
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 43,203
√	Sewer	Minor Adjustments	2%	$ 28,802
√	Landscaping and Irrigation		4%	$ 57,604
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 763,252**

Paving and Allowance Subtotal:		**$ 2,203,350**
Construction Contingency:	10%	$ 220,335
Mobilization	5%	$ 110,168
Prep ROW	5%	$ 110,168
Construction Cost TOTAL:		**$ 2,645,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,645,000**
Engineering/Survey/Testing:		16%	$ 423,200
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 264,500
		Impact Fee Project Cost TOTAL:	**$ 3,333,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	A-6
Name:	Harvey Rd.	**This project consists of the reconstruction of the current roadway to a four-lane divided major arterial.**		
Limits:	Appomattox Dr. to Boonville Rd. (CL)			
Impact Fee Class:	MAJ4			
Ultimate Class:	Major Arterial 4-Lane			
Length (lf):	11,485			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	45,940	cy	$ 9.00	$ 413,460
203	2" Asphalt (Type C)	81,671	sy	$ 7.75	$ 632,951
303	4" Asphalt Base (Type B)	81,671	sy	$ 11.50	$ 939,218
403	6" Asphalt Base (Type B)	86,776	sy	$ 21.00	$ 1,822,287
503	12" Lime Stabilization (with Lime @ 50#/sy)	89,328	sy	$ 8.00	$ 714,622
603	6' Concrete Sidewalk	26	sf	$ 4.50	$ 117
703	Machine Laid Curb & Gutter	22,970	lf	$ 10.00	$ 229,700
803	Turn Lanes and Median Openings	10,847	sy	$ 48.25	$ 523,365
				Paving Construction Cost Subtotal:	**$ 5,275,720**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 263,786
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 158,272
√	Roadway Drainage	Standard Internal System	30%	$ 1,582,716
√	Illumination		6%	$ 316,543
√	Special Drainage Structures	Bridge Crossing	0%	$ 3,600,000
√	Water	Minor Adjustments	3%	$ 158,272
√	Sewer	Minor Adjustments	2%	$ 105,514
√	Landscaping and Irrigation		4%	$ 211,029
	Miscellaneous:		$0	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 6,396,132**

Paving and Allowance Subtotal:		**$ 11,671,852**
Construction Contingency:	10%	$ 1,167,185
Mobilization	5%	$ 583,593
Prep ROW	5%	$ 583,593
Construction Cost TOTAL:		**$ 14,007,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 14,007,000**
Engineering/Survey/Testing:		16%	$ 2,241,120
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 3,249,600**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	A-7, D-2
Name:	Bird Pond Rd.	**This project consists of the reconstruction of the current roadway to a four-lane divided minor arterial.**		
Limits:	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	7,020			
Service Area(s):	A, D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	28,080	cy	$ 9.00	$ 252,720
209	8" Lime Stabilization (with Lime @ 36#/sy)	54,600	sy	$ 6.00	$ 327,600
309	10" Concrete Pavement and Curb	51,480	sy	$ 54.00	$ 2,779,920
409	4" Topsoil	21,060	sy	$ 3.25	$ 68,445
509	6' Concrete Sidewalk	84,240	sf	$ 5.00	$ 421,200
609	Turn Lanes and Median Openings	6,630	sy	$ 60.00	$ 397,800
				Paving Construction Cost Subtotal:	**$ 4,247,685**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 212,384
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 127,431
√	Roadway Drainage	Standard Internal System	30%	$ 1,274,306
√	Illumination		6%	$ 254,861
√	Special Drainage Structures	Bridge Crossing	0%	$ 900,000
√	Water	Minor Adjustments	3%	$ 127,431
√	Sewer	Minor Adjustments	2%	$ 84,954
√	Landscaping and Irrigation		4%	$ 169,907
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 3,151,273**

Paving and Allowance Subtotal:		**$ 7,398,958**
Construction Contingency:	10%	$ 739,896
Mobilization	5%	$ 369,948
Prep ROW	5%	$ 369,948
Construction Cost TOTAL:		**$ 8,879,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 8,879,000**
Engineering/Survey/Testing:		16%	$ 1,420,640
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 887,900
		Impact Fee Project Cost TOTAL:	**$ 11,188,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	A-8
Name:	Linda Lane	**This project consists of the reconstruction of the current roadway to a four-lane divided minor arterial.**		
Limits:	Harvey Rd. to 560' SE of Harvey Rd. (CL)			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	560			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	2,240	cy	$ 9.00	$ 20,160
209	8" Lime Stabilization (with Lime @ 36#/sy)	4,356	sy	$ 6.00	$ 26,133
309	10" Concrete Pavement and Curb	4,107	sy	$ 54.00	$ 221,760
409	4" Topsoil	1,680	sy	$ 3.25	$ 5,460
509	6' Concrete Sidewalk	6,720	sf	$ 5.00	$ 33,600
609	Turn Lanes and Median Openings	529	sy	$ 60.00	$ 31,733
				Paving Construction Cost Subtotal:	**$ 338,847**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 16,942
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 10,165
√	Roadway Drainage	Standard Internal System	30%	$ 101,654
√	Illumination		6%	$ 20,331
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 10,165
√	Sewer	Minor Adjustments	2%	$ 6,777
√	Landscaping and Irrigation		4%	$ 13,554
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 179,589**

Paving and Allowance Subtotal:		**$ 518,435**
Construction Contingency:	10%	$ 51,844
Mobilization	5%	$ 25,922
Prep ROW	5%	$ 25,922
Construction Cost TOTAL:		**$ 623,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 623,000**
Engineering/Survey/Testing:		16%	$ 99,680
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 62,300
		Impact Fee Project Cost TOTAL:	**$ 785,000**

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City of College Station - 2016 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area B

#	IF Class	Project	Limits		Status	Percent in Service Area	Project Cost	Total Cost in Service Area
			From	To				
A-4, B-1	MAJ6 (1/3)	S Texas Ave.	Harvey Mitchell Pkwy.	Deacon Dr.	Widening	50	$ 332,000	$ 166,000
B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr.	SH 6	Under Construction	50	$ 3,935,724	$ 1,967,862
B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL)	Wellborn Rd.	Proposed 2015	50	$ 4,985,000	$ 2,492,500
B-4	MAJ2	Rock Prairie Rd. (3)	360' W. of Great Oaks Dr. (CL)	Holleman Dr.	Reconstruction	100	$ 3,714,000	$ 3,714,000
B-5	MIN4	Holleman Dr. (1)	Rock Prairie Rd.	N Graham Rd.	Reconstruction	100	$ 2,317,000	$ 2,317,000
B-6	MIN4	Holleman Dr. (2)	N Dowling Rd.	Rock Prairie Rd.	Proposed 2015	100	$ 10,305,000	$ 10,305,000
B-7	MAJ6 (1/3)	Wellborn Rd.	University Dr.	Harvey Mitchell Pkwy.	Widening	100	$ 1,165,400	$ 1,165,400
B-8	MAJ2	Luther St.	Penberthy Rd.	Marion Pugh Dr.	Reconstruction	100	$ 1,346,000	$ 1,346,000
B-9	MIN4	Penberthy Rd.	Goerge Bush Dr.	Luther St.	Completed 2008	100	$ 3,006,373	$ 3,006,373
B-10	MAJ2	Turkey Creek Rd.	S Traditions Dr.	Raymond Stotzer Pkwy.	Reconstruction	100	$ 3,141,000	$ 3,141,000
B-11	MAJ2	F and B Rd.	Turkey Creek Rd.	Harvey Mitchell Pkwy.	Reconstruction	100	$ 2,298,000	$ 2,298,000
B-12	MAJ6 (1/3)	University Dr.	Harvey Mitchell Pkwy.	Wellborn Rd.	Widening	100	$ 534,200	$ 534,200
I-1	S Texas Ave. and Deacon Dr. Signal					50	$ 150,000	$ 75,000
I-2	Holleman Rd. and S. Texas Ave. Improvement					50	$ 1,500,000	$ 750,000
I-3	S Texas Ave. and Walton Dr. Signal					50	$ 300,000	$ 150,000
I-5	Wellborn Rd. and George Bush Dr.					100	$ 1,190,232	$ 1,190,232
						TOTAL	$ 40,219,929	$ 34,618,567

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **A-4, B-1**

Name:	S Texas Ave.
Limits:	Harvey Mitchell Pkwy. to Deacon Dr.
Impact Fee Class:	MAJ6 (1/3)
Ultimate Class:	Major Arterial 6-Lane (1/3)
Length (lf):	3,615
Service Area(s):	A,B

This project consists of the widening of the five-lane undivided roadway to a six-lane divided major arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,623	cy	$ 9.00	$ 50,610
202	2" Asphalt (Type C)	9,640	sy	$ 7.75	$ 74,710
302	4" Asphalt Base (Type B)	9,640	sy	$ 11.50	$ 110,860
402	6" Asphalt Base (Type B)	10,443	sy	$ 21.00	$ 219,310
502	12" Lime Stabilization (with Lime @ 50#/sy)	10,845	sy	$ 8.00	$ 86,760
602	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	0	sf	$ 4.50	$ -
702	Machine Laid Curb & Gutter	7,230	lf	$ 10.00	$ 72,300
802	Turn Lanes and Median Openings	3,414	sy	$ 48.25	$ 164,734
				Paving Construction Cost Subtotal:	**$ 779,284**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 38,964
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 23,379
√	Roadway Drainage	Standard Internal System	30%	$ 233,785
√	Illumination		6%	$ 46,757
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 23,379
√	Sewer	Minor Adjustments	2%	$ 15,586
√	Landscaping and Irrigation		4%	$ 31,171
	Miscellaneous:		$0	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 413,020**

Paving and Allowance Subtotal:		**$ 1,192,304**
Construction Contingency:	10%	$ 119,230
Mobilization	5%	$ 59,615
Prep ROW	5%	$ 59,615
Construction Cost TOTAL:		**$ 1,431,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,431,000**
Engineering/Survey/Testing:		16%	$ 228,960
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 332,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-2, C-1**
Name:	Rock Prairie Rd. (1)	**This project was completed with the 2008 bond election and the cost was $3,935,724.**		
Limits:	Normand Dr. to SH 6			
Impact Fee Class:	MAJ6			
Ultimate Class:	Major Arterial 6-Lane			
Length (lf):	2,560			
Service Area(s):	B,C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,935,724**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 3,935,724**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-3, C-2**
Name:	Rock Prairie Rd. (2)	**This project is part of the 2015 bond election and the cost is estimated at $4,985,000.**		
Limits:	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,385			
Service Area(s):	B,C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,985,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 4,985,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	B-4
Name:	Rock Prairie Rd. (3)	**This project consists of the reconstruction of the existing roadway into a major collector.**		
Limits:	360' W. of Great Oaks Dr. (CL) to Holleman Dr.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,920			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	12,413	cy	$ 9.00	$ 111,720
211	6" Lime Stabilization (with Lime @ 36#/sy)	24,391	sy	$ 4.50	$ 109,760
311	8" Concrete Pavement and Curb	23,520	sy	$ 48.00	$ 1,128,960
411	4" Topsoil	6,098	sy	$ 3.25	$ 19,818
511	6' Concrete Sidewalk	47,040	sf	$ 5.00	$ 235,200
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,605,458**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 80,273
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 48,164
√	Roadway Drainage	Standard Internal System	30%	$ 481,637
√	Illumination		6%	$ 96,327
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 48,164
√	Sewer	Minor Adjustments	2%	$ 32,109
√	Landscaping and Irrigation		4%	$ 64,218
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 850,893**

Paving and Allowance Subtotal:		**$ 2,456,350**
Construction Contingency:	10%	$ 245,635
Mobilization	5%	$ 122,818
Prep ROW	5%	$ 122,818
Construction Cost TOTAL:		**$ 2,948,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,948,000**
Engineering/Survey/Testing:		16%	$ 471,680
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 294,800
		Impact Fee Project Cost TOTAL:	**$ 3,714,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	B-5
Name:	Holleman Dr. (1)	**This project consists of the reconstruction of the existing roadway into a major collector.**		
Limits:	Rock Prairie Rd. to N Graham Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	1,655			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	6,620	cy	$ 9.00	$ 59,580
209	8" Lime Stabilization (with Lime @ 36#/sy)	12,872	sy	$ 6.00	$ 77,233
309	10" Concrete Pavement and Curb	12,137	sy	$ 54.00	$ 655,380
409	4" Topsoil	4,965	sy	$ 3.25	$ 16,136
509	6' Concrete Sidewalk	19,860	sf	$ 5.00	$ 99,300
609	Turn Lanes and Median Openings	1,563	sy	$ 60.00	$ 93,783
				Paving Construction Cost Subtotal:	**$ 1,001,413**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,071
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 30,042
√	Roadway Drainage	Standard Internal System	30%	$ 300,424
√	Illumination		6%	$ 60,085
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 30,042
√	Sewer	Minor Adjustments	2%	$ 20,028
√	Landscaping and Irrigation		4%	$ 40,057
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 530,749**

Paving and Allowance Subtotal:		**$ 1,532,162**
Construction Contingency:	10%	$ 153,216
Mobilization	5%	$ 76,608
Prep ROW	5%	$ 76,608
Construction Cost TOTAL:		**$ 1,839,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,839,000**
Engineering/Survey/Testing:		16%	$ 294,240
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 183,900
		Impact Fee Project Cost TOTAL:	**$ 2,317,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-6**
Name:	Holleman Dr. (2)	**This project is part of the 2015 bond election and the cost is estimated to be $10,305,000.**		
Limits:	N Dowling Rd. to Rock Prairie Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	8,150			
Service Area(s):	B			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 10,305,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 10,305,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	B-7
Name:	Wellborn Rd.	**This project consists of the widening of the five-lane undivided roadway to a six-lane divided major arterial.**		
Limits:	University Dr. to Harvey Mitchell Pkwy.			
Impact Fee Class:	MAJ6 (1/3)			
Ultimate Class:	Major Arterial 6-Lane (1/3)			
Length (lf):	12,690			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	19,740	cy	$ 9.00	$ 177,660
202	2" Asphalt (Type C)	33,840	sy	$ 7.75	$ 262,260
302	4" Asphalt Base (Type B)	33,840	sy	$ 11.50	$ 389,160
402	6" Asphalt Base (Type B)	36,660	sy	$ 21.00	$ 769,860
502	12" Lime Stabilization (with Lime @ 50#/sy)	38,070	sy	$ 8.00	$ 304,560
602	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	0	sf	$ 4.50	$ -
702	Machine Laid Curb & Gutter	25,380	lf	$ 10.00	$ 253,800
802	Turn Lanes and Median Openings	11,985	sy	$ 48.25	$ 578,276
				Paving Construction Cost Subtotal:	**$ 2,735,576**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 136,779
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 82,067
√	Roadway Drainage	Standard Internal System	30%	$ 820,673
√	Illumination		6%	$ 164,135
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 82,067
√	Sewer	Minor Adjustments	2%	$ 54,712
√	Landscaping and Irrigation		4%	$ 109,423
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,449,855**

Paving and Allowance Subtotal:		**$ 4,185,432**
Construction Contingency:	10%	$ 418,543
Mobilization	5%	$ 209,272
Prep ROW	5%	$ 209,272
Construction Cost TOTAL:		**$ 5,023,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,023,000**
Engineering/Survey/Testing:		16%	$ 803,680
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 1,165,400**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	B-8
Name:	Luther St.	**This project consists of the reconstruction of the existing roadway into a major collector.**		
Limits:	Penberthy Rd. to Marion Pugh Dr.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	1,420			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	4,497	cy	$ 9.00	$ 40,470
211	6" Lime Stabilization (with Lime @ 36#/sy)	8,836	sy	$ 4.50	$ 39,760
311	8" Concrete Pavement and Curb	8,520	sy	$ 48.00	$ 408,960
411	4" Topsoil	2,209	sy	$ 3.25	$ 7,179
511	6' Concrete Sidewalk	17,040	sf	$ 5.00	$ 85,200
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 581,569**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 29,078
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 17,447
√	Roadway Drainage	Standard Internal System	30%	$ 174,471
√	Illumination		6%	$ 34,894
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 17,447
√	Sewer	Minor Adjustments	2%	$ 11,631
√	Landscaping and Irrigation		4%	$ 23,263
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 308,232**

Paving and Allowance Subtotal:		**$ 889,800**
Construction Contingency:	10%	$ 88,980
Mobilization	5%	$ 44,490
Prep ROW	5%	$ 44,490
Construction Cost TOTAL:		**$ 1,068,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,068,000**
Engineering/Survey/Testing:		16%	$ 170,880
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 106,800
		Impact Fee Project Cost TOTAL:	**$ 1,346,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-9**
Name:	Penberthy Rd.	**This project was completed with the 2008 bond election and the cost was $3,006,373.**		
Limits:	Goerge Bush Dr. to Luther St.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	2,105			
Service Area(s):	B			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,006,373**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 3,006,373**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **B-10**

Name:	Turkey Creek Rd.
Limits:	S Traditions Dr. to Raymond Stotzer Pkwy.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	3,315
Service Area(s):	B

This project consists of the reconstruction of the existing roadway into a major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,498	cy	$ 9.00	$ 94,478
211	6" Lime Stabilization (with Lime @ 36#/sy)	20,627	sy	$ 4.50	$ 92,820
311	8" Concrete Pavement and Curb	19,890	sy	$ 48.00	$ 954,720
411	4" Topsoil	5,157	sy	$ 3.25	$ 16,759
511	6' Concrete Sidewalk	39,780	sf	$ 5.00	$ 198,900
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,357,677**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 67,884
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 40,730
√	Roadway Drainage	Standard Internal System	30%	$ 407,303
√	Illumination		6%	$ 81,461
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 40,730
√	Sewer	Minor Adjustments	2%	$ 27,154
√	Landscaping and Irrigation		4%	$ 54,307
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 719,569**

Paving and Allowance Subtotal:		**$ 2,077,245**
Construction Contingency:	10%	$ 207,725
Mobilization	5%	$ 103,862
Prep ROW	5%	$ 103,862
Construction Cost TOTAL:		**$ 2,493,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,493,000**
Engineering/Survey/Testing:		16%	$ 398,880
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 249,300
		Impact Fee Project Cost TOTAL:	**$ 3,141,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: | Project No. **B-11**

Name:	F and B Rd.
Limits:	Turkey Creek Rd. to Harvey Mitchell Pkwy.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	2,425
Service Area(s):	B

This project consists of the reconstruction of the existing roadway into a major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	7,679	cy	$ 9.00	$ 69,113
211	6" Lime Stabilization (with Lime @ 36#/sy)	15,089	sy	$ 4.50	$ 67,900
311	8" Concrete Pavement and Curb	14,550	sy	$ 48.00	$ 698,400
411	4" Topsoil	3,772	sy	$ 3.25	$ 12,260
511	6' Concrete Sidewalk	29,100	sf	$ 5.00	$ 145,500
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 993,172**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 49,659
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 29,795
√	Roadway Drainage	Standard Internal System	30%	$ 297,952
√	Illumination		6%	$ 59,590
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 29,795
√	Sewer	Minor Adjustments	2%	$ 19,863
√	Landscaping and Irrigation		4%	$ 39,727
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 526,381**

Paving and Allowance Subtotal:		**$ 1,519,554**
Construction Contingency:	10%	$ 151,955
Mobilization	5%	$ 75,978
Prep ROW	5%	$ 75,978
Construction Cost TOTAL:		**$ 1,824,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,824,000**
Engineering/Survey/Testing:		16%	$ 291,840
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 182,400
		Impact Fee Project Cost TOTAL:	**$ 2,298,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	B-12
Name:	University Dr.	**This project consists of the widening of the four-lane undivided roadway with a center TWLTL to a six-lane divided major arterial.**		
Limits:	Harvey Mitchell Pkwy. to Wellborn Rd.			
Impact Fee Class:	MAJ6 (1/3)			
Ultimate Class:	Major Arterial 6-Lane (1/3)			
Length (lf):	6,910			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	10,749	cy	$ 9.00	$ 96,740
202	2" Asphalt (Type C)	18,427	sy	$ 7.75	$ 142,807
302	4" Asphalt Base (Type B)	18,427	sy	$ 11.50	$ 211,907
402	6" Asphalt Base (Type B)	19,962	sy	$ 21.00	$ 419,207
502	12" Lime Stabilization (with Lime @ 50#/sy)	20,730	sy	$ 8.00	$ 165,840
602	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	0	sf	$ 4.50	$ -
702	Machine Laid Curb & Gutter	13,820	lf	$ 10.00	$ 138,200
802	Turn Lanes and Median Openings	6,526	sy	$ 48.25	$ 314,885
				Paving Construction Cost Subtotal:	**$ 1,489,585**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 74,479
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 44,688
	Roadway Drainage	None Anticipated	0%	$ -
	Illumination		0%	$ -
	Special Drainage Structures	None Anticipated	0%	$ -
	Water	None Anticipated	0%	$ -
	Sewer	None Anticipated	0%	$ -
√	Landscaping and Irrigation		4%	$ 59,583
√	Miscellaneous:	RAILRAOD	$0	$ 250,000
	Allowance Subtotal:			**$ 428,750**

Paving and Allowance Subtotal:		**$ 1,918,335**
Construction Contingency:	10%	$ 191,834
Mobilization	5%	$ 95,917
Prep ROW	5%	$ 95,917
Construction Cost TOTAL:		**$ 2,303,000**

**Allowances based on % of Paving Construction Cost Subtotal

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,303,000**
Engineering/Survey/Testing:		16%	$ 368,480
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 534,200**

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City of College Station - 2016 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area C

#	IF Class	Project	Limits		Status	Percent in Service Area	Project Cost	Total Cost in Service Area
			From	To				
B-2, C-1	MAJ6	Rock Prairie Rd. (1)	Normand Dr.	SH 6	Under Construction	50	$ 3,935,724	$ 1,967,862
B-3, C-2	MAJ2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL)	Wellborn Rd.	Proposed 2015	50	$ 4,985,000	$ 2,492,500
C-3	MAJ2	N Graham Rd.	Old Wellborn Rd.	2,075' W of Old Wellborn Rd. (CL)	Reconstruction	100	$ 1,967,000	$ 1,967,000
C-4	MAJ4	Wellborn Rd. (1)	Capstone Dr.	Greens Prairie Rd.	Reconstruction	100	$ 1,281,800	$ 1,281,800
C-5	MAJ4	Wellborn Rd. (2)	Greens Prairie Rd.	540' S of Greens Prairie Trl.	Reconstruction	100	$ 1,172,000	$ 1,172,000
C-6	MIN4	Capstone/Barron Realignment	Wellborn Rd.	210' W of Piccadilly Cir.	Proposed 2015	100	$ 2,289,000	$ 2,289,000
C-7	MIN4	Barron Rd. (1)	210' W of Piccadilly Cir.	Barron Cut Off Rd.	Reconstruction	100	$ 939,000	$ 939,000
C-8	MIN4 (1/2)	Barron Rd. (2)	Barron Cut Off Rd.	William D Fitch Pkwy.	Widening	100	$ 494,000	$ 494,000
C-9	MIN4	Barron Rd. (3)	William D Fitch Pkwy.	Decatur Dr.	Completed 2008	100	$ 7,801,145	$ 7,801,145
C-10	MIN4 (1/2)	WS Phillips Pkwy. (1)	Barron Rd.	1740' S of Barron Cut Off Rd.	Reconstruction	100	$ 1,939,000	$ 1,939,000
C-11	MIN4 (1/2)	WS Phillips Pkwy. (2)	1740' S of Barron Cut Off Rd.	Odell Ln.	Widening	100	$ 1,634,000	$ 1,634,000
C-12	MAJ2	Etonburg	Barron Cut Off Rd.	McCullough Rd. Extension	New	100	$ 1,665,000	$ 1,665,000
C-13	MAJ2	McCullough Rd. Extension	2530' E of Wellborn Rd.	WS Phillips Pkwy.	New	100	$ 3,037,000	$ 3,037,000
C-14	MAJ2	S. Dowling/McCullough	I & G Rd.	2485' E of I & G Rd.	Reconstruction	100	$ 2,350,000	$ 2,350,000
C-15	MAJ2	Future 2 Lane Major Collector	S. Dowling/McCullough	Greens Prairie Rd. Extension	New	100	$ 1,372,000	$ 1,372,000
C-16	MAJ2	Greens Prairie Rd. Extension (1)	I & G Rd.	565' E of I & G Rd. (CL)	New	100	$ 541,000	$ 541,000
C-17	MAJ2	Greens Prairie Rd. Extension (2)	995' W of Welborn Rd. (CL)	Wellborn Rd.	New	100	$ 1,346,000	$ 1,346,000
C-18	MIN4	Greens Prairie Rd. (1)	Wellborn Rd.	Royder Rd.	Reconstruction	100	$ 561,000	$ 561,000
C-19	MAJ2	Greens Prairie Rd. (2)	Royder Rd.	750' E of Turnberry Cir.	Reconstruction	100	$ 3,213,000	$ 3,213,000
C-20	MAJ2	Greens Prairie Rd. (3)	750' E of Turnberry Cir.	Greens Prairie Trl.	Reconstruction	100	$ 2,592,000	$ 2,592,000
C-21	MIN4	Royder Rd.	Greens Prairie Rd.	885' S of Greens Prairie Trl.	Proposed 2015	100	$ 4,930,000	$ 4,930,000
C-22	MIN4	Greens Prairie Trl. (1)	Wellborn Rd.	1000' W of Woodlake Dr.	Proposed 2015	100	$ 6,960,000	$ 6,960,000
C-23	MIN4	Greens Prairie Rd. (4)	465' E of Future Etonburg	Arrington Rd.	Proposed 2015	100	$ 4,230,000	$ 4,230,000
C-24	MIN4	WS Phillips Pkwy. Extension	Greens Prairie Rd.	Arrington Rd.	New	100	$ 11,500,000	$ 11,500,000
C-25	MAJ2	Victoria Ave.	Southern Plantation Dr.	William D Fitch Pkwy.	Completed 2008	100	$ 1,828,530	$ 1,828,530
I-6	William D Fitch Pkwy. and Victoria Ave. Signal					100	$ 776,335	$ 776,335
I-7	Wellborn Rd. and S Dowling Rd. Signal					100	$ 300,000	$ 300,000
						TOTAL	$ 75,639,534	$ 71,179,172

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-2, C-1**
Name:	Rock Prairie Rd. (1)	**This project was completed with the 2008 bond election and the cost was $3,935,724.**		
Limits:	Normand Dr. to SH 6			
Impact Fee Class:	MAJ6			
Ultimate Class:	Major Arterial 6-Lane			
Length (lf):	2,560			
Service Area(s):	B,C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,935,724**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 3,935,724**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**B-3, C-2**
Name:	Rock Prairie Rd. (2)	**This project is part of the 2015 bond election and the cost is estimated to be $4,985,000.**		
Limits:	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,385			
Service Area(s):	B,C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,985,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 4,985,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	C-3
Name:	N Graham Rd.	**This project consists of the reconstruction of the existing roadway into a major collector.**		
Limits:	Old Wellborn Rd. to 2,075' W of Old Wellborn Rd. (CL)			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,075			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	6,571	cy	$ 9.00	$ 59,138
211	6" Lime Stabilization (with Lime @ 36#/sy)	12,911	sy	$ 4.50	$ 58,100
311	8" Concrete Pavement and Curb	12,450	sy	$ 48.00	$ 597,600
411	4" Topsoil	3,228	sy	$ 3.25	$ 10,490
511	6' Concrete Sidewalk	24,900	sf	$ 5.00	$ 124,500
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 849,828**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 42,491
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 25,495
√	Roadway Drainage	Standard Internal System	30%	$ 254,948
√	Illumination		6%	$ 50,990
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 25,495
√	Sewer	Minor Adjustments	2%	$ 16,997
√	Landscaping and Irrigation		4%	$ 33,993
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 450,409**

Paving and Allowance Subtotal:		**$ 1,300,237**
Construction Contingency:	10%	$ 130,024
Mobilization	5%	$ 65,012
Prep ROW	5%	$ 65,012
Construction Cost TOTAL:		**$ 1,561,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,561,000**
Engineering/Survey/Testing:		16%	$ 249,760
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 156,100
		Impact Fee Project Cost TOTAL:	**$ 1,967,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	C-4
Name:	Wellborn Rd. (1)	**This project consists of the reconstruction of the existing roadway to a four-lane divided major arterial.**		
Limits:	Capstone Dr. to Greens Prairie Rd.			
Impact Fee Class:	MAJ4			
Ultimate Class:	Major Arterial 4-Lane			
Length (lf):	6,550			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	26,200	cy	$ 9.00	$ 235,800
203	2" Asphalt (Type C)	46,578	sy	$ 7.75	$ 360,978
303	4" Asphalt Base (Type B)	46,578	sy	$ 11.50	$ 535,644
403	6" Asphalt Base (Type B)	49,489	sy	$ 21.00	$ 1,039,267
503	12" Lime Stabilization (with Lime @ 50#/sy)	50,944	sy	$ 8.00	$ 407,556
603	6' Concrete Sidewalk	15	sf	$ 4.50	$ 67
703	Machine Laid Curb & Gutter	13,100	lf	$ 10.00	$ 131,000
803	Turn Lanes and Median Openings	6,186	sy	$ 48.25	$ 298,480
				Paving Construction Cost Subtotal:	**$ 3,008,791**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 150,440
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 90,264
√	Roadway Drainage	Standard Internal System	30%	$ 902,637
√	Illumination		6%	$ 180,527
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 90,264
√	Sewer	Minor Adjustments	2%	$ 60,176
√	Landscaping and Irrigation		4%	$ 120,352
	Miscellaneous:		$0	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,594,659**
			Paving and Allowance Subtotal:	**$ 4,603,451**
			Construction Contingency: 10%	$ 460,345
			Mobilization 5%	$ 230,173
			Prep ROW 5%	$ 230,173
			Construction Cost TOTAL:	**$ 5,525,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,525,000**
Engineering/Survey/Testing:		16%	$ 884,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 1,281,800**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: Project No. **C-5**

Name:	Wellborn Rd. (2)
Limits:	Greens Prairie Rd. to 540' S of Greens Prairie Trl.
Impact Fee Class:	MAJ4
Ultimate Class:	Major Arterial 4-Lane
Length (lf):	5,990
Service Area(s):	C

This project consists of the reconstruction of the existing roadway to a four-lane divided major arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	23,960	cy	$ 9.00	$ 215,640
203	2" Asphalt (Type C)	42,596	sy	$ 7.75	$ 330,116
303	4" Asphalt Base (Type B)	42,596	sy	$ 11.50	$ 489,849
403	6" Asphalt Base (Type B)	45,258	sy	$ 21.00	$ 950,413
503	12" Lime Stabilization (with Lime @ 50#/sy)	46,589	sy	$ 8.00	$ 372,711
603	6' Concrete Sidewalk	14	sf	$ 4.50	$ 61
703	Machine Laid Curb & Gutter	11,980	lf	$ 10.00	$ 119,800
803	Turn Lanes and Median Openings	5,657	sy	$ 48.25	$ 272,961
				Paving Construction Cost Subtotal:	**$ 2,751,551**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 137,578
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 82,547
√	Roadway Drainage	Standard Internal System	30%	$ 825,465
√	Illumination		6%	$ 165,093
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 82,547
√	Sewer	Minor Adjustments	2%	$ 55,031
√	Landscaping and Irrigation		4%	$ 110,062
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 1,458,322**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 4,209,873**
Construction Contingency:	10%	$ 420,987
Mobilization	5%	$ 210,494
Prep ROW	5%	$ 210,494
Construction Cost TOTAL:		**$ 5,052,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,052,000**
Engineering/Survey/Testing:		16%	$ 808,320
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	0%	$ -
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 1,172,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	C-6
Name:	Capstone/Barron Realignment	**This project consists of the construction of a new four-lane minor collector.**		
Limits:	Wellborn Rd. to 210' W of Piccadilly Cir.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	1,620			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	6,480	cy	$ 9.00	$ 58,320
209	8" Lime Stabilization (with Lime @ 36#/sy)	12,600	sy	$ 6.00	$ 75,600
309	10" Concrete Pavement and Curb	11,880	sy	$ 54.00	$ 641,520
409	4" Topsoil	4,860	sy	$ 3.25	$ 15,795
509	6' Concrete Sidewalk	19,440	sf	$ 5.00	$ 97,200
609	Turn Lanes and Median Openings	1,530	sy	$ 60.00	$ 91,800
				Paving Construction Cost Subtotal:	**$ 980,235**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 29,407
√	Roadway Drainage	Standard Internal System	30%	$ 294,071
√	Illumination		6%	$ 58,814
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 29,407
√	Sewer	Minor Adjustments	2%	$ 19,605
√	Landscaping and Irrigation		4%	$ 39,209
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 470,513**

Paving and Allowance Subtotal:		**$ 1,450,748**
Construction Contingency:	10%	$ 145,075
Mobilization	5%	$ 72,537
Prep ROW	1%	$ 14,507
Construction Cost TOTAL:		**$ 1,683,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,683,000**
Engineering/Survey/Testing:		16%	$ 269,280
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 336,600
		Impact Fee Project Cost TOTAL:	**$ 2,289,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **C-7**

Name:	Barron Rd. (1)
Limits:	210' W of Piccadilly Cir. to Barron Cut Off Rd.
Impact Fee Class:	MIN4
Ultimate Class:	Minor Arterial 4-Lane
Length (lf):	670
Service Area(s):	C

This project consists of the reconstruction of the existing roadway to a four-lane minor arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	2,680	cy	$ 9.00	$ 24,120
209	8" Lime Stabilization (with Lime @ 36#/sy)	5,211	sy	$ 6.00	$ 31,267
309	10" Concrete Pavement and Curb	4,913	sy	$ 54.00	$ 265,320
409	4" Topsoil	2,010	sy	$ 3.25	$ 6,533
509	6' Concrete Sidewalk	8,040	sf	$ 5.00	$ 40,200
609	Turn Lanes and Median Openings	633	sy	$ 60.00	$ 37,967
				Paving Construction Cost Subtotal:	**$ 405,406**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 20,270
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 12,162
√	Roadway Drainage	Standard Internal System	30%	$ 121,622
√	Illumination		6%	$ 24,324
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 12,162
√	Sewer	Minor Adjustments	2%	$ 8,108
√	Landscaping and Irrigation		4%	$ 16,216
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 214,865**

Paving and Allowance Subtotal:		**$ 620,271**
Construction Contingency:	10%	$ 62,027
Mobilization	5%	$ 31,014
Prep ROW	5%	$ 31,014
Construction Cost TOTAL:		**$ 745,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 745,000**
Engineering/Survey/Testing:		16%	$ 119,200
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 74,500
		Impact Fee Project Cost TOTAL:	**$ 939,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **C-8**

Name:	Barron Rd. (2)
Limits:	Barron Cut Off Rd. to William D Fitch Pkwy.
Impact Fee Class:	MIN4 (1/2)
Ultimate Class:	Minor Arterial 4-Lane (1/2)
Length (lf):	695
Service Area(s):	C

This project consists of the widening of the roadway to a four-lane minor arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	1,390	cy	$ 9.00	$ 12,510
210	8" Lime Stabilization (with Lime @ 36#/sy)	2,703	sy	$ 6.00	$ 16,217
310	10" Concrete Pavement and Curb	2,548	sy	$ 54.00	$ 137,610
410	4" Topsoil	1,699	sy	$ 3.25	$ 5,521
510	6' Concrete Sidewalk	4,170	sf	$ 5.00	$ 20,850
610	Turn Lanes and Median Openings	338	sy	$ 60.00	$ 20,288
				Paving Construction Cost Subtotal:	**$ 212,996**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 10,650
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 6,390
√	Roadway Drainage	Standard Internal System	30%	$ 63,899
√	Illumination		6%	$ 12,780
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 6,390
√	Sewer	Minor Adjustments	2%	$ 4,260
√	Landscaping and Irrigation		4%	$ 8,520
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 112,888**

Paving and Allowance Subtotal:		**$ 325,885**
Construction Contingency:	10%	$ 32,588
Mobilization	5%	$ 16,294
Prep ROW	5%	$ 16,294
Construction Cost TOTAL:		**$ 392,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 392,000**
Engineering/Survey/Testing:		16%	$ 62,720
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 39,200
		Impact Fee Project Cost TOTAL:	**$ 494,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**C-9**
Name:	Barron Rd. (3)	**This project was completed with the 2008 bond election and the cost was $7,801,145**		
Limits:	William D Fitch Pkwy. to Decatur Dr.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	6,705			
Service Area(s):	C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 7,801,145**
Engineering/Survey/Testing:			
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 7,801,145**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

Description: **Project No.** **C-10**

Name:	WS Phillips Pkwy. (1)
Limits:	Barron Rd. to 1740' S of Barron Cut Off Rd.
Impact Fee Class:	MIN4 (1/2)
Ultimate Class:	Minor Arterial 4-Lane (1/2)
Length (lf):	2,735
Service Area(s):	C

This project consists of the reconstruction of the roadway to a four-lane minor arterial. The City is anticipated to build two of the four lanes.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	5,470	cy	$ 9.00	$ 49,230
210	8" Lime Stabilization (with Lime @ 36#/sy)	10,636	sy	$ 6.00	$ 63,817
310	10" Concrete Pavement and Curb	10,028	sy	$ 54.00	$ 541,530
410	4" Topsoil	6,686	sy	$ 3.25	$ 21,728
510	6' Concrete Sidewalk	16,410	sf	$ 5.00	$ 82,050
610	Turn Lanes and Median Openings	1,331	sy	$ 60.00	$ 79,840
				Paving Construction Cost Subtotal:	**$ 838,195**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 41,910
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 25,146
√	Roadway Drainage	Standard Internal System	30%	$ 251,458
√	Illumination		6%	$ 50,292
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 25,146
√	Sewer	Minor Adjustments	2%	$ 16,764
√	Landscaping and Irrigation		4%	$ 33,528
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 444,243**

Paving and Allowance Subtotal:		**$ 1,282,438**
Construction Contingency:	10%	$ 128,244
Mobilization	5%	$ 64,122
Prep ROW	5%	$ 64,122
Construction Cost TOTAL:		**$ 1,539,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,539,000**
Engineering/Survey/Testing:		16%	$ 246,240
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 153,900
		Impact Fee Project Cost TOTAL:	**$ 1,939,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **C-11**

Name:	WS Phillips Pkwy. (2)
Limits:	1740' S of Barron Cut Off Rd. to Odell Ln.
Impact Fee Class:	MIN4 (1/2)
Ultimate Class:	Minor Arterial 4-Lane (1/2)
Length (lf):	2,305
Service Area(s):	C

This project consists of widening the roadway to a four-lane minor arterial section.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	4,610	cy	$ 9.00	$ 41,490
210	8" Lime Stabilization (with Lime @ 36#/sy)	8,964	sy	$ 6.00	$ 53,783
310	10" Concrete Pavement and Curb	8,452	sy	$ 54.00	$ 456,390
410	4" Topsoil	5,634	sy	$ 3.25	$ 18,312
510	6' Concrete Sidewalk	13,830	sf	$ 5.00	$ 69,150
610	Turn Lanes and Median Openings	1,121	sy	$ 60.00	$ 67,287
				Paving Construction Cost Subtotal:	**$ 706,413**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 35,321
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 21,192
√	Roadway Drainage	Standard Internal System	30%	$ 211,924
√	Illumination		6%	$ 42,385
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 21,192
√	Sewer	Minor Adjustments	2%	$ 14,128
√	Landscaping and Irrigation		4%	$ 28,257
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 374,399**

Paving and Allowance Subtotal:		**$ 1,080,811**
Construction Contingency:	10%	$ 108,081
Mobilization	5%	$ 54,041
Prep ROW	5%	$ 54,041
Construction Cost TOTAL:		**$ 1,297,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,297,000**
Engineering/Survey/Testing:		16%	$ 207,520
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 129,700
		Impact Fee Project Cost TOTAL:	**$ 1,634,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: | Project No. **C-12**

Name:	Etonburg
Limits:	Barron Cut Off Rd. to McCullough Rd. Extension
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	1,740
Service Area(s):	C

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	5,510	cy	$ 9.00	$ 49,590
211	6" Lime Stabilization (with Lime @ 36#/sy)	10,827	sy	$ 4.50	$ 48,720
311	8" Concrete Pavement and Curb	10,440	sy	$ 48.00	$ 501,120
411	4" Topsoil	2,707	sy	$ 3.25	$ 8,797
511	6' Concrete Sidewalk	20,880	sf	$ 5.00	$ 104,400
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 712,627**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 21,379
√	Roadway Drainage	Standard Internal System	30%	$ 213,788
√	Illumination		6%	$ 42,758
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 21,379
√	Sewer	Minor Adjustments	2%	$ 14,253
√	Landscaping and Irrigation		4%	$ 28,505
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 342,061**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,054,687**
Construction Contingency:	10%	$ 105,469
Mobilization	5%	$ 52,734
Prep ROW	1%	$ 10,547
Construction Cost TOTAL:		**$ 1,224,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,224,000**
Engineering/Survey/Testing:		16%	$ 195,840
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 244,800
		Impact Fee Project Cost TOTAL:	**$ 1,665,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: | Project No. **C-13**

Name:	McCullough Rd. Extension
Limits:	2530' E of Wellborn Rd. to WS Phillips Pkwy.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	3,175
Service Area(s):	C

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,054	cy	$ 9.00	$ 90,488
211	6" Lime Stabilization (with Lime @ 36#/sy)	19,756	sy	$ 4.50	$ 88,900
311	8" Concrete Pavement and Curb	19,050	sy	$ 48.00	$ 914,400
411	4" Topsoil	4,939	sy	$ 3.25	$ 16,051
511	6' Concrete Sidewalk	38,100	sf	$ 5.00	$ 190,500
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,300,339**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 39,010
√	Roadway Drainage	Standard Internal System	30%	$ 390,102
√	Illumination		6%	$ 78,020
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 39,010
√	Sewer	Minor Adjustments	2%	$ 26,007
√	Landscaping and Irrigation		4%	$ 52,014
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 624,163**

Paving and Allowance Subtotal:		**$ 1,924,502**
Construction Contingency:	10%	$ 192,450
Mobilization	5%	$ 96,225
Prep ROW	1%	$ 19,245
Construction Cost TOTAL:		**$ 2,233,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,233,000**
Engineering/Survey/Testing:		16%	$ 357,280
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 446,600
		Impact Fee Project Cost TOTAL:	**$ 3,037,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

Description: **Project No.** **C-14**

Name:	S. Dowling/McCullough
Limits:	I & G Rd. to 2485' E of I & G Rd.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	2,480
Service Area(s):	C

This project consists of the reconstruction of the existing roadway to a major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	7,853	cy	$ 9.00	$ 70,680
211	6" Lime Stabilization (with Lime @ 36#/sy)	15,431	sy	$ 4.50	$ 69,440
311	8" Concrete Pavement and Curb	14,880	sy	$ 48.00	$ 714,240
411	4" Topsoil	3,858	sy	$ 3.25	$ 12,538
511	6' Concrete Sidewalk	29,760	sf	$ 5.00	$ 148,800
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,015,698**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,785
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 30,471
√	Roadway Drainage	Standard Internal System	30%	$ 304,709
√	Illumination		6%	$ 60,942
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 30,471
√	Sewer	Minor Adjustments	2%	$ 20,314
√	Landscaping and Irrigation		4%	$ 40,628
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 538,320**

Paving and Allowance Subtotal:		**$ 1,554,018**
Construction Contingency:	10%	$ 155,402
Mobilization	5%	$ 77,701
Prep ROW	5%	$ 77,701
Construction Cost TOTAL:		**$ 1,865,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,865,000**
Engineering/Survey/Testing:		16%	$ 298,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 186,500
		Impact Fee Project Cost TOTAL:	**$ 2,350,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: | Project No. **C-15**

Name:	Future 2 Lane Major Collector
Limits:	S. Dowling/McCullough to Greens Prairie Rd. Extension
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	1,435
Service Area(s):	C

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	4,544	cy	$ 9.00	$ 40,898
211	6" Lime Stabilization (with Lime @ 36#/sy)	8,929	sy	$ 4.50	$ 40,180
311	8" Concrete Pavement and Curb	8,610	sy	$ 48.00	$ 413,280
411	4" Topsoil	2,232	sy	$ 3.25	$ 7,255
511	6' Concrete Sidewalk	17,220	sf	$ 5.00	$ 86,100
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 587,712**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 17,631
√	Roadway Drainage	Standard Internal System	30%	$ 176,314
√	Illumination		6%	$ 35,263
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 17,631
√	Sewer	Minor Adjustments	2%	$ 11,754
√	Landscaping and Irrigation		4%	$ 23,508
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 282,102**

Paving and Allowance Subtotal:		**$ 869,814**
Construction Contingency:	10%	$ 86,981
Mobilization	5%	$ 43,491
Prep ROW	1%	$ 8,698
Construction Cost TOTAL:		**$ 1,009,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,009,000**
Engineering/Survey/Testing:		16%	$ 161,440
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 201,800
		Impact Fee Project Cost TOTAL:	**$ 1,372,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	C-16
Name:	Greens Prairie Rd. Extension (1)	**This project consists of the construction of a new major collector.**		
Limits:	I & G Rd. to 565' E of I & G Rd. (CL)			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	565			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	1,789	cy	$ 9.00	$ 16,103
211	6" Lime Stabilization (with Lime @ 36#/sy)	3,516	sy	$ 4.50	$ 15,820
311	8" Concrete Pavement and Curb	3,390	sy	$ 48.00	$ 162,720
411	4" Topsoil	879	sy	$ 3.25	$ 2,856
511	6' Concrete Sidewalk	6,780	sf	$ 5.00	$ 33,900
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 231,399**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 6,942
√	Roadway Drainage	Standard Internal System	30%	$ 69,420
√	Illumination		6%	$ 13,884
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 6,942
√	Sewer	Minor Adjustments	2%	$ 4,628
√	Landscaping and Irrigation		4%	$ 9,256
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 111,071**

Paving and Allowance Subtotal:		**$ 342,470**
Construction Contingency:	10%	$ 34,247
Mobilization	5%	$ 17,124
Prep ROW	1%	$ 3,425
Construction Cost TOTAL:		**$ 398,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 398,000**
Engineering/Survey/Testing:		16%	$ 63,680
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 79,600
		Impact Fee Project Cost TOTAL:	**$ 541,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	C-17
Name:	Greens Prairie Rd. Extension (2)	**This project consists of the construction of a new major collector.**		
Limits:	995' W of Welborn Rd. (CL) to Wellborn Rd.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	995			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	3,151	cy	$ 9.00	$ 28,358
211	6" Lime Stabilization (with Lime @ 36#/sy)	6,191	sy	$ 4.50	$ 27,860
311	8" Concrete Pavement and Curb	5,970	sy	$ 48.00	$ 286,560
411	4" Topsoil	1,548	sy	$ 3.25	$ 5,030
511	6' Concrete Sidewalk	11,940	sf	$ 5.00	$ 59,700
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 407,508**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 12,225
√	Roadway Drainage	Standard Internal System	30%	$ 122,252
√	Illumination		6%	$ 24,450
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 12,225
√	Sewer	Minor Adjustments	2%	$ 8,150
√	Landscaping and Irrigation		4%	$ 16,300
√	Miscellaneous:	RAILROAD	$0	$ 250,000
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 445,604**

Paving and Allowance Subtotal:		**$ 853,112**
Construction Contingency:	10%	$ 85,311
Mobilization	5%	$ 42,656
Prep ROW	1%	$ 8,531
Construction Cost TOTAL:		**$ 990,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 990,000**
Engineering/Survey/Testing:		16%	$ 158,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 198,000
		Impact Fee Project Cost TOTAL:	**$ 1,346,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	C-18
Name:	Greens Prairie Rd. (1)	**This project consists of the reconstruction of the existing roadway to a four-lane minor arterial.**		
Limits:	Wellborn Rd. to Royder Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	400			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	1,600	cy	$ 9.00	$ 14,400
209	8" Lime Stabilization (with Lime @ 36#/sy)	3,111	sy	$ 6.00	$ 18,667
309	10" Concrete Pavement and Curb	2,933	sy	$ 54.00	$ 158,400
409	4" Topsoil	1,200	sy	$ 3.25	$ 3,900
509	6' Concrete Sidewalk	4,800	sf	$ 5.00	$ 24,000
609	Turn Lanes and Median Openings	378	sy	$ 60.00	$ 22,667
				Paving Construction Cost Subtotal:	**$ 242,033**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 12,102
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 7,261
√	Roadway Drainage	Standard Internal System	30%	$ 72,610
√	Illumination		6%	$ 14,522
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 7,261
√	Sewer	Minor Adjustments	2%	$ 4,841
√	Landscaping and Irrigation		4%	$ 9,681
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 128,278**

Paving and Allowance Subtotal:		**$ 370,311**
Construction Contingency:	10%	$ 37,031
Mobilization	5%	$ 18,516
Prep ROW	5%	$ 18,516
Construction Cost TOTAL:		**$ 445,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 445,000**
Engineering/Survey/Testing:		16%	$ 71,200
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 44,500
		Impact Fee Project Cost TOTAL:	**$ 561,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	C-19
Name:	Greens Prairie Rd. (2)	**This project consists of the reconstruction of the existing roadway to a major collector.**		
Limits:	Royder Rd. to 750' E of Turnberry Cir.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,390			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,735	cy	$ 9.00	$ 96,615
211	6" Lime Stabilization (with Lime @ 36#/sy)	21,093	sy	$ 4.50	$ 94,920
311	8" Concrete Pavement and Curb	20,340	sy	$ 48.00	$ 976,320
411	4" Topsoil	5,273	sy	$ 3.25	$ 17,138
511	6' Concrete Sidewalk	40,680	sf	$ 5.00	$ 203,400
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,388,393**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 69,420
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 41,652
√	Roadway Drainage	Standard Internal System	30%	$ 416,518
√	Illumination		6%	$ 83,304
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 41,652
√	Sewer	Minor Adjustments	2%	$ 27,768
√	Landscaping and Irrigation		4%	$ 55,536
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 735,848**

Paving and Allowance Subtotal:		**$ 2,124,242**
Construction Contingency:	10%	$ 212,424
Mobilization	5%	$ 106,212
Prep ROW	5%	$ 106,212
Construction Cost TOTAL:		**$ 2,550,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,550,000**
Engineering/Survey/Testing:		16%	$ 408,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 255,000
		Impact Fee Project Cost TOTAL:	**$ 3,213,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	C-20
Name:	Greens Prairie Rd. (3)	**This project consists of the reconstruction of the existing roadway to a major collector.**		
Limits:	750' E of Turnberry Cir. to Greens Prairie Trl.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,735			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	8,661	cy	$ 9.00	$ 77,948
211	6" Lime Stabilization (with Lime @ 36#/sy)	17,018	sy	$ 4.50	$ 76,580
311	8" Concrete Pavement and Curb	16,410	sy	$ 48.00	$ 787,680
411	4" Topsoil	4,254	sy	$ 3.25	$ 13,827
511	6' Concrete Sidewalk	32,820	sf	$ 5.00	$ 164,100
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,120,134**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 56,007
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 33,604
√	Roadway Drainage	Standard Internal System	30%	$ 336,040
√	Illumination		6%	$ 67,208
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 33,604
√	Sewer	Minor Adjustments	2%	$ 22,403
√	Landscaping and Irrigation		4%	$ 44,805
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 593,671**

Paving and Allowance Subtotal:		**$ 1,713,806**
Construction Contingency:	10%	$ 171,381
Mobilization	5%	$ 85,690
Prep ROW	5%	$ 85,690
Construction Cost TOTAL:		**$ 2,057,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,057,000**
Engineering/Survey/Testing:		16%	$ 329,120
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 205,700
		Impact Fee Project Cost TOTAL:	**$ 2,592,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**C-21**
Name:	Royder Rd.	**This project is part of the 2015 bond election and the cost is estimted at $4,930,000.**		
Limits:	Greens Prairie Rd. to 885' S of Greens Prairie Trl.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	5,630			
Service Area(s):	C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,930,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 4,930,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**C-22**
Name:	Greens Prairie Trl. (1)	**This project is part of the 2015 bond election and the cost is estimated at $6,960,000.**		
Limits:	Wellborn Rd. to 1000' W of Woodlake Dr.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	6,735			
Service Area(s):	C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,960,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 6,960,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**C-23**
Name:	Greens Prairie Rd. (4)	**This project is part of the 2015 bond election and the cost is estimated at $4,230,000.**		
Limits:	465' E of Future Etonburg to Arrington Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	7,580			
Service Area(s):	C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,230,000**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 4,230,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **C-24**

Name:	WS Phillips Pkwy. Extension
Limits:	Greens Prairie Rd. to Arrington Rd.
Impact Fee Class:	MIN4
Ultimate Class:	Minor Arterial 4-Lane
Length (lf):	8,140
Service Area(s):	C

This project consists of the construction of a new four-lane minor arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	32,560	cy	$ 9.00	$ 293,040
209	8" Lime Stabilization (with Lime @ 36#/sy)	63,311	sy	$ 6.00	$ 379,867
309	10" Concrete Pavement and Curb	59,693	sy	$ 54.00	$ 3,223,440
409	4" Topsoil	24,420	sy	$ 3.25	$ 79,365
509	6' Concrete Sidewalk	97,680	sf	$ 5.00	$ 488,400
609	Turn Lanes and Median Openings	7,688	sy	$ 60.00	$ 461,267
				Paving Construction Cost Subtotal:	**$ 4,925,378**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 147,761
√	Roadway Drainage	Standard Internal System	30%	$ 1,477,614
√	Illumination		6%	$ 295,523
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 147,761
√	Sewer	Minor Adjustments	2%	$ 98,508
√	Landscaping and Irrigation		4%	$ 197,015
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,364,182**

Paving and Allowance Subtotal:		**$ 7,289,560**
Construction Contingency:	10%	$ 728,956
Mobilization	5%	$ 364,478
Prep ROW	1%	$ 72,896
Construction Cost TOTAL:		**$ 8,456,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 8,456,000**
Engineering/Survey/Testing:		16%	$ 1,352,960
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,691,200
		Impact Fee Project Cost TOTAL:	**$ 11,500,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:		**Description:**	**Project No.**	**C-25**
Name:	Victoria Ave.	**This project was completed with the 2008 bond election and the cost was $1,828,530.**		
Limits:	Southern Plantation Dr. to William D Fitch Pkwy.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,535			
Service Area(s):	C			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,828,530**
Engineering/Survey/Testing:		0%	$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:		0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 1,828,530**

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City of College Station - 2016 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area D

#	IF Class	Project	Limits		Status	Percent in Service Area	Project Cost	Total Cost in Service Area
			From	To				
A-5, D-1	MAJ4	Rock Prairie Rd. (1)	Medical Ave.	Bird Pond Rd.	Reconstruction	50	$ 3,333,000	$ 1,666,500
A-7, D-2	MIN4	Bird Pond Rd.	Rock Prairie Rd.	4,830' NE of Bird Pond Estates (CL)	Reconstruction	50	$ 11,188,000	$ 5,594,000
D-3	MAJ4	Rock Prairie Rd. (2)	Bird Pond Rd.	Bradley Rd.	Reconstruction	100	$ 5,046,000	$ 5,046,000
D-4	MIN4	Rock Prairie Rd. (3)	Bradley Rd.	2,610' E of Campbell Ct. (CL)	Reconstruction	100	$ 23,733,000	$ 23,733,000
D-5	MAJ2	Lakeway Dr. (1)	Medical Ave.	Pebble Creek Pkwy.	New	100	$ 8,703,000	$ 8,703,000
D-6	MAJ2	Lakeway Dr. (2)	Pebble Creek Pkwy.	1,910' N of William D. Fitch Pkwy.	New	100	$ 2,946,000	$ 2,946,000
D-7	MAJ2	Lakeway Dr. (3)	940' S of Technology Way	Future Nantucket Dr.	New	100	$ 4,022,000	$ 4,022,000
D-8	MAJ2	Ritchey Rd.	SH 6 NBFR	Rock Prairie Rd.	New	100	$ 3,964,000	$ 3,964,000
D-9	MIN4	Bird Pond Rd. Extension	SH 6	Rock Prairie Rd.	New	100	$ 8,894,000	$ 8,894,000
D-10	MAJ2	Pebble Creek Pkwy. (1)	SH 6 NBFR	William D. Fitch Pkwy.	New	100	$ 9,100,000	$ 9,100,000
D-11	MAJ2	Pebble Creek Pkwy. (2)	Royal Adelade Dr.	St. Andrews Dr.	Reconstruction	100	$ 896,000	$ 896,000
D-12	MAJ2	Pebble Creek Pkwy. (3)	St. Andrews Dr.	Future Nantucket Dr.	New	100	$ 4,886,000	$ 4,886,000
D-13	MAJ6 (1/3)	William D. Fitch Pkwy. (1)	Lakeway Dr.	Rock Prairie Rd.	Widen	100	$ 4,392,000	$ 4,392,000
D-14	MAJ6	William D. Fitch Pkwy. (2)	Rock Prairie Rd.	9,700' E of Tonkaway Lake Rd. (CL)	Reconstruction	100	$ 40,890,000	$ 40,890,000
D-15	MIN4	Future Nantucket Dr.	SH 6	East City Limits	New	100	$ 19,735,000	$ 19,735,000
D-16	MAJ2	Future East-West Major Collector	Pebble Creek Pkwy.	East City Limits	New	100	$ 5,772,000	$ 5,772,000
D-17	MAJ2	Future North-South Major Collector	Future East-West Major Collector	Future Nantucket Dr.	New	100	$ 3,176,000	$ 3,176,000
D-18	MIN4	Barron Rd. Extension	Lakeway Dr.	Rock Prairie Rd.	New	100	$ 12,930,000	$ 12,930,000
						TOTAL	$ 173,606,000	$ 166,345,500

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	A-5, D-1
Name:	Rock Prairie Rd. (1)	**This project consists of the reconstruction of the existing roadway to a four-lane divided major arterial.**		
Limits:	Medical Ave. to Bird Pond Rd.			
Impact Fee Class:	MAJ4			
Ultimate Class:	Major Arterial 4-Lane			
Length (lf):	2,380			
Service Area(s):	A, D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	9,520	cy	$ 9.00	$ 85,680
203	8" Lime Stabilization (with Lime @ 36#/sy)	18,511	sy	$ 6.00	$ 111,067
303	10" Concrete Pavement and Curb	17,453	sy	$ 54.00	$ 942,480
403	4" Topsoil	7,140	sy	$ 3.25	$ 23,205
503	6' Concrete Sidewalk	28,560	sf	$ 5.00	$ 142,800
603	Turn Lanes and Median Openings	2,248	sy	$ 60.00	$ 134,867
				Paving Construction Cost Subtotal:	**$ 1,440,098**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 72,005
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 43,203
√	Roadway Drainage	Standard Internal System	30%	$ 432,030
√	Illumination		6%	$ 86,406
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 43,203
√	Sewer	Minor Adjustments	2%	$ 28,802
√	Landscaping and Irrigation		4%	$ 57,604
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 763,252**

Paving and Allowance Subtotal:		**$ 2,203,350**
Construction Contingency:	10%	$ 220,335
Mobilization	5%	$ 110,168
Prep ROW	5%	$ 110,168
Construction Cost TOTAL:		**$ 2,645,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,645,000**
Engineering/Survey/Testing:		16%	$ 423,200
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 264,500
		Impact Fee Project Cost TOTAL:	**$ 3,333,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

Description: **Project No.** **A-7, D-2**

Name:	Bird Pond Rd.
Limits:	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)
Impact Fee Class:	MIN4
Ultimate Class:	Minor Arterial 4-Lane
Length (lf):	7,020
Service Area(s):	A, D

This project consists of the reconstruction of the existing roadway to a four-lane divided minor arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	28,080	cy	$ 9.00	$ 252,720
209	8" Lime Stabilization (with Lime @ 36#/sy)	54,600	sy	$ 6.00	$ 327,600
309	10" Concrete Pavement and Curb	51,480	sy	$ 54.00	$ 2,779,920
409	4" Topsoil	21,060	sy	$ 3.25	$ 68,445
509	6' Concrete Sidewalk	84,240	sf	$ 5.00	$ 421,200
609	Turn Lanes and Median Openings	6,630	sy	$ 60.00	$ 397,800
				Paving Construction Cost Subtotal:	**$ 4,247,685**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 212,384
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 127,431
√	Roadway Drainage	Standard Internal System	30%	$ 1,274,306
√	Illumination		6%	$ 254,861
√	Special Drainage Structures	Bridge Crossing	0%	$ 900,000
√	Water	Minor Adjustments	3%	$ 127,431
√	Sewer	Minor Adjustments	2%	$ 84,954
√	Landscaping and Irrigation		4%	$ 169,907
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 3,151,273**

Paving and Allowance Subtotal:		**$ 7,398,958**
Construction Contingency:	10%	$ 739,896
Mobilization	5%	$ 369,948
Prep ROW	5%	$ 369,948
Construction Cost TOTAL:		**$ 8,879,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 8,879,000**
Engineering/Survey/Testing:		16%	$ 1,420,640
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 887,900
		Impact Fee Project Cost TOTAL:	**$ 11,188,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-3
Name:	Rock Prairie Rd. (2)	**This project consists of the reconstruction of the existing roadway to a four-lane divided major arterial.**		
Limits:	Bird Pond Rd. to Bradley Rd.			
Impact Fee Class:	MAJ4			
Ultimate Class:	Major Arterial 4-Lane			
Length (lf):	3,605			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	14,420	cy	$ 9.00	$ 129,780
203	8" Lime Stabilization (with Lime @ 36#/sy)	28,039	sy	$ 6.00	$ 168,233
303	10" Concrete Pavement and Curb	26,437	sy	$ 54.00	$ 1,427,580
403	4" Topsoil	10,815	sy	$ 3.25	$ 35,149
503	6' Concrete Sidewalk	43,260	sf	$ 5.00	$ 216,300
603	Turn Lanes and Median Openings	3,405	sy	$ 60.00	$ 204,283
				Paving Construction Cost Subtotal:	**$ 2,181,325**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 109,066
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 65,440
√	Roadway Drainage	Standard Internal System	30%	$ 654,398
√	Illumination		6%	$ 130,880
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 65,440
√	Sewer	Minor Adjustments	2%	$ 43,627
√	Landscaping and Irrigation		4%	$ 87,253
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,156,102**

Paving and Allowance Subtotal:		**$ 3,337,428**
Construction Contingency:	10%	$ 333,743
Mobilization	5%	$ 166,871
Prep ROW	5%	$ 166,871
Construction Cost TOTAL:		**$ 4,005,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,005,000**
Engineering/Survey/Testing:		16%	$ 640,800
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 400,500
		Impact Fee Project Cost TOTAL:	**$ 5,046,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **D-4**

Name:	Rock Prairie Rd. (3)
Limits:	Bradley Rd. to 2,610' E of Campbell Ct. (CL)
Impact Fee Class:	MIN4
Ultimate Class:	Minor Arterial 4-Lane
Length (lf):	16,955
Service Area(s):	D

This project consists of the reconstruction of the existing roadway to a four-lane divided minor arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	67,820	cy	$ 9.00	$ 610,380
209	8" Lime Stabilization (with Lime @ 36#/sy)	131,872	sy	$ 6.00	$ 791,233
309	10" Concrete Pavement and Curb	124,337	sy	$ 54.00	$ 6,714,180
409	4" Topsoil	50,865	sy	$ 3.25	$ 165,311
509	6' Concrete Sidewalk	203,460	sf	$ 5.00	$ 1,017,300
609	Turn Lanes and Median Openings	16,013	sy	$ 60.00	$ 960,783
				Paving Construction Cost Subtotal:	**$ 10,259,188**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 512,959
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 307,776
√	Roadway Drainage	Standard Internal System	30%	$ 3,077,756
√	Illumination		6%	$ 615,551
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 307,776
√	Sewer	Minor Adjustments	2%	$ 205,184
√	Landscaping and Irrigation		4%	$ 410,368
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 5,437,370**

Paving and Allowance Subtotal:		**$ 15,696,558**
Construction Contingency:	10%	$ 1,569,656
Mobilization	5%	$ 784,828
Prep ROW	5%	$ 784,828
Construction Cost TOTAL:		**$ 18,836,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 18,836,000**
Engineering/Survey/Testing:		16%	$ 3,013,760
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 1,883,600
		Impact Fee Project Cost TOTAL:	**$ 23,733,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **D-5**

Name:	Lakeway Dr. (1)
Limits:	Medical Ave. to Pebble Creek Pkwy.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	5,800
Service Area(s):	D

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	18,367	cy	$ 9.00	$ 165,300
211	6" Lime Stabilization (with Lime @ 36#/sy)	36,089	sy	$ 4.50	$ 162,400
311	8" Concrete Pavement and Curb	34,800	sy	$ 48.00	$ 1,670,400
411	4" Topsoil	9,022	sy	$ 3.25	$ 29,322
511	6' Concrete Sidewalk	69,600	sf	$ 5.00	$ 348,000
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 2,375,422**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 71,263
√	Roadway Drainage	Standard Internal System	30%	$ 712,627
√	Illumination		6%	$ 142,525
√	Special Drainage Structures	Bridge Crossing	0%	$ 2,000,000
√	Water	Minor Adjustments	3%	$ 71,263
√	Sewer	Minor Adjustments	2%	$ 47,508
√	Landscaping and Irrigation		4%	$ 95,017
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 3,140,203**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 5,515,625**
Construction Contingency:	10%	$ 551,562
Mobilization	5%	$ 275,781
Prep ROW	1%	$ 55,156
Construction Cost TOTAL:		**$ 6,399,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,399,000**
Engineering/Survey/Testing:		16%	$ 1,023,840
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,279,800
		Impact Fee Project Cost TOTAL:	**$ 8,703,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	D-6
Name:	Lakeway Dr. (2)	**This project consists of the construction of a new major collector.**		
Limits:	Pebble Creek Pkwy. to 1,910' N of William D. Fitch Pkwy.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	2,585			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	8,186	cy	$ 9.00	$ 73,673
211	6" Lime Stabilization (with Lime @ 36#/sy)	16,084	sy	$ 4.50	$ 72,380
311	8" Concrete Pavement and Curb	15,510	sy	$ 48.00	$ 744,480
411	4" Topsoil	4,021	sy	$ 3.25	$ 13,069
511	6' Concrete Sidewalk	31,020	sf	$ 5.00	$ 155,100
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,058,701**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 31,761
√	Roadway Drainage	Standard Internal System	30%	$ 317,610
√	Illumination		6%	$ 63,522
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 300,000
√	Water	Minor Adjustments	3%	$ 31,761
√	Sewer	Minor Adjustments	2%	$ 21,174
√	Landscaping and Irrigation		4%	$ 42,348
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 808,177**

Paving and Allowance Subtotal:		**$ 1,866,878**
Construction Contingency:	10%	$ 186,688
Mobilization	5%	$ 93,344
Prep ROW	1%	$ 18,669
Construction Cost TOTAL:		**$ 2,166,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,166,000**
Engineering/Survey/Testing:		16%	$ 346,560
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 433,200
		Impact Fee Project Cost TOTAL:	**$ 2,946,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **D-7**

Name:	Lakeway Dr. (3)
Limits:	940' S of Technology Way to Future Nantucket Dr.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	3,215
Service Area(s):	D

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,181	cy	$ 9.00	$ 91,628
211	6" Lime Stabilization (with Lime @ 36#/sy)	20,004	sy	$ 4.50	$ 90,020
311	8" Concrete Pavement and Curb	19,290	sy	$ 48.00	$ 925,920
411	4" Topsoil	5,001	sy	$ 3.25	$ 16,254
511	6' Concrete Sidewalk	38,580	sf	$ 5.00	$ 192,900
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,316,721**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 39,502
√	Roadway Drainage	Standard Internal System	30%	$ 395,016
√	Illumination		6%	$ 79,003
√	Special Drainage Structures	Bridge Crossing	0%	$ 600,000
√	Water	Minor Adjustments	3%	$ 39,502
√	Sewer	Minor Adjustments	2%	$ 26,334
√	Landscaping and Irrigation		4%	$ 52,669
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,232,026**

Paving and Allowance Subtotal:		**$ 2,548,747**
Construction Contingency:	10%	$ 254,875
Mobilization	5%	$ 127,437
Prep ROW	1%	$ 25,487
Construction Cost TOTAL:		**$ 2,957,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,957,000**
Engineering/Survey/Testing:		16%	$ 473,120
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 591,400
		Impact Fee Project Cost TOTAL:	**$ 4,022,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

Description: **Project No.** **D-8**

Name:	Ritchey Rd.
Limits:	SH 6 NBFR to Rock Prairie Rd.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	4,145
Service Area(s):	D

This project consists of the construction of a new major collector.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	13,126	cy	$ 9.00	$ 118,133
211	6" Lime Stabilization (with Lime @ 36#/sy)	25,791	sy	$ 4.50	$ 116,060
311	8" Concrete Pavement and Curb	24,870	sy	$ 48.00	$ 1,193,760
411	4" Topsoil	6,448	sy	$ 3.25	$ 20,955
511	6' Concrete Sidewalk	49,740	sf	$ 5.00	$ 248,700
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,697,608**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 50,928
√	Roadway Drainage	Standard Internal System	30%	$ 509,282
√	Illumination		6%	$ 101,856
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 50,928
√	Sewer	Minor Adjustments	2%	$ 33,952
√	Landscaping and Irrigation		4%	$ 67,904
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 814,852**

Paving and Allowance Subtotal:		**$ 2,512,460**
Construction Contingency:	10%	$ 251,246
Mobilization	5%	$ 125,623
Prep ROW	1%	$ 25,125
Construction Cost TOTAL:		**$ 2,915,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,915,000**
Engineering/Survey/Testing:		16%	$ 466,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 583,000
		Impact Fee Project Cost TOTAL:	**$ 3,964,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	D-9
Name:	Bird Pond Rd. Extension	**This project consists of the construction of a new four-lane minor arterial.**		
Limits:	SH 6 to Rock Prairie Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	4,955			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	19,820	cy	$ 9.00	$ 178,380
209	8" Lime Stabilization (with Lime @ 36#/sy)	38,539	sy	$ 6.00	$ 231,233
309	10" Concrete Pavement and Curb	36,337	sy	$ 54.00	$ 1,962,180
409	4" Topsoil	14,865	sy	$ 3.25	$ 48,311
509	6' Concrete Sidewalk	59,460	sf	$ 5.00	$ 297,300
609	Turn Lanes and Median Openings	4,680	sy	$ 60.00	$ 280,783
				Paving Construction Cost Subtotal:	**$ 2,998,188**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 89,946
√	Roadway Drainage	Standard Internal System	30%	$ 899,456
√	Illumination		6%	$ 179,891
√	Special Drainage Structures	Bridge Crossing	0%	$ 1,200,000
√	Water	Minor Adjustments	3%	$ 89,946
√	Sewer	Minor Adjustments	2%	$ 59,964
√	Landscaping and Irrigation		4%	$ 119,928
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,639,130**

Paving and Allowance Subtotal:		**$ 5,637,318**
Construction Contingency:	10%	$ 563,732
Mobilization	5%	$ 281,866
Prep ROW	1%	$ 56,373
Construction Cost TOTAL:		**$ 6,540,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,540,000**
Engineering/Survey/Testing:		16%	$ 1,046,400
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,308,000
		Impact Fee Project Cost TOTAL:	**$ 8,894,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-10
Name:	Pebble Creek Pkwy. (1)	**This project consists of the construction of a new major collector.**		
Limits:	SH 6 NBFR to William D. Fitch Pkwy.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	8,030			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	25,428	cy	$ 9.00	$ 228,855
211	6" Lime Stabilization (with Lime @ 36#/sy)	49,964	sy	$ 4.50	$ 224,840
311	8" Concrete Pavement and Curb	48,180	sy	$ 48.00	$ 2,312,640
411	4" Topsoil	12,491	sy	$ 3.25	$ 40,596
511	6' Concrete Sidewalk	96,360	sf	$ 5.00	$ 481,800
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 3,288,731**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 98,662
√	Roadway Drainage	Standard Internal System	30%	$ 986,619
√	Illumination		6%	$ 197,324
√	Special Drainage Structures	Bridge Crossing	0%	$ 900,000
√	Water	Minor Adjustments	3%	$ 98,662
√	Sewer	Minor Adjustments	2%	$ 65,775
√	Landscaping and Irrigation		4%	$ 131,549
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,478,591**

Paving and Allowance Subtotal:		**$ 5,767,322**
Construction Contingency:	10%	$ 576,732
Mobilization	5%	$ 288,366
Prep ROW	1%	$ 57,673
Construction Cost TOTAL:		**$ 6,691,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,691,000**
Engineering/Survey/Testing:		16%	$ 1,070,560
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,338,200
		Impact Fee Project Cost TOTAL:	**$ 9,100,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **D-11**

Name:	Pebble Creek Pkwy. (2)
Limits:	Royal Adelade Dr. to St. Andrews Dr.
Impact Fee Class:	MAJ2
Ultimate Class:	Major Collector 2 -Lane
Length (lf):	1,890
Service Area(s):	D

This project consists of widening the roadway to a two-lane major collector section. The City is antcipated to build half of the roadway.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	5,985	cy	$ 9.00	$ 53,865
211	6" Lime Stabilization (with Lime @ 36#/sy)	11,760	sy	$ 4.50	$ 52,920
311	8" Concrete Pavement and Curb	11,340	sy	$ 48.00	$ 544,320
411	4" Topsoil	2,940	sy	$ 3.25	$ 9,555
511	6' Concrete Sidewalk	22,680	sf	$ 5.00	$ 113,400
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 774,060**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 38,703
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 23,222
√	Roadway Drainage	Standard Internal System	30%	$ 232,218
√	Illumination		6%	$ 46,444
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 23,222
√	Sewer	Minor Adjustments	2%	$ 15,481
√	Landscaping and Irrigation		4%	$ 30,962
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 410,252**

Paving and Allowance Subtotal:		**$ 1,184,312**
Construction Contingency:	10%	$ 118,431
Mobilization	5%	$ 59,216
Prep ROW	5%	$ 59,216
Construction Cost TOTAL:		**$ 1,422,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,422,000**
Engineering/Survey/Testing:		16%	$ 227,520
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 142,200
Impact Fee Project Cost TOTAL (50% City Contribution)			**$ 896,000**

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City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	D-12
Name:	Pebble Creek Pkwy. (3)	**This project consists of the construction of a new major collector.**		
Limits:	St. Andrews Dr. to Future Nantucket Dr.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,625			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	11,479	cy	$ 9.00	$ 103,313
211	6" Lime Stabilization (with Lime @ 36#/sy)	22,556	sy	$ 4.50	$ 101,500
311	8" Concrete Pavement and Curb	21,750	sy	$ 48.00	$ 1,044,000
411	4" Topsoil	5,639	sy	$ 3.25	$ 18,326
511	6' Concrete Sidewalk	43,500	sf	$ 5.00	$ 217,500
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,484,639**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 44,539
√	Roadway Drainage	Standard Internal System	30%	$ 445,392
√	Illumination		6%	$ 89,078
√	Special Drainage Structures	Bridge Crossing	0%	$ 900,000
√	Water	Minor Adjustments	3%	$ 44,539
√	Sewer	Minor Adjustments	2%	$ 29,693
√	Landscaping and Irrigation		4%	$ 59,386
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,612,627**

Paving and Allowance Subtotal:		**$ 3,097,266**
Construction Contingency:	10%	$ 309,727
Mobilization	5%	$ 154,863
Prep ROW	1%	$ 30,973
Construction Cost TOTAL:		**$ 3,593,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,593,000**
Engineering/Survey/Testing:		16%	$ 574,880
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 718,600
		Impact Fee Project Cost TOTAL:	**$ 4,886,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-13
Name:	William D. Fitch Pkwy. (1)	**This project consists of the widening of the current four-lane divided roadway to a six-lane major arterial section.**		
Limits:	Lakeway Dr. to Rock Prairie Rd.			
Impact Fee Class:	MAJ6 (1/3)			
Ultimate Class:	Major Arterial 6-Lane (1/3)			
Length (lf):	7,955			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	12,374	cy	$ 9.00	$ 111,370
202	8" Lime Stabilization (with Lime @ 36#/sy)	23,865	sy	$ 6.00	$ 143,190
302	10" Concrete Pavement and Curb	22,097	sy	$ 54.00	$ 1,193,250
402	4" Topsoil	0	sy	$ 3.25	$ -
502	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	0	sf	$ 5.00	$ -
602	Turn Lanes and Median Openings	7,513	sy	$ 60.00	$ 450,783
				Paving Construction Cost Subtotal:	**$ 1,898,593**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 94,930
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 56,958
√	Roadway Drainage	Standard Internal System	30%	$ 569,578
√	Illumination		6%	$ 113,916
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 56,958
√	Sewer	Minor Adjustments	2%	$ 37,972
√	Landscaping and Irrigation		4%	$ 75,944
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,006,254**

Paving and Allowance Subtotal:		**$ 2,904,848**
Construction Contingency:	10%	$ 290,485
Mobilization	5%	$ 145,242
Prep ROW	5%	$ 145,242
Construction Cost TOTAL:		**$ 3,486,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,486,000**
Engineering/Survey/Testing:		16%	$ 557,760
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 348,600
		Impact Fee Project Cost TOTAL:	**$ 4,392,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

Description: **Project No.** **D-14**

Name:	William D. Fitch Pkwy. (2)
Limits:	Rock Prairie Rd. to 9,700' E of Tonkaway Lake Rd. (CL)
Impact Fee Class:	MAJ6
Ultimate Class:	Major Arterial 6-Lane
Length (lf):	19,755
Service Area(s):	D

This project consists of the reconstruction of the current two-lane undivided roadway to a six-lane major arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	87,800	cy	$ 9.00	$ 790,200
201	8" Lime Stabilization (with Lime @ 36#/sy)	171,210	sy	$ 6.00	$ 1,027,260
301	10" Concrete Pavement and Curb	162,430	sy	$ 54.00	$ 8,771,220
401	4" Topsoil	166,820	sy	$ 3.25	$ 542,165
501	6' Concrete Sidewalk and 12' Concrete Shared-Use Path	355,590	sf	$ 5.00	$ 1,777,950
601	Turn Lanes and Median Openings	22,798	sy	$ 60.00	$ 1,367,884
				Paving Construction Cost Subtotal:	**$ 14,276,679**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 713,834
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 428,300
√	Roadway Drainage	Standard Internal System	30%	$ 4,283,004
√	Illumination		6%	$ 856,601
√	Special Drainage Structures	Bridge Crossing	0%	$ 5,200,000
√	Water	Minor Adjustments	3%	$ 428,300
√	Sewer	Minor Adjustments	2%	$ 285,534
√	Landscaping and Irrigation		4%	$ 571,067
	Miscellaneous:		$0	$ -
			Allowance Subtotal:	**$ 12,766,640**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 27,043,319**
Construction Contingency:	10%	$ 2,704,332
Mobilization	5%	$ 1,352,166
Prep ROW	5%	$ 1,352,166
Construction Cost TOTAL:		**$ 32,452,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 32,452,000**
Engineering/Survey/Testing:		16%	$ 5,192,320
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	10%	$ 3,245,200
		Impact Fee Project Cost TOTAL:	**$ 40,890,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-15
Name:	Future Nantucket Dr.	**This project consists of the construction of a new four-lane minor arterial.**		
Limits:	SH 6 to East City Limits			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	13,745			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	54,980	cy	$ 9.00	$ 494,820
209	8" Lime Stabilization (with Lime @ 36#/sy)	106,906	sy	$ 6.00	$ 641,433
309	10" Concrete Pavement and Curb	100,797	sy	$ 54.00	$ 5,443,020
409	4" Topsoil	41,235	sy	$ 3.25	$ 134,014
509	6' Concrete Sidewalk	164,940	sf	$ 5.00	$ 824,700
609	Turn Lanes and Median Openings	12,981	sy	$ 60.00	$ 778,883
				Paving Construction Cost Subtotal:	**$ 8,316,870**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 249,506
√	Roadway Drainage	Standard Internal System	30%	$ 2,495,061
√	Illumination		6%	$ 499,012
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 200,000
√	Water	Minor Adjustments	3%	$ 249,506
√	Sewer	Minor Adjustments	2%	$ 166,337
√	Landscaping and Irrigation		4%	$ 332,675
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 4,192,098**

Paving and Allowance Subtotal:		**$ 12,508,968**
Construction Contingency:	10%	$ 1,250,897
Mobilization	5%	$ 625,448
Prep ROW	1%	$ 125,090
Construction Cost TOTAL:		**$ 14,511,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 14,511,000**
Engineering/Survey/Testing:		16%	$ 2,321,760
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 2,902,200
		Impact Fee Project Cost TOTAL:	**$ 19,735,000**

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City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-16
Name:	Future East-West Major Collector	**This project consists of the construction of a new major collector.**		
Limits:	Pebble Creek Pkwy. to East City Limits			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	5,870			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	18,588	cy	$ 9.00	$ 167,295
211	6" Lime Stabilization (with Lime @ 36#/sy)	36,524	sy	$ 4.50	$ 164,360
311	8" Concrete Pavement and Curb	35,220	sy	$ 48.00	$ 1,690,560
411	4" Topsoil	9,131	sy	$ 3.25	$ 29,676
511	6' Concrete Sidewalk	70,440	sf	$ 5.00	$ 352,200
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 2,404,091**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 72,123
√	Roadway Drainage	Standard Internal System	30%	$ 721,227
√	Illumination		6%	$ 144,245
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 100,000
√	Water	Minor Adjustments	3%	$ 72,123
√	Sewer	Minor Adjustments	2%	$ 48,082
√	Landscaping and Irrigation		4%	$ 96,164
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,253,964**

Paving and Allowance Subtotal:		**$ 3,658,055**
Construction Contingency:	10%	$ 365,805
Mobilization	5%	$ 182,903
Prep ROW	1%	$ 36,581
Construction Cost TOTAL:		**$ 4,244,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,244,000**
Engineering/Survey/Testing:		16%	$ 679,040
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 848,800
		Impact Fee Project Cost TOTAL:	**$ 5,772,000**

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 College Station.

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

City of College Station
2016 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 11/9/2016

Project Information:

		Description:	Project No.	D-17
Name:	Future North-South Major Collector	**This project consists of the construction of a new major collector.**		
Limits:	Future East-West Major Collector to Future Nantucket Dr.			
Impact Fee Class:	MAJ2			
Ultimate Class:	Major Collector 2 -Lane			
Length (lf):	3,320			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,513	cy	$ 9.00	$ 94,620
211	6" Lime Stabilization (with Lime @ 36#/sy)	20,658	sy	$ 4.50	$ 92,960
311	8" Concrete Pavement and Curb	19,920	sy	$ 48.00	$ 956,160
411	4" Topsoil	5,164	sy	$ 3.25	$ 16,784
511	6' Concrete Sidewalk	39,840	sf	$ 5.00	$ 199,200
611	Turn Lanes and Median Openings	0	sy	$ 52.50	$ -
				Paving Construction Cost Subtotal:	**$ 1,359,724**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 40,792
√	Roadway Drainage	Standard Internal System	30%	$ 407,917
√	Illumination		6%	$ 81,583
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	3%	$ 40,792
√	Sewer	Minor Adjustments	2%	$ 27,194
√	Landscaping and Irrigation		4%	$ 54,389
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 652,668**

Paving and Allowance Subtotal:		**$ 2,012,392**
Construction Contingency:	10%	$ 201,239
Mobilization	5%	$ 100,620
Prep ROW	1%	$ 20,124
Construction Cost TOTAL:		**$ 2,335,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,335,000**
Engineering/Survey/Testing:		16%	$ 373,600
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 467,000
		Impact Fee Project Cost TOTAL:	**$ 3,176,000**

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 College Station.

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

City of College Station

2016 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/9/2016

Project Information:

		Description:	Project No.	D-18
Name:	Barron Rd. Extension	**This project consists of the construction of a new four-lane minor arterial.**		
Limits:	Lakeway Dr. to Rock Prairie Rd.			
Impact Fee Class:	MIN4			
Ultimate Class:	Minor Arterial 4-Lane			
Length (lf):	6,025			
Service Area(s):	D			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	24,100	cy	$ 9.00	$ 216,900
209	8" Lime Stabilization (with Lime @ 36#/sy)	46,861	sy	$ 6.00	$ 281,167
309	10" Concrete Pavement and Curb	44,183	sy	$ 54.00	$ 2,385,900
409	4" Topsoil	18,075	sy	$ 3.25	$ 58,744
509	6' Concrete Sidewalk	72,300	sf	$ 5.00	$ 361,500
609	Turn Lanes and Median Openings	5,690	sy	$ 60.00	$ 341,417
				Paving Construction Cost Subtotal:	**$ 3,645,627**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	3%	$ 109,369
√	Roadway Drainage	Standard Internal System	30%	$ 1,093,688
√	Illumination		6%	$ 218,738
√	Special Drainage Structures	Bridge Crossing	0%	$ 2,800,000
√	Water	Minor Adjustments	3%	$ 109,369
√	Sewer	Minor Adjustments	2%	$ 72,913
√	Landscaping and Irrigation		4%	$ 145,825
	Miscellaneous:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 4,549,901**

Paving and Allowance Subtotal:		**$ 8,195,528**
Construction Contingency:	10%	$ 819,553
Mobilization	5%	$ 409,776
Prep ROW	1%	$ 81,955
Construction Cost TOTAL:		**$ 9,507,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 9,507,000**
Engineering/Survey/Testing:		16%	$ 1,521,120
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,901,400
		Impact Fee Project Cost TOTAL:	**$ 12,930,000**

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 College Station.

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

Appendix B – Roadway Impact Fee CIP Service Units of Supply

City of College Station - 2016 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area A

11/9/2016

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[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-1	Pavilion Ave. Extension	Sebesta Rd. to SH 6 NBFR	0.48	2	MAJ2	New	100%	550	528	0	528	$ 2,434,000	$ 2,434,000
A-2	Dartmouth St. Extension	Emerald Pkwy. to S Texas Ave.	0.48	2	MAJ2	New	100%	550	528	0	528	$ 1,224,000	$ 1,224,000.00
A-3	Lassie Ln. Extension	Sterling St. to Manuel Dr.	0.06	2	MAJ2	New	100%	550	66	0	66	$ 302,000	$ 302,000.00
A-4, B-1	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	0.68	6	MAJ6 (1/3)	2,458	50%	950	1938	836	1,102	$ 332,000	$ 166,000
A-5, D-1	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	0.45	4	MAJ4	512	50%	650	585	115	470	$ 3,333,000	$ 1,666,500
A-6	Harvey Rd.	Appomattox Dr. to Boonville Rd. (CL)	2.18	4	MAJ4	1,298	100%	950	8284	2,830	5,454	$ 3,249,600	$ 3,249,600
A-7, D-2	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	1.33	4	MIN4	56	50%	625	1663	37	1,626	$ 11,188,000	$ 5,594,000
A-8	Linda Lane	Harvey Rd. to 560' SE of Harvey Rd. (CL)	0.11	4	MIN4	50	100%	625	275	6	269	$ 785,000	$ 785,000
I-1	S Texas Ave. and Deacon Dr. Signal						50%					$ 150,000	$ 75,000
I-2	Holleman Rd. and S. Texas Ave. Improvement						50%					$ 1,500,000	$ 750,000
I-3	S Texas Ave. and Walton Dr. Signal						50%					$ 300,000	$ 150,000
I-4	University Dr. and University Towne Center Signal						100%					$ 300,000	$ 300,000
SUBTOTAL									**13,867**	**3,824**	**10,043**	**$ 25,097,600**	**$ 16,696,100**

2016 Roadway Impact Fee Study Cost Per Service Area $ 22,125

TOTAL COST IN SERVICE AREA A $ 16,718,225

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. If minimal traffic is anticipated on an existing roadway a default of 50 vph was used.

City of College Station - 2016 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area B

11/9/2016

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[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-4, B-1	S Texas Ave.	Harvey Mitchell Pkwy. to Deacon Dr.	0.68	6	MAJ6 (1/3)	2,458	50%	950	1938	836	1,102	$ 332,000	$ 166,000
B-2, C-1	Rock Prairie Rd. (1)	Normand Dr. to SH 6	0.48	6	MAJ6	2,068	50%	750	1080	496	584	$ 3,935,724	$ 1,967,862.00
B-3, C-2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	0.64	2	MAJ2	2,068	50%	550	352	662	-310	$ 4,985,000	$ 2,492,500
B-4	Rock Prairie Rd. (3)	360' W. of Great Oaks Dr. (CL) to Holleman Dr.	0.74	2	MAJ2	2,068	100%	550	814	1,530	-716	$ 3,714,000	$ 3,714,000
B-5	Holleman Dr. (1)	Rock Prairie Rd. to N Graham Rd.	0.31	4	MIN4	907	100%	625	775	281	494	$ 2,317,000	$ 2,317,000
B-6	Holleman Dr. (2)	N Dowling Rd. to Rock Prairie Rd.	1.54	4	MIN4	907	100%	625	3850	1,397	2,453	$ 10,305,000	$ 10,305,000
B-7	Wellborn Rd.	University Dr. to Harvey Mitchell Pkwy.	2.40	6	MAJ6 (1/3)	2,870	100%	950	13680	6,888	6,792	$ 1,165,400	$ 1,165,400
B-8	Luther St.	Penberthy Rd. to Marion Pugh Dr.	0.27	2	MAJ2	252	100%	550	297	68	229	$ 1,346,000	$ 1,346,000
B-9	Penberthy Rd.	Goerge Bush Dr. to Luther St.	0.40	4	MIN4	910	100%	625	1000	364	636	$ 3,006,373	$ 3,006,373
B-10	Turkey Creek Rd.	S Traditions Dr. to Raymond Stotzer Pkwy.	0.63	2	MAJ2	140	100%	550	693	88	605	$ 3,141,000	$ 3,141,000
B-11	F and B Rd.	Turkey Creek Rd. to Harvey Mitchell Pkwy.	0.46	2	MAJ2	143	100%	550	506	66	440	$ 2,298,000	$ 2,298,000
B-12	University Dr.	Harvey Mitchell Pkwy. to Wellborn Rd.	1.31	6	MAJ6 (1/3)	3,480	100%	950	7467	4,559	2,908	$ 534,200	$ 534,200
I-1	S Texas Ave. and Deacon Dr. Signal						50%					$ 150,000	$ 75,000
I-2	Holleman Rd. and S. Texas Ave. Improvement						50%					$ 1,500,000	$ 750,000
I-3	S Texas Ave. and Walton Dr. Signal						50%					$ 300,000	$ 150,000
I-5	Wellborn Rd. and George Bush Dr.						100%					$ 1,190,232	$ 1,190,232
SUBTOTAL									**32,452**	**17,235**	**15,217**	**$ 40,219,929**	**$ 34,618,567**

2016 Roadway Impact Fee Study Cost Per Service Area $ 22,125

TOTAL COST IN SERVICE AREA B $ 34,640,692

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. If minimal traffic is anticipated on an existing roadway a default of 50 vph was used.

City of College Station - 2016 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

11/9/2016

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[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
B-2, C-1	Rock Prairie Rd. (1)	Normand Dr. to SH 6	0.48	6	MAJ6	2,068	50%	750	1080	496	584	$ 3,935,724	$ 1,967,862
B-3, C-2	Rock Prairie Rd. (2)	1,500' E. of Holleman Dr. (CL) to Wellborn Rd.	0.64	2	MAJ2	2,068	50%	550	352	662	-310	$ 4,985,000	$ 2,492,500.00
C-3	N Graham Rd.	Old Wellborn Rd. to 2,075' W of Old Wellborn Rd. (CL)	0.39	2	MAJ2	577	100%	550	429	225	204	$ 1,967,000	$ 1,967,000.00
C-4	Wellborn Rd. (1)	Capstone Dr. to Greens Prairie Rd.	1.24	4	MAJ4	541	100%	950	4712	671	4,041	$ 1,281,800	$ 1,281,800
C-5	Wellborn Rd. (2)	Greens Prairie Rd. to 540' S of Greens Prairie Trl.	1.13	4	MAJ4	541	100%	950	4294	611	3,683	$ 1,172,000	$ 1,172,000
C-6	Capstone/Barron Realignment	Wellborn Rd. to 210' W of Piccadilly Cir.	0.31	4	MIN4	New	100%	625	775	0	775	$ 2,289,000	$ 2,289,000
C-7	Barron Rd. (1)	210' W of Piccadilly Cir. to Barron Cut Off Rd.	0.13	4	MIN4	481	100%	625	325	63	262	$ 939,000	$ 939,000
C-8	Barron Rd. (2)	Barron Cut Off Rd. to William D Fitch Pkwy.	0.13	4	MIN4 (1/2)	481	100%	625	325	63	262	$ 494,000	$ 494,000
C-9	Barron Rd. (3)	William D Fitch Pkwy. to Decatur Dr.	1.27	4	MIN4	481	100%	625	3175	611	2,564	$ 7,801,145	$ 7,801,145
C-10	WS Phillips Pkwy. (1)	Barron Rd. to 1740' S of Barron Cut Off Rd.	0.52	4	MIN4 (1/2)	98	100%	625	1300	51	1,249	$ 1,939,000	$ 1,939,000
C-11	WS Phillips Pkwy. (2)	1740' S of Barron Cut Off Rd. to Odell Ln.	0.44	4	MIN4 (1/2)	98	100%	625	1100	43	1,057	$ 1,634,000	$ 1,634,000
C-12	Etonburg	Barron Cut Off Rd. to McCullough Rd. Extension	0.33	2	MAJ2	New	100%	550	363	0	363	$ 1,665,000	$ 1,665,000
C-13	McCullough Rd. Extension	2530' E of Wellborn Rd. to WS Phillips Pkwy.	0.60	2	MAJ2	New	100%	550	660	0	660	$ 3,037,000	$ 3,037,000
C-14	S. Dowling/McCullough	I & G Rd. to 2485' E of I & G Rd.	0.47	2	MAJ2	50	100%	550	517	24	493	$ 2,350,000	$ 2,350,000
C-15	Future 2 Lane Major Collector	S. Dowling/McCullough to Greens Prairie Rd. Extension	0.27	2	MAJ2	New	100%	550	297	0	297	$ 1,372,000	$ 1,372,000
C-16	Greens Prairie Rd. Extension (1)	I & G Rd. to 565' E of I & G Rd. (CL)	0.11	2	MAJ2	New	100%	550	121	0	121	$ 541,000	$ 541,000
C-17	Greens Prairie Rd. Extension (2)	995' W of Welborn Rd. (CL) to Wellborn Rd.	0.19	2	MAJ2	New	100%	550	209	0	209	$ 1,346,000	$ 1,346,000
C-18	Greens Prairie Rd. (1)	Wellborn Rd. to Royder Rd.	0.08	4	MIN4	292	100%	625	200	23	177	$ 561,000	$ 561,000
C-19	Greens Prairie Rd. (2)	Royder Rd. to 750' E of Turnberry Cir.	0.64	2	MAJ2	292	100%	550	704	187	517	$ 3,213,000	$ 3,213,000
C-20	Greens Prairie Rd. (3)	750' E of Turnberry Cir. to Greens Prairie Trl.	0.52	2	MAJ2	292	100%	550	572	152	420	$ 2,592,000	$ 2,592,000
C-21	Royder Rd.	Greens Prairie Rd. to 885' S of Greens Prairie Trl.	1.07	4	MIN4	86	100%	625	2675	92	2,583	$ 4,930,000	$ 4,930,000
C-22	Greens Prairie Trl. (1)	Wellborn Rd. to 1000' W of Woodlake Dr.	1.28	4	MIN4	257	100%	625	3200	329	2,871	$ 6,960,000	$ 6,960,000
C-23	Greens Prairie Rd. (4)	465' E of Future Etonburg to Arrington Rd.	1.44	4	MIN4	292	100%	625	3600	420	3,180	$ 4,230,000	$ 4,230,000
C-24	WS Phillips Pkwy. Extension	Greens Prairie Rd. to Arrington Rd.	1.54	4	MIN4	New	100%	625	3850	0	3,850	$ 11,500,000	$ 11,500,000
C-25	Victoria Ave.	Southern Plantation Dr. to William D Fitch Pkwy.	0.48	2	MAJ2	389	100%	550	528	187	341	$ 1,828,530	$ 1,828,530
I-6	William D Fitch Pkwy. and Victoria Ave. Signal						100%					$ 776,335	$ 776,335
I-7	Wellborn Rd. and S Dowling Rd. Signal						100%					$ 300,000	$ 300,000
SUBTOTAL									**35,363**	**4,910**	**30,453**	**$ 75,639,534**	**$ 71,179,172**

2016 Roadway Impact Fee Study Cost Per Service Area $ 22,125

TOTAL COST IN SERVICE AREA C $ 71,201,297

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. If minimal traffic is anticipated on an existing roadway a default of 50 vph was used.

City of College Station - 2016 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area D

11/9/2016

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[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-5, D-1	Rock Prairie Rd. (1)	Medical Ave. to Bird Pond Rd.	0.45	4	MAJ4	512	50%	650	585	115	470	$ 3,333,000	$ 1,666,500.00
A-7, D-2	Bird Pond Rd.	Rock Prairie Rd. to 4,830' NE of Bird Pond Estates (CL)	1.33	4	MIN4	56	50%	625	1663	37	1626	$ 11,188,000	$ 5,594,000.00
D-3	Rock Prairie Rd. (2)	Bird Pond Rd. to Bradley Rd.	0.68	4	MAJ4	949	100%	650	1768	645	1123	$ 5,046,000	$ 5,046,000.00
D-4	Rock Prairie Rd. (3)	Bradley Rd. to 2,610' E of Campbell Ct. (CL)	3.21	4	MIN4	949	100%	625	8025	3046	4979	$ 23,733,000	$ 23,733,000.00
D-5	Lakeway Dr. (1)	Medical Ave. to Pebble Creek Pkwy.	1.10	2	MAJ2	New	100%	550	1210	0	1,210	$ 8,703,000	$ 8,703,000
D-6	Lakeway Dr. (2)	Pebble Creek Pkwy. to 1,910' N of William D. Fitch Pkwy.	0.49	2	MAJ2	New	100%	550	539	0	539	$ 2,946,000	$ 2,946,000
D-7	Lakeway Dr. (3)	940' S of Technology Way to Future Nantucket Dr.	0.61	2	MAJ2	New	100%	550	671	0	671	$ 4,022,000	$ 4,022,000
D-8	Ritchey Rd.	SH 6 NBFR to Rock Prairie Rd.	0.79	2	MAJ2	New	100%	550	869	0	869	$ 3,964,000	$ 3,964,000
D-9	Bird Pond Rd. Extension	SH 6 to Rock Prairie Rd.	0.94	4	MIN4	New	100%	625	2350	0	2,350	$ 8,894,000	$ 8,894,000
D-10	Pebble Creek Pkwy. (1)	SH 6 NBFR to William D. Fitch Pkwy.	1.52	2	MAJ2	New	100%	550	1672	0	1,672	$ 9,100,000	$ 9,100,000
D-11	Pebble Creek Pkwy. (2)	Royal Adelade Dr. to St. Andrews Dr.	0.36	2	MAJ2	1,223	100%	550	396	440	-44	$ 896,000	$ 896,000
D-12	Pebble Creek Pkwy. (3)	St. Andrews Dr. to Future Nantucket Dr.	0.69	2	MAJ2	New	100%	550	759	0	759	$ 4,886,000	$ 4,886,000
D-13	William D. Fitch Pkwy. (1)	Lakeway Dr. to Rock Prairie Rd.	1.51	6	MAJ6 (1/3)	1,803	100%	750	6795	2,723	4,072	$ 4,392,000	$ 4,392,000
D-14	William D. Fitch Pkwy. (2)	Rock Prairie Rd. to 9,700' E of Tonkaway Lake Rd. (CL)	3.74	6	MAJ6	1,803	100%	750	16830	6,743	10,087	$ 40,890,000	$ 40,890,000
D-15	Future Nantucket Dr.	SH 6 to East City Limits	2.60	4	MIN4	New	100%	625	6500	0	6,500	$ 19,735,000	$ 19,735,000
D-16	Future East-West Major Collector	Pebble Creek Pkwy. to East City Limits	1.11	2	MAJ2	New	100%	550	1221	0	1,221	$ 5,772,000	$ 5,772,000
D-17	Future North-South Major Collector	Future East-West Major Collector to Future Nantucket Dr.	0.63	2	MAJ2	New	100%	550	693	0	693	$ 3,176,000	$ 3,176,000
D-18	Barron Rd. Extension	Lakeway Dr. to Rock Prairie Rd.	1.14	4	MIN4	New	100%	625	2850	0	2,850	$ 12,930,000	$ 12,930,000
SUBTOTAL									**55,396**	**13,749**	**41,647**	**$ 173,606,000**	**$ 166,345,500**

2016 Roadway Impact Fee Study Cost Per Service Area $ 22,125

TOTAL COST IN SERVICE AREA D $ 166,367,625

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. If minimal traffic is anticipated on an existing roadway a default of 50 vph was used.

Appendix C – Existing Roadway Facilities Inventory

City of College Station - 2016 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area A

11/9/2016

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[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					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
Harvey Mitchell Parkway	S Texas Avenue	SH 6	4,056	0.77	2	2	5U-TX	6 Lane Major Arterial	6D	736	736	100%	950	950	1,460	1,460	565	565	894	894		
Appomattox Drive	Harvey Road	Switch Station Road	2,131	0.40	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	172	172						
Appomattox Drive	N Forest Parkway	Emerald Parkway	3,614	0.68	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	291	291						
Bird Pond Road	City Limits	Rock Prairie Road	7,019	1.33	1	1	2U	4 Lane Minor Arterial	4U	25	31	50%	425	425	282	282	17	21	266	262		
Brazoswood Drive	Glenhaven Drive	SH 6 SBFR	904	0.17	1	1	2U	2 Lane Major Collector	2U	86	66	100%	425	425	73	73	15	11	58	61		
Brentwood Drive E	Dartmouth Street	S Texas Avenue	2,556	0.48	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	206	206						
Central Park Lane	Colgate Drive	Southwest Parkway	1,000	0.19	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	80	80						
Central Park Lane	Southwest Parkway	Mid-Street	729	0.14	1	1	3U	2 Lane Minor Collector	2U	n/a	n/a	100%	550	550	76	76						
Colgate Drive	Dartmouth Street	Eastmark Drive	2,374	0.45	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	191	191						
Copperfield Parkway	University Drive E	Harvey Road	3,180	0.60	2	2	4D	4 Lane Minor Arterial	4U	n/a	n/a	100%	650	650	783	783						
Cornell Drive	Manuel Drive	Southwest Parkway E	1,913	0.36	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	154	154						
Dartmouth Street	Harvey Road	Holleman Drive E	1,804	0.34	1	1	3U	4 Lane Minor Arterial	4U	69	141	100%	550	550	188	188	24	48	164	140		
Dartmouth Street	Holleman Drive E	Southwest Parkway E	2,629	0.50	2	2	4U	4 Lane Minor Arterial	4U	91	143	100%	525	525	523	523	45	71	478	452		
Dartmouth Street	Southwest Parkway E	Krenek Tap Road	1,567	0.30	2	2	5U	4 Lane Minor Arterial	4U	118	199	100%	600	600	356	356	35	59	321	297		
Dominik Drive	Glenhaven Drive	George Bush Drive E	6,071	1.15	1	1	2U	2 Lane Major Collector	2U	195	122	100%	425	425	489	489	224	140	264	348		
E Tarrow Drive	University Drive	Couplet Split	965	0.18	3	0	3U	4 Lane Minor Arterial	4U	546	0	100%	550	550	302	0	100	0	202	0		
Eisenhower Street	University Drive	Ash Street	955	0.18	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	77	77						
Emerald Parkway	Amber Ridge	Bent Oak Street	3,588	0.68	1	1	2U	2 Lane Major Collector	2U	160	146	100%	425	425	289	289	109	99	180	190		
Emerald Parkway	SH 6	Corsair Circle (Ext)	1,108	0.21	2	2	5U	4 Lane Minor Arterial	4U	325	169	100%	600	600	252	252	68	35	184	216		
Faulkner Drive	Fontaine Drive	Frost Drive	2,018	0.38	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	162	162						
Foster Avenue	Lincoln Avenue	George Bush E	3,299	0.62	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	266	266						
Foxfire Drive	Sebesta Road	Frost Drive	4,433	0.84	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	357	357						
Francis Drive	Glenhaven Drive	S Texas Avenue	7,538	1.43	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	607	607						
Frost Drive	Foxfire Drive	Bird Pond Road	4,382	0.83	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	353	353						
George Bush Drive E	Texas Avenue	Dominik Drive	1,503	0.28	2	2	4D	2 Lane Major Collector	2U	193	123	100%	650	650	370	370	55	35	315	335		
George Bush Drive E	Dominik Drive	Holleman Drive E	2,777	0.53	1	1	3U	2 Lane Major Collector	2U	20	22	100%	550	550	289	289	11	12	279	278		
Glenhaven Drive	University Drive	Dominik Drive	3,010	0.57	1	1	2U	2 Lane Major Collector	2U	366	322	100%	425	425	242	242	209	184	34	59		
Harvey Road	SH 6	Appomattox Drive	911	0.17	2	1	5U	4 Lane Major Arterial	4D	955	955	100%	600	600	207	104	165	165	42	-61		61
Harvey Road	Stallings Drive	Dartmouth Street	1,263	0.24	2	2	5U-TX	4 Lane Major Arterial	4D	970	970	100%	950	950	454	454	232	232	222	222		
Harvey Road	Darmouth Street	Munson Avenue	363	0.07	2	2	4D-TX	4 Lane Major Arterial	4D	970	970	100%	950	950	131	131	67	67	64	64		
Harvey Road	Pamela (Ext)	Boonville Road	2,542	0.48	1	1	2U-TX	4 Lane Major Arterial	4D	487	487	100%	950	950	457	457	234	234	223	223		
Harvey Road	Pamela (Ext)	Appomattox Drive	8,944	1.69	1	1	2U-TX	4 Lane Major Arterial	4D	649	649	100%	950	950	1,609	1,609	1,099	1,099	510	510		
Harvey Road	Munson Avenue	SH 6	3,516	0.67	2	2	5U-TX	4 Lane Major Arterial	4D	955	955	100%	950	950	1,265	1,265	636	636	629	629		
Harvey Road	George Bush Drive E	Stallings Drive	1,261	0.24	2	2	5U-TX	4 Lane Major Arterial	4D	970	970	100%	950	950	454	454	232	232	222	222		
Harvey Road	S Texas Avenue	George Bush Drive E	1,134	0.21	2	2	4D-TX	4 Lane Major Arterial	4D	970	970	100%	950	950	408	408	208	208	200	200		
Holleman Drive E	S Texas Avenue	SH 6 SBFR	7,021	1.33	1	1	3U	2 Lane Major Collector	2U	84	82	100%	550	550	731	731	112	109	620	622		
Krenek Tap Road	S Texas Avenue	SH 6 SBFR	5,534	1.05	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	445	445						
Lincoln Avenue	University Boulevard	S Texas Avenue	5,978	1.13	1	1	2U	2 Lane Major Collector	2U	585	648	100%	425	425	481	481	662	734	-181	-252	181	252
Manuel Drive	Cornell Drive	S Texas Avenue	3,131	0.59	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	252	252						
Munson Avenue	Dominik Drive	Harvey Road	1,714	0.32	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	138	138						
N Forest Parkway	SH 6 NBFR	705' N of Appomattox Drive	3,511	0.66	1	1	2U	2 Lane Major Collector	2U	99	65	100%	425	425	283	283	66	43	217	239		
Raintree Drive	SH 6	Palm Court	4,553	0.86	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	366	366						
Rock Prairie Road	SH 6 NBFR	Stonebrook Drive	2,123	0.40	1	1	2D	4 Lane Major Arterial	4D	440	509	50%	500	500	101	101	88	102	12	-2		2
Rock Prairie Road	SH 6	SH 6 NBFR	253	0.05	2	2	4D	6 Lane Major Arterial	6D	440	509	50%	650	650	31	31	11	12	21	19		
Rock Prairie Road	Stonebrook Drive	Bird Pond Road (Ext)	3,075	0.58	1	1	2U	4 Lane Major Arterial	4D	267	245	50%	425	425	124	124	78	71	46	52		
S Texas Avenue	University Drive	City Limit	956	0.18	2	2	5U-TX	4 Lane Minor Arterial	4U	2,183	2,183	50%	950	950	172	172	198	198	-26	-26	26	26
S Texas Avenue	University Drive	Harvey Mitchell Parkway	14,423	2.73	3	3	6D-TX	6 Lane Major Arterial	6D	2,183	2,183	50%	950	950	3,893	3,893	2,982	2,982	911	911		
S Texas Avenue	Harvey Mitchell Parkway	Deacon Drive	3,616	0.68	2	2	5U-TX	6 Lane Major Arterial	6D	1,229	1,229	50%	950	950	651	651	421	421	230	230		
S Texas Avenue	Deacon Drive	SH 6	1,451	0.27	2	2	4D-TX	6 Lane Major Arterial	6D	1,229	1,229	50%	950	950	261	261	169	169	92	92		
Sandstone Drive	Emerald Parkway	Sebesta Road	663	0.13	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	53	53						
Sebesta Road	Sandstone Drive	SH 6 NBFR	4,566	0.86	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	368	368						
Southwest Parkway E	Cornell Drive	S Texas Avenue	1,204	0.23	2	2	4D	4 Lane Minor Arterial	4U	548	447	100%	650	650	296	296	125	102	171	195		
Southwest Parkway E	Cornell Drive	SH 6	4,849	0.92	2	2	5U	4 Lane Minor Arterial	4U	675	525	100%	600	600	1,102	1,102	620	482	482	620		
Spring Loop	Tarrow Street	University Drive	3,133	0.59	1	1	2U	2 Lane Major Collector	2U	413	468	100%	425	425	252	252	245	278	7	-26		26
Stallings Drive	Dominik Drive	Harvey Road	1,728	0.33	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	139	139						
Stonebrook Drive	Foxfire Drive	Rock Prairie Road	3,817	0.72	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	307	307						
Switch Station Rd	SH 6 NBFR	Appomattox Drive	1,274	0.24	1	1	2U-R	2 Lane Minor Collector	2U	n/a	n/a	100%	150	150	36	36						
Tarrow Street	Couplet Split	University Drive E	1,463	0.28	0	3	3U	4 Lane Minor Arterial	4U	420	0	100%	550	550	0	457	116	0	-116	457	116	
Tarrow Street	Couplet Split	City Limit	1,257	0.24	1	1	3U	4 Lane Minor Arterial	4U	742	920	100%	550	550	131	131	177	219	-46	-88	46	88
Tarrow Street	University Drive	Lincoln Avenue	1,760	0.33	1	1	3U	2 Lane Major Collector	2U	214	162	100%	550	550	183	183	71	54	112	129		
University Drive E	Boonville Road	SH 6	9,772	1.85	2	2	4D-TX	4 Lane Major Arterial	4D	659	659	50%	950	950	1,758	1,758	610	610	1,148	1,148		
University Drive E	SH 6	Tarrow Street	6,687	1.27	3	3	6D-TX	6 Lane Major Arterial	6D	1,537	1,537	100%	950	950	3,609	3,609	1,947	1,947	1,663	1,663		
University Drive E	Tarrow Street	S Texas Avenue	2,641	0.50	3	3	7U-TX	6 Lane Major Arterial	6D	1,435	1,435	100%	950	950	1,426	1,426	718	718	708	708		
University Oaks Boulevard	George Bush Drive E	SH 6 SBFR	6,321	1.20	1	1	2U	2 Lane Major Collector	2U	216	23	100%	425	425	509	509	259	28	250	481		
Walton Drive	S Texas Avenue	Francis Drive	3,231	0.61	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	260	260						
Woodcreek Drive	SH 6 SBFR	Fontaine Drive	4,776	0.90	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	384	384						
SUBTOTAL			**213,538**	**40.44**											**32,617**	**32,669**	**14,021**	**13,431**	**12,072**	**12,715**	**369**	**455**
															65,287		**27,453**		**24,787**		**824**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Minor Collectors.

City of College Station - 2016 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area B

11/9/2016

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[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					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
Anderson Street	George Bush Drive	Southwest Parkway	6,430	1.22	1	1	3U	2 Lane Major Collector	2U	534	457	100%	550	550	670	670	650	557	19	113		
Balcones Drive	Welsh Avenue	Rio Grande Boulevard	2,223	0.42	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	179	179						
Brentwood Drive	S Texas Avenue	Anderson Street	1,332	0.25	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	107	107						
Brothers Boulevard	S Texas Avenue	Ponderosa Drive	5,844	1.11	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	470	470						
Church Avenue	Nagle Street	Wellborn Road	2,210	0.42	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	178	178						
College Avenue	Inlow Boulevard	University Drive	2,192	0.42	2	2	4D-TX	4 Lane Minor Arterial	4U	538	538	100%	950	950	789	789	223	223	565	565		
College Main	Patricia Street	Cherry Street	1,246	0.24	1	1	2U	2 Lane Major Collector	2U	157	159	100%	425	425	100	100	37	38	63	63		
Deacon Drive	S Texas Avenue	Wellborn Road	9,954	1.89	1	1	3U	2 Lane Major Collector	2U	152	76	100%	550	550	1,037	1,037	287	143	750	894		
Edelweiss Avenue	Rock Prairie Road	Welsh Avenue	2,201	0.42	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	177	177						
F And B Road	City Limit	Turkey Creek Raod	9,274	1.76	1	1	3U	2 Lane Major Collector	2U	71	72	100%	550	550	966	966	125	126	841	840		
Fairview Avenue	Holleman Drive	George Bush Drive	3,574	0.68	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	288	288						
George Bush Drive	S Texas Avenue	Harvey Mitchell Parkway	13,664	2.59	2	2	4D-TX	4 Lane Major Arterial	4D	349	709	100%	950	950	4,917	4,917	903	1,835	4,014	3,082		
Glade Street	Timm Drive	Southwest Parkway	5,232	0.99	1	1	2U	2 Lane Major Collector	2U	574	455	100%	425	425	421	421	569	451	-148	-30	148	30
Harvey Mitchell Parkway	City Limit	S Texas Avenue	31,482	5.96	2	2	4D-TX	6 Lane Major Arterial	6D	1,992	1,180	100%	950	950	11,329	11,329	11,877	7,036	-549	4,293	549	
Hensel Drive	College Avenue	University Drive	4,070	0.77	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	328	328						
Holleman Drive	S Texas Avenue	N Graham Road	25,165	4.77	1	1	3U	2 Lane Major Collector	2U	388	519	100%	550	550	2,621	2,621	1,849	2,474	772	148		
Inlow Boulevard	Nagle Street	College Avenue	1,253	0.24	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	101	101						
Jones Butler Road	Luther Street W	Holleman Drive W	1,191	0.23	2	2	4U	4 Lane Minor Arterial	4U	50	431	100%	525	525	237	237	11	97	226	140		
Longmire Drive	Harvey Mitchell Parkway	Rock Prairie Road	7,728	1.46	1	1	3U	2 Lane Major Collector	2U	839	1,174	100%	550	550	805	805	1,228	1,718	-423	-913	423	913
Luther Street	Wellborn Road	Fairview Avenue	1,740	0.33	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	140	140						
Luther Street W	Marion Pugh Drive	Harvey Mitchell Parkway	5,030	0.95	1	1	2U	2 Lane Major Collector	2U	122	130	100%	425	425	405	405	116	124	289	281		
Marion Pugh Drive	George Bush Drive	Luther Street W	2,288	0.43	1	1	2U	2 Lane Major Collector	2U	216	312	100%	425	425	184	184	94	135	91	49		
Montclair Avenue	Luther Street	George Bush Drive	2,034	0.39	1	1	2U	2 Lane Major Collector	2U	340	340	100%	425	425	164	164	131	131	33	33		
Nagle Street	Foch Street	University Drive	1,869	0.35	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	150	150						
Nueces Drive	Welsh Avenue	Harvey Mitchell Parkway	3,199	0.61	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	257	257						
Ponderosa Road	Rio Grande Boulevard	SH 6 SBFR	4,605	0.87	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	371	371						
Rio Grande Boulevard	Harvey Mitchell Parkway	Rock Prairie Road	6,402	1.21	1	1	3U	2 Lane Major Collector	2U	686	612	100%	550	550	667	667	832	742	-165	-75	165	75
Rock Prairie Road	SH 6	City Limit	13,045	2.47	2	2	4D	6 Lane Major Arterial	6D	1,052	1,016	50%	650	650	1,606	1,606	1,300	1,255	306	351		
Rock Prairie Road W	Holleman Drive S	City Limit	3,920	0.74	1	1	2U	2 Lane Major Collector	2U	1,052	1,016	100%	425	425	316	316	781	754	-466	-439	466	439
S Dexter Drive	Holleman Drive	George Bush Drive	3,708	0.70	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	298	298						
S Texas Avenue	University Drive	City Limit	956	0.18	2	2	5U-TX	4 Lane Minor Arterial	4U	2,183	2,183	50%	950	950	172	172	198	198	-26	-26	26	26
S Texas Avenue	University Drive	Harvey Mitchell Parkway	14,423	2.73	3	3	6D-TX	6 Lane Major Arterial	6D	2,183	2,183	50%	950	950	3,893	3,893	2,982	2,982	911	911		
S Texas Avenue	Harvey Mitchell Parkway	Deacon Drive	3,616	0.68	2	2	5U-TX	6 Lane Major Arterial	6D	1,229	1,229	50%	950	950	651	651	421	421	230	230		
S Texas Avenue	Deacon Drive	SH 6	1,451	0.27	2	2	4D-TX	6 Lane Major Arterial	6D	1,229	1,229	50%	950	950	261	261	169	169	92	92		
Southwest Parkway	Wellborn Road	S Texas Avenue	9,283	1.76	2	2	5U	4 Lane Minor Arterial	4U	699	724	100%	600	600	2,110	2,110	1,229	1,273	881	837		
Southwood Drive	Southwest Parkway	Dead End	4,799	0.91	1	1	2U	2 Lane Major Collector	2U	532	648	100%	425	425	386	386	484	589	-97	-203	97	203
Timber Street	George Bush Drive	Timm Drive	1,628	0.31	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	131	131						
Timm Drive	Timber Street	Glade Street	344	0.07	1	1	2U	2 Lane Major Collector	2U	n/a	n/a	100%	425	425	28	28						
Turkey Creek Road	Raymond Stotzer Parkway	S Traditions Drive	3,313	0.63	1	1	2U	2 Lane Major Collector	2U	60	80	100%	425	425	267	267	38	50	229	216		
University Drive	S Texas Avenue	Harvey Mitchell Parkway	13,054	2.47	3	3	6D-TX	6 Lane Major Arterial	6D	1,740	1,740	100%	950	950	7,046	7,046	4,302	4,302	2,744	2,744		
Wellborn Road	City Limit	Rock Prairie Road	22,261	4.22	2	2	5U-TX	6 Lane Major Arterial	6D	1,198	1,672	100%	950	950	8,011	8,011	5,051	7,049	2,960	961		
Welsh Avenue	Holleman Drive	Rock Prairie Road	11,962	2.27	1	1	3U	2 Lane Major Collector	2U	593	636	100%	550	550	1,246	1,246	1,343	1,441	-97	-195	97	195
SUBTOTAL			**271,195**	**51.36**											**54,478**	**54,478**	**37,228**	**36,312**	**14,047**	**14,963**	**1,971**	**1,881**
															108,957		**73,540**		**29,009**		**3,852**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Minor Collectors.

City of College Station - 2016 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area C

11/9/2016

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[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					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
Alexandria Avenue	Graham Road	Decatur Drive	8,441	1.60	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	679	679						
Arnold Road	Farah Drive	Schaffer Drive	812	0.15	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	65	65						
Arrington Road	Decatur Drive	SH 6 SBFR	1,442	0.27	1	1	2U	2 Lane Major Collector	2U	216	211	100%	425	425	116	116	59	58	57	58		
Arrington Road	Harpers Gerry Road	S Oaks Drive	2,873	0.54	1	1	2U	2 Lane Major Collector	2U	481	598	50%	425	425	116	116	131	163	-15	-47	15	47
Barron Road	SH 6	670' E of Barron Cut Off Road	10,035	1.90	2	2	4D	4 Lane Minor Arterial	4U	247	234	100%	650	650	2,471	2,471	469	445	2,001	2,026		
Birmingham Road	Birmingham Road	SH 6 SBFR	2,301	0.44	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	185	185						
Castlegate Drive	Greens Prairie Road	Victoria Avenue	4,510	0.85	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	363	363						
Decatur Drive	Barron Road	Alexandria Avenue	3,270	0.62	1	1	2U	2 Lane Major Collector	2U	218	101	100%	425	425	263	263	135	63	128	201		
Eagle Avenue	Alexandria Avenue	SH 6 SBFR	3,648	0.69	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	294	294						
Edelweiss Avenue	Mortier Drive	Rock Prairie Road	2,937	0.56	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	236	236						
Graham Road	SH 6 SBFR	Wellborn Road	8,980	1.70	1	1	3U	2 Lane Major Collector	2U	712	135	100%	550	550	935	935	1,211	230	-276	706	276	
Greens Prairie Road W	Whites Creek Lane	Wellborn Road	15,221	2.88	1	1	2U	2 Lane Major Collector	2U	145	147	100%	425	425	1,225	1,225	418	424	807	801		
Greens Prairie Trail	Woodlake Drive	Wellborn Road	7,735	1.46	1	1	2U	4 Lane Minor Arterial	4U	112	145	100%	425	425	623	623	164	212	459	410		
Harpers Ferry Road	City Limit	Nantucket Drive	974	0.18	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	50%	425	425	39	39						
I & G Road	Capstone Drive	City Limit	5,782	1.10	1	1	2U-R	4 Lane Minor Arterial	4U	57	84	50%	150	150	82	82	31	46	51	36		
I & G Road	City Limit	City Limit	675	0.13	1	1	2U-R	4 Lane Minor Arterial	4U	57	84	50%	150	150	10	10	4	5	6	4		
Longmire Drive	Rock Prairie Road	Barron Road	6,254	1.18	1	1	3U	2 Lane Major Collector	2U	50	595	100%	550	550	651	651	59	705	592	-53		53
Montier Drive	Wellborn Road	Victoria Avenue	2,562	0.49	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	206	206						
N Graham Road	Old Wellborn Road	City Limit	2,074	0.39	1	1	2U	2 Lane Major Collector	2U	304	273	100%	425	425	167	167	119	107	48	60		
Nantucket Drive	Harpers Ferry	SH 6 SBFR	2,019	0.38	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	163	163						
Newport Lane	Eagle Avenue	Barron Road	2,177	0.41	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	175	175						
Old Wellborn Road	Rock Prairie Road W	N Graham Road	1,209	0.23	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	97	97						
Rock Prairie Road	SH 6	City Limit	13,045	2.47	2	2	4D	6 Lane Major Arterial	6D	1,052	1,016	50%	650	650	1,606	1,606	1,300	1,255	306	351		
Royder Road	Greens Prairie Road W	City Limit	5,632	1.07	1	1	2U	4 Lane Minor Arterial	4U	41	45	100%	425	425	453	453	44	48	410	405		
Schaffer Drive	Arnold Drive	Graham Road	2,020	0.38	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	163	163						
Southern Plantation Drive	Newport Lane	SH 6 SBFR	4,638	0.88	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	373	373						
Victoria Avenue	Rock Prairie Road	Barron Road	7,711	1.46	1	1	3U	2 Lane Major Collector	2U	189	200	100%	550	550	803	803	276	292	527	511		
Victoria Avenue	WS Phillips Parkway	William D Fitch Parkway	3,061	0.58	1	1	2U	2 Lane Major Collector	2U	228	402	100%	425	425	246	246	132	233	114	13		
Wellborn Road	Rock Prairie Road	Greens Prairie Trail	20,516	3.89	1	1	2U-TX	4 Lane Major Arterial	4D	216	325	100%	950	950	3,691	3,691	839	1,263	2,852	2,429		
William D Fitch Parkway	SH 6	Wellborn Road	15,498	2.94	2	2	4D-TX	Freeway/Expressway	6D	721	881	100%	950	950	5,577	5,577	2,116	2,586	3,461	2,991		
SUBTOTAL			**130,720**	**24.76**											**22,076**	**22,076**	**7,508**	**8,134**	**11,528**	**10,902**	**291**	**100**
															44,151		**15,642**		**22,431**		**391**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Minor Collectors.

City of College Station - 2016 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area D

11/9/2016

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[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					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
Bird Pond Road	City Limits	Rock Prairie Road	7,019	1.33	1	1	2U	4 Lane Minor Arterial	4U	25	31	50%	425	425	282	282	17	21	266	262		
Lakeway Drive	William D Fitch Parkway	775' S of Technology Way	5,659	1.07	1	1	3U	2 Lane Major Collector	2U	361	387	100%	550	550	589	589	387	415	203	175		
Parkview Drive	Lakeway Drive	Spearman Drive	2,052	0.39	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	165	165						
Pebble Creek Parkway	William D Fitch Parkway	Royal Adelade Drive	5,178	0.98	1	1	4D	2 Lane Major Collector	2U	613	610	100%	650	650	637	637	601	598	36	39		
Rock Prairie Road	SH 6	City Limits	26,009	4.93	1	1	2U	4 Lane Minor Arterial	4U	440	509	100%	425	425	2,094	2,094	2,167	2,507	-74	-414	74	414
Spearman Drive	Fore Court	Pebble Creek Parkway	4,544	0.86	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	366	366						
St Andrews Drive	Birkdale	Royal Adelade Drive	3,479	0.66	1	1	2U	2 Lane Minor Collector	2U	n/a	n/a	100%	425	425	280	280						
Venture Drive	SH 6 NBFR	Lakeway Drive	1,065	0.20	1	1	2U	2 Lane Major Collector	2U	9	529	100%	425	425	86	86	2	107	84	-21		21
William D Fitch Parkway	SH 6	SH 30	28,985	5.49	2	2	4D-TX	6 Lane Major Arterial	6D	908	895	100%	950	950	10,430	10,430	4,985	4,913	5,446	5,517		
SUBTOTAL			**83,990**	**16**											**14,930**	**14,930**	**8,158**	**8,561**	**5,960**	**5,558**	**74**	**435**
															29,860		**16,719**		**11,518**		**509**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Minor Collectors.

Appendix D – Plan for Awarding the Transportation Impact Fee Credit Summary

(as prepared by NewGen Strategies.)

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area A

Recoverable Impact Fee CIP Costs	$	11,114,539	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		-	Page 4 of Appendix E - Service Area A
Financing Costs		5,060,262	See Detail Below
Interest Earnings		(906,150)	Page 5 of Appendix E - Service Area A
Pre Credit Recoverable Cost for Impact Fee	$	15,268,651	Sum of Above
Credit for Ad Valorem Revenues		(166,710)	Page 8 of Appendix E - Service Area A
Maximum Recoverable Cost for Impact Fee	**$**	**15,101,941**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area A column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area A.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed 80% of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area A). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	13,814,607	(Page 3 of Appendix E - Service Area A)
Existing Annual Debt Service		-	(Page 3 of Appendix E - Service Area A)
Principal Component		(8,754,344)	(Page 4 of Appendix E - Service Area A)
Financing Costs	$	5,060,262	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 0.71% annual interest rate based on the City's Average Weighted Interest from 03-31-2016 Balances. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area A.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area A.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area B

Recoverable Impact Fee CIP Costs	$	12,131,501	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		(426,322)	Page 4 of Appendix E - Service Area A
Financing Costs		4,955,838	See Detail Below
Interest Earnings		(760,714)	Page 5 of Appendix E - Service Area B
Pre Credit Recoverable Cost for Impact Fee	$	15,900,303	Sum of Above
Credit for Ad Valorem Revenues		(232,443)	Page 8 of Appendix E - Service Area B
Maximum Recoverable Cost for Impact Fee	**$**	**15,667,860**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area B column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal already paid for existing debt funded projects from a detailed project funding list and debt service schedules provided by the City.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed 80% of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area B). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	10,061,373	(Page 3 of Appendix E - Service Area B)
Existing Annual Debt Service		4,904,838	(Page 3 of Appendix E - Service Area B)
Principal Component		(10,010,372)	(Page 4 of Appendix E - Service Area B)
Financing Costs	$	4,955,838	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 0.71% annual interest rate based on the City's Average Weighted Interest from 03-31-2016 Balances. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area B.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area B.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area C

Recoverable Impact Fee CIP Costs	$	38,314,255	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		(1,495,473)	Page 4 of Appendix E - Service Area A
Financing Costs		15,158,448	See Detail Below
Interest Earnings		(2,354,300)	Page 5 of Appendix E - Service Area C
Pre Credit Recoverable Cost for Impact Fee	$	49,622,929	Sum of Above
Credit for Ad Valorem Revenues		(957,823)	Page 8 of Appendix E - Service Area C
Maximum Recoverable Cost for Impact Fee	**$**	**48,665,106**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area C column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal already paid for existing debt funded projects from a detailed project funding list and debt service schedules provided by the City.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed 80% of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area C). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	30,395,280	(Page 3 of Appendix E - Service Area C)
Existing Annual Debt Service		16,690,639	(Page 3 of Appendix E - Service Area C)
Principal Component		(31,927,472)	(Page 4 of Appendix E - Service Area C)
Financing Costs	$	15,158,448	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 0.71% annual interest rate based on the City's Average Weighted Interest from 03-31-2016 Balances. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area C.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area C.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area D

Recoverable Impact Fee CIP Costs	$	40,894,187	Line 11, Max Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		(676,619)	Page 4 of Appendix E - Service Area A
Financing Costs		18,161,493	See Detail Below
Interest Earnings		(3,172,804)	Page 5 of Appendix E - Service Area D
Pre Credit Recoverable Cost for Impact Fee	$	55,206,256	Sum of Above
Credit for Ad Valorem Revenues		(626,934)	Page 8 of Appendix E - Service Area D
Maximum Recoverable Cost for Impact Fee	**$**	**54,579,323**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area D column, line 11 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal already paid for existing debt funded projects from a detailed project funding list and debt service schedules provided by the City.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed 80% of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area D). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	47,984,488	(Page 3 of Appendix E - Service Area D)
Existing Annual Debt Service		2,770,480	(Page 3 of Appendix E - Service Area D)
Principal Component		(32,593,476)	(Page 4 of Appendix E - Service Area D)
Financing Costs	$	18,161,493	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 0.71% annual interest rate based on the City's Average Weighted Interest from 03-31-2016 Balances. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area D.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area D.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues. This is the maximum cost that can be recovered through impact fees.

Appendix E – Plan for Awarding the Transportation Impact Fee Credit Supporting Exhibits

(as prepared by NewGen Strategies.)

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

I. General Assumptions

Annual Interest Rate on Deposits[1]	0.71%
Annual Service Unit Growth[2]	1,424
Portion of Projects Funded by Existing Debt[3]	$ -
Non-debt Funded New Project Cost[4]	2,360,195
New Project Cost Funded Through New Debt[5]	8,754,344
Total Recoverable Project Cost[6]	$ 11,114,539

II. New Debt Issues Assumptions

Year	Principal[7]	Interest[8]	Term
1	$ 875,434	4.00%	20
2	875,434	4.50%	20
3	875,434	4.75%	20
4	875,434	4.75%	20
5	875,434	5.00%	20
6	875,434	5.00%	20
7	875,434	5.00%	20
8	875,434	5.00%	20
9	875,434	5.00%	20
10	875,434	5.00%	20
Total	$ 8,754,344		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[9]
1	$ 833,590
2	1,111,454
3	1,111,454
4	1,111,454
5	1,111,454
6	1,111,454
7	1,111,454
8	1,111,454
9	1,111,454
10	1,389,317
Total	$ 11,114,539

(1) Average Weighted Interest from 03-31-2016 Balances
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) Not applicable to this service area
(4) Assumes 20% of new project costs funded through sources other than debt unless otherwise specified
(5) Assumes 80% of new project costs funded through new debt issues unless otherwise specified
(6) Line 11 of the Max Fee Table Report
(7) Assumes new debt issued in equal annual amounts
(8) Estimated interest cost provided by City Staff
(9) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent fully in tenth year; Non-debt funded capital expenditures made in equal annual amounts

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 64,416	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 64,416
2	64,416	67,300	-	-	-	-	-	-	-	-	131,716
3	64,416	67,300	68,766	-	-	-	-	-	-	-	200,482
4	64,416	67,300	68,766	68,766	-	-	-	-	-	-	269,248
5	64,416	67,300	68,766	68,766	70,247	-	-	-	-	-	339,495
6	64,416	67,300	68,766	68,766	70,247	70,247	-	-	-	-	409,742
7	64,416	67,300	68,766	68,766	70,247	70,247	70,247	-	-	-	479,989
8	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	-	-	550,236
9	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	-	620,483
10	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
11	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
12	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
13	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
14	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
15	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
16	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
17	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
18	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
19	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
20	64,416	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	690,730
21	-	67,300	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	626,314
22	-	-	68,766	68,766	70,247	70,247	70,247	70,247	70,247	70,247	559,014
23	-	-	-	68,766	70,247	70,247	70,247	70,247	70,247	70,247	490,249
24	-	-	-	-	70,247	70,247	70,247	70,247	70,247	70,247	421,483
25	-	-	-	-	-	70,247	70,247	70,247	70,247	70,247	351,236
26	-	-	-	-	-	-	70,247	70,247	70,247	70,247	280,988
27	-	-	-	-	-	-	-	70,247	70,247	70,247	210,741
28	-	-	-	-	-	-	-	-	70,247	70,247	140,494
29	-	-	-	-	-	-	-	-	-	70,247	70,247
	$ 1,288,320	$ 1,346,000	$ 1,375,316	$ 1,375,316	$ 1,404,942	$ 1,404,942	$ 1,404,942	$ 1,404,942	$ 1,404,942	$ 1,404,942	$ 13,814,607

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 64,416	$ 833,590	$ (875,434)	$ -	$ (425)	$ 22,147
2	131,716	1,111,454	(875,434)	-	(1,726)	366,009
3	200,482	1,111,454	(875,434)	-	(3,916)	432,586
4	269,248	1,111,454	(875,434)	-	(6,966)	498,301
5	339,495	1,111,454	(875,434)	-	(10,909)	564,605
6	409,742	1,111,454	(875,434)	-	(15,699)	630,063
7	479,989	1,111,454	(875,434)	-	(21,319)	694,690
8	550,236	1,111,454	(875,434)	-	(27,754)	758,502
9	620,483	1,111,454	(875,434)	-	(34,989)	821,514
10	690,730	1,389,317	(875,434)	-	(43,008)	1,161,605
11	690,730	-	-	-	-	690,730
12	690,730	-	-	-	-	690,730
13	690,730	-	-	-	-	690,730
14	690,730	-	-	-	-	690,730
15	690,730	-	-	-	-	690,730
16	690,730	-	-	-	-	690,730
17	690,730	-	-	-	-	690,730
18	690,730	-	-	-	-	690,730
19	690,730	-	-	-	-	690,730
20	690,730	-	-	-	-	690,730
21	626,314	-	-	-	-	626,314
22	559,014	-	-	-	-	559,014
23	490,249	-	-	-	-	490,249
24	421,483	-	-	-	-	421,483
25	351,236	-	-	-	-	351,236
26	280,988	-	-	-	-	280,988
27	210,741	-	-	-	-	210,741
28	140,494	-	-	-	-	140,494
29	70,247	-	-	-	-	70,247
	$ 13,814,607	$ 11,114,539	$ (8,754,344)	$ -	$ (166,710)	$ 16,008,091

III. Summary of Principal Paid to Date for Existing Debt[3]

The projects related to this area have not been previously funded with debt.

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]	$	-
-Less Principal PTD		-
Outstanding Debt Principal		-
New Project Costs Debt Principal[5]		8,754,344
Principal Component	**$**	**8,754,344**

(1) Appendix E - Service Area A, Page 2
(2) Appendix E - Service Area A, Page 1
(3) Not Applicable for this Area
(4) Appendix E - Service Area A, Page 8
(5) Appendix E - Service Area A, Page 1

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 1,061	1,424	$ 1,510,194	$ 22,147	$ 1,488,047	$ 5,272	1,493,319
2	1,061	1,424	1,510,194	366,009	1,144,185	14,636	2,652,140
3	1,061	1,424	1,510,194	432,586	1,077,608	22,612	3,752,361
4	1,061	1,424	1,510,194	498,301	1,011,893	30,176	4,794,429
5	1,061	1,424	1,510,194	564,605	945,589	37,325	5,777,343
6	1,061	1,424	1,510,194	630,063	880,131	44,058	6,701,533
7	1,061	1,424	1,510,194	694,690	815,504	50,378	7,567,416
8	1,061	1,424	1,510,194	758,502	751,692	56,288	8,375,396
9	1,061	1,424	1,510,194	821,514	688,680	61,791	9,125,867
10	1,061	1,424	1,510,194	1,161,605	348,589	65,904	9,540,360
11	-	-	-	690,730	(690,730)	65,158	8,914,788
12	-	-	-	690,730	(690,730)	60,725	8,284,783
13	-	-	-	690,730	(690,730)	56,261	7,650,313
14	-	-	-	690,730	(690,730)	51,765	7,011,348
15	-	-	-	690,730	(690,730)	47,237	6,367,855
16	-	-	-	690,730	(690,730)	42,677	5,719,801
17	-	-	-	690,730	(690,730)	38,085	5,067,156
18	-	-	-	690,730	(690,730)	33,460	4,409,886
19	-	-	-	690,730	(690,730)	28,802	3,747,958
20	-	-	-	690,730	(690,730)	24,112	3,081,339
21	-	-	-	626,314	(626,314)	19,616	2,474,641
22	-	-	-	559,014	(559,014)	15,555	1,931,182
23	-	-	-	490,249	(490,249)	11,948	1,452,881
24	-	-	-	421,483	(421,483)	8,802	1,040,201
25	-	-	-	351,236	(351,236)	6,127	695,092
26	-	-	-	280,988	(280,988)	3,930	418,033
27	-	-	-	210,741	(210,741)	2,216	209,507
28	-	-	-	140,494	(140,494)	987	70,000
29	-	-	-	70,247	(70,247)	247	(0)
			$ 15,101,941	$ 16,008,091		$ 906,150	

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Year	Number of Years to End of Period	Future Value Escalation Interest Rate Factor	Future Value Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.2229	1.0000	1,424	1,741	$ 22,147	$ 27,084
2	28	1.2143	1.0000	1,424	1,729	366,009	444,456
3	27	1.2058	1.0000	1,424	1,717	432,586	521,605
4	26	1.1973	1.0000	1,424	1,705	498,301	596,616
5	25	1.1889	1.0000	1,424	1,693	564,605	671,245
6	24	1.1805	1.0000	1,424	1,681	630,063	743,795
7	23	1.1722	1.0000	1,424	1,669	694,690	814,318
8	22	1.1640	1.0000	1,424	1,657	758,502	882,862
9	21	1.1558	1.0000	1,424	1,645	821,514	949,477
10	20	1.1476	1.0000	1,424	1,634	1,161,605	1,333,096
11	19	1.1396	1.0000	-	-	690,730	787,127
12	18	1.1315	1.0000	-	-	690,730	781,588
13	17	1.1236	1.0000	-	-	690,730	776,089
14	16	1.1157	1.0000	-	-	690,730	770,628
15	15	1.1078	1.0000	-	-	690,730	765,206
16	14	1.1000	1.0000	-	-	690,730	759,821
17	13	1.0923	1.0000	-	-	690,730	754,475
18	12	1.0846	1.0000	-	-	690,730	749,166
19	11	1.0770	1.0000	-	-	690,730	743,895
20	10	1.0694	1.0000	-	-	690,730	738,660
21	9	1.0619	1.0000	-	-	626,314	665,062
22	8	1.0544	1.0000	-	-	559,014	589,421
23	7	1.0470	1.0000	-	-	490,249	513,278
24	6	1.0396	1.0000	-	-	421,483	438,177
25	5	1.0323	1.0000	-	-	351,236	362,578
26	4	1.0250	1.0000	-	-	280,988	288,021
27	3	1.0178	1.0000	-	-	210,741	214,496
28	2	1.0107	1.0000	-	-	140,494	141,991
29	1	1.0035	1.0000	-	-	70,247	70,496
					16,869	$ 16,008,091	$ 17,894,729

Total Escalated Expense for Entire Period	$	17,894,729
Total Escalated Service Units		16,869
Impact Fee for Service Area A	**$**	**1,061**

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
Pavilion Ave. Extension	A-1	$ 2,434,000	$ 1,617,080	$ -	$ 1,293,664	$ 323,416	$ 1,617,080
Dartmouth St. Extension	A-2	1,224,000	813,191	-	650,553	162,638	813,191
Lassie Ln. Extension	A-3	302,000	200,640	-	160,512	40,128	200,640
S Texas Ave.	A-4, B-1	166,000	110,286	-	88,229	22,057	110,286
Rock Prairie Rd. (1)	A-5, D-1	1,666,500	1,107,175	-	885,740	221,435	1,107,175
Harvey Rd.	A-6	3,249,600	2,158,942	-	1,727,153	431,788	2,158,942
Bird Pond Rd.	A-7, D-2	5,594,000	3,716,495	-	2,973,196	743,299	3,716,495
Linda Lane	A-8	785,000	521,532	-	417,225	104,306	521,532
S Texas Ave. and Deacon Dr. Signal	I-1	75,000	49,828	-	-	49,828	49,828
Holleman Rd. and S. Texas Ave. Improvement	I-2	750,000	498,279	-	398,623	99,656	498,279
S Texas Ave. and Walton Dr. Signal	I-3	150,000	99,656	-	-	99,656	99,656
University Dr. and University Towne Center Signal	I-4	300,000	199,311	-	159,449	39,862	199,311
Study Costs		22,125	22,125	-	-	22,125	22,125
Total		**$ 16,718,225**	**$ 11,114,539**	**$ -**	**$ 8,754,344**	**$ 2,360,195**	**$ 11,114,539**

(1) 2016 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Line 11 of the Max Fee Table Report

(3) Based on Contributions by Project and Planned Future Debt Financing

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

2016 Vehicle Miles (All Service Areas) [1]	214,409	
Ten Year Growth in Vehicle Miles (Service Area A) [2]	14,237	
	10	years
Annual Growth in Vehicle Miles	1,424	

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	$ 64,416	$ 131,716	$ 200,482	$ 269,248	$ 339,495	$ 409,742	$ 479,989	$ 550,236	$ 620,483	$ 690,730	$ 3,756,537
2016 Vehicle Miles plus Service Area A Growth	215,833	217,256	218,680	220,104	221,527	222,951	224,375	225,798	227,222	228,646	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	$ 0.30	$ 0.61	$ 0.92	$ 1.22	$ 1.53	$ 1.84	$ 2.14	$ 2.44	$ 2.73	$ 3.02	
Annual Growth in Service Area A Vehicle Miles (Cumulative)	1,424	2,847	4,271	5,695	7,118	8,542	9,966	11,389	12,813	14,237	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	$ 425	$ 1,726	$ 3,916	$ 6,966	$ 10,909	$ 15,699	$ 21,319	$ 27,754	$ 34,989	$ 43,008	$ 166,710

Credit Amount **$ 166,710**

(1) Engineer's calculation

(2) Line 8 of the Max Fee Table Report

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

I. General Assumptions

Annual Interest Rate on Deposits[1]	0.71%
Annual Service Unit Growth[2]	1,461
Portion of Projects Funded by Existing Debt[3]	$ 4,060,782
Non-debt Funded New Project Cost[4]	1,694,807
New Project Cost Funded Through New Debt[5]	6,375,912
Total Recoverable Project Cost[6]	$ 12,131,501

II. New Debt Issues Assumptions

Year	Principal[7]	Interest[8]	Term
1	$ 637,591	4.00%	20
2	637,591	4.50%	20
3	637,591	4.75%	20
4	637,591	4.75%	20
5	637,591	5.00%	20
6	637,591	5.00%	20
7	637,591	5.00%	20
8	637,591	5.00%	20
9	637,591	5.00%	20
10	637,591	5.00%	20
Total	$ 6,375,912		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[9]
1	$ 605,304
2	807,072
3	807,072
4	807,072
5	807,072
6	807,072
7	807,072
8	807,072
9	807,072
10	1,008,840
Total	$ 8,070,719

(1) Average Weighted Interest from 03-31-2016 Balances
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) Existing debt service allocable to projects in this area as provided by staff
(4) Assumes 20% of new project costs funded through sources other than debt unless otherwise specified
(5) Assumes 80% of new project costs funded through new debt issues unless otherwise specified
(6) Line 11 of the Max Fee Table Report
(7) Assumes new debt issued in equal annual amounts
(8) Estimated interest cost provided by City Staff
(9) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent fully in tenth year; Non-debt funded capital expenditures made in equal annual amounts

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 46,915	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 46,915
2	46,915	49,016	-	-	-	-	-	-	-	-	95,931
3	46,915	49,016	50,083	-	-	-	-	-	-	-	146,014
4	46,915	49,016	50,083	50,083	-	-	-	-	-	-	196,097
5	46,915	49,016	50,083	50,083	51,162	-	-	-	-	-	247,259
6	46,915	49,016	50,083	50,083	51,162	51,162	-	-	-	-	298,421
7	46,915	49,016	50,083	50,083	51,162	51,162	51,162	-	-	-	349,583
8	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	-	-	400,745
9	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	-	451,907
10	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
11	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
12	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
13	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
14	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
15	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
16	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
17	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
18	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
19	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
20	46,915	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	503,069
21	-	49,016	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	456,154
22	-	-	50,083	50,083	51,162	51,162	51,162	51,162	51,162	51,162	407,138
23	-	-	-	50,083	51,162	51,162	51,162	51,162	51,162	51,162	357,055
24	-	-	-	-	51,162	51,162	51,162	51,162	51,162	51,162	306,972
25	-	-	-	-	-	51,162	51,162	51,162	51,162	51,162	255,810
26	-	-	-	-	-	-	51,162	51,162	51,162	51,162	204,648
27	-	-	-	-	-	-	-	51,162	51,162	51,162	153,486
28	-	-	-	-	-	-	-	-	51,162	51,162	102,324
29	-	-	-	-	-	-	-	-	-	51,162	51,162
	$ 938,302	$ 980,311	$ 1,001,662	$ 1,001,662	$ 1,023,239	$ 1,023,239	$ 1,023,239	$ 1,023,239	$ 1,023,239	$ 1,023,239	$ 10,061,373

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 46,915	$ 605,304	$ (637,591)	$ 424,911	$ (3,193)	$ 436,346
2	95,931	807,072	(637,591)	335,387	(5,799)	594,999
3	146,014	807,072	(637,591)	329,476	(9,526)	635,444
4	196,097	807,072	(637,591)	328,763	(13,927)	680,414
5	247,259	807,072	(637,591)	321,722	(18,747)	719,715
6	298,421	807,072	(637,591)	322,464	(24,388)	765,977
7	349,583	807,072	(637,591)	322,338	(30,591)	810,810
8	400,745	807,072	(637,591)	313,486	(36,923)	846,789
9	451,907	807,072	(637,591)	281,342	(42,371)	860,359
10	503,069	1,008,840	(637,591)	233,294	(46,977)	1,060,635
11	503,069	-	-	196,645	-	699,713
12	503,069	-	-	196,705	-	699,774
13	503,069	-	-	196,911	-	699,980
14	503,069	-	-	196,914	-	699,983
15	503,069	-	-	182,656	-	685,725
16	503,069	-	-	182,368	-	685,437
17	503,069	-	-	179,189	-	682,258
18	503,069	-	-	156,850	-	659,918
19	503,069	-	-	101,570	-	604,639
20	503,069	-	-	101,845	-	604,914
21	456,154	-	-	-	-	456,154
22	407,138	-	-	-	-	407,138
23	357,055	-	-	-	-	357,055
24	306,972	-	-	-	-	306,972
25	255,810	-	-	-	-	255,810
26	204,648	-	-	-	-	204,648
27	153,486	-	-	-	-	153,486
28	102,324	-	-	-	-	102,324
29	51,162	-	-	-	-	51,162
	$ 10,061,373	$ 8,070,719	$ (6,375,912)	$ 4,904,838	$ (232,443)	$ 16,428,575

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

III. Summary of Principal Paid to Date for Existing Debt[3]

Bond Series	Principal Paid To Date
GO 2008	$ 60,736
GO 2009	-
GO 2010	45,460
GO 2011	6,595
GO 2012	84,995
GO 2013	151,025
GO 2014	-
CO 2014	77,512
GO 2016	-
CO 2016	-
Total Paid to Date	**$ 426,322**

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]	$ 4,060,782
-Less Principal PTD	426,322
Outstanding Debt Principal	3,634,460
New Project Costs Debt Principal[5]	6,375,912
Principal Component	**$ 10,010,372**

(1) Appendix E - Service Area B, Page 2
(2) Appendix E - Service Area B, Page 1
(3) Existing debt funded, eligible project costs calculated from scheduled annual debt service payments.
(4) Appendix E - Service Area B, Page 8
(5) Appendix E - Service Area B, Page 1

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 1,072	1,461	$ 1,566,786	$ 436,346	$ 1,130,440	$ 4,005	1,134,446
2	1,072	1,461	1,566,786	594,999	971,787	11,482	2,117,715
3	1,072	1,461	1,566,786	635,444	931,342	18,307	3,067,364
4	1,072	1,461	1,566,786	680,414	886,372	24,877	3,978,612
5	1,072	1,461	1,566,786	719,715	847,072	31,195	4,856,878
6	1,072	1,461	1,566,786	765,977	800,809	37,255	5,694,942
7	1,072	1,461	1,566,786	810,810	755,976	43,035	6,493,952
8	1,072	1,461	1,566,786	846,789	719,998	48,569	7,262,519
9	1,072	1,461	1,566,786	860,359	706,427	53,967	8,022,913
10	1,072	1,461	1,566,786	1,060,635	506,151	58,646	8,587,710
11	-	-	-	699,713	(699,713)	58,376	7,946,373
12	-	-	-	699,774	(699,774)	53,831	7,300,430
13	-	-	-	699,980	(699,980)	49,253	6,649,702
14	-	-	-	699,983	(699,983)	44,642	5,994,361
15	-	-	-	685,725	(685,725)	40,048	5,348,685
16	-	-	-	685,437	(685,437)	35,474	4,698,722
17	-	-	-	682,258	(682,258)	30,879	4,047,343
18	-	-	-	659,918	(659,918)	26,342	3,413,767
19	-	-	-	604,639	(604,639)	22,049	2,831,177
20	-	-	-	604,914	(604,914)	17,919	2,244,183
21	-	-	-	456,154	(456,154)	14,287	1,802,316
22	-	-	-	407,138	(407,138)	11,329	1,406,507
23	-	-	-	357,055	(357,055)	8,702	1,058,154
24	-	-	-	306,972	(306,972)	6,411	757,593
25	-	-	-	255,810	(255,810)	4,462	506,245
26	-	-	-	204,648	(204,648)	2,862	304,459
27	-	-	-	153,486	(153,486)	1,614	152,587
28	-	-	-	102,324	(102,324)	719	50,982
29	-	-	-	51,162	(51,162)	180	(0)
			$ 15,667,860	$ 16,428,575		$ 760,714	

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Year	Number of Years to End of Period	Future Value Escalation Interest Rate Factor	Future Value Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.2229	1.0000	1,461	1,787	$ 436,346	$ 533,622
2	28	1.2143	1.0000	1,461	1,774	594,999	722,524
3	27	1.2058	1.0000	1,461	1,762	635,444	766,209
4	26	1.1973	1.0000	1,461	1,749	680,414	814,660
5	25	1.1889	1.0000	1,461	1,737	719,715	855,651
6	24	1.1805	1.0000	1,461	1,725	765,977	904,244
7	23	1.1722	1.0000	1,461	1,713	810,810	950,435
8	22	1.1640	1.0000	1,461	1,701	846,789	985,624
9	21	1.1558	1.0000	1,461	1,689	860,359	994,373
10	20	1.1476	1.0000	1,461	1,677	1,060,635	1,217,219
11	19	1.1396	1.0000	-	-	699,713	797,364
12	18	1.1315	1.0000	-	-	699,774	791,822
13	17	1.1236	1.0000	-	-	699,980	786,482
14	16	1.1157	1.0000	-	-	699,983	780,951
15	15	1.1078	1.0000	-	-	685,725	759,660
16	14	1.1000	1.0000	-	-	685,437	753,998
17	13	1.0923	1.0000	-	-	682,258	745,220
18	12	1.0846	1.0000	-	-	659,918	715,747
19	11	1.0770	1.0000	-	-	604,639	651,177
20	10	1.0694	1.0000	-	-	604,914	646,889
21	9	1.0619	1.0000	-	-	456,154	484,374
22	8	1.0544	1.0000	-	-	407,138	429,284
23	7	1.0470	1.0000	-	-	357,055	373,827
24	6	1.0396	1.0000	-	-	306,972	319,130
25	5	1.0323	1.0000	-	-	255,810	264,071
26	4	1.0250	1.0000	-	-	204,648	209,770
27	3	1.0178	1.0000	-	-	153,486	156,220
28	2	1.0107	1.0000	-	-	102,324	103,414
29	1	1.0035	1.0000	-	-	51,162	51,343
					17,312	$ 16,428,575	$ 18,565,304

Total Escalated Expense for Entire Period	$	18,565,304
Total Escalated Service Units		17,312
Impact Fee for Service Area B	**$**	**1,072**

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
S Texas Ave.	A-4, B-1	$ 166,000	$ 58,066	$ -	$ 46,453	$ 11,613	$ 58,066
Rock Prairie Rd. (1)	B-2, C-1	1,967,862	688,347	688,347	-	-	688,347
Rock Prairie Rd. (2)	B-3, C-2	2,492,500	871,862	350,000	417,490	104,372	871,862
Rock Prairie Rd. (3)	B-4	3,714,000	1,299,136	-	1,039,309	259,827	1,299,136
Holleman Dr. (1)	B-5	2,317,000	810,473	-	648,379	162,095	810,473
Holleman Dr. (2)	B-6	10,305,000	3,604,630	1,500,000	1,683,704	420,926	3,604,630
Wellborn Rd.	B-7	1,165,400	407,650	-	326,120	81,530	407,650
Luther St.	B-8	1,346,000	470,823	470,823	-	-	470,823
Penberthy Rd.	B-9	3,006,373	1,051,612	1,051,612	-	-	1,051,612
Turkey Creek Rd.	B-10	3,141,000	1,098,704	-	878,963	219,741	1,098,704
F and B Rd.	B-11	2,298,000	803,827	-	643,062	160,765	803,827
University Dr.	B-12	534,200	186,860	-	149,488	37,372	186,860
S Texas Ave. and Deacon Dr. Signal	I-1	75,000	26,235	-	-	26,235	26,235
Holleman Rd. and S. Texas Ave. Improvement	I-2	750,000	262,346	-	209,877	52,469	262,346
S Texas Ave. and Walton Dr. Signal	I-3	150,000	52,469	-	-	52,469	52,469
Wellborn Rd. and George Bush Dr.	I-5	1,190,232	416,336	-	333,069	83,267	416,336
Roadway Impact Fee Project		22,125	22,125	-	-	22,125	22,125
Total		$ 34,640,692	$ 12,131,501	$ 4,060,782	$ 6,375,912	$ 1,694,807	$ 12,131,501

(1) 2016 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Line 11 of the Max Fee Table Report

(3) Based on Contributions by Project and Planned Future Debt Financing

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

2016 Vehicle Miles (All Service Areas) [1]	214,409	
Ten Year Growth in Vehicle Miles (Service Area B) [2]	14,610	
	10	years
Annual Growth in Vehicle Miles	1,461	

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	$ 471,826	$ 431,317	$ 475,489	$ 524,860	$ 568,981	$ 620,885	$ 671,921	$ 714,231	$ 733,249	$ 736,363	$ 5,949,123
2016 Vehicle Miles plus Service Area B Growth	215,870	217,331	218,792	220,253	221,714	223,175	224,636	226,097	227,558	229,019	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	$ 2.19	$ 1.98	$ 2.17	$ 2.38	$ 2.57	$ 2.78	$ 2.99	$ 3.16	$ 3.22	$ 3.22	
Annual Growth in Service Area B Vehicle Miles (Cumulative)	1,461	2,922	4,383	5,844	7,305	8,766	10,227	11,688	13,149	14,610	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	$ 3,193	$ 5,799	$ 9,526	$ 13,927	$ 18,747	$ 24,388	$ 30,591	$ 36,923	$ 42,371	$ 46,977	$ 232,443

Credit Amount **$ 232,443**

(1) Engineer's calculation

(2) Line 8 of the Max Fee Table Report

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

I. General Assumptions

Annual Interest Rate on Deposits[1]	0.71%
Annual Service Unit Growth[2]	1,904
Portion of Projects Funded by Existing Debt[3]	$ 14,161,394
Non-debt Funded New Project Cost[4]	4,891,310
New Project Cost Funded Through New Debt[5]	19,261,551
Total Recoverable Project Cost[6]	$ 38,314,255

II. New Debt Issues Assumptions

Year	Principal[7]	Interest[8]	Term
1	$ 1,926,155	4.00%	20
2	1,926,155	4.50%	20
3	1,926,155	4.75%	20
4	1,926,155	4.75%	20
5	1,926,155	5.00%	20
6	1,926,155	5.00%	20
7	1,926,155	5.00%	20
8	1,926,155	5.00%	20
9	1,926,155	5.00%	20
10	1,926,155	5.00%	20
Total	$ 19,261,551		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[9]
1	$ 1,811,465
2	2,415,286
3	2,415,286
4	2,415,286
5	2,415,286
6	2,415,286
7	2,415,286
8	2,415,286
9	2,415,286
10	3,019,108
Total	$ 24,152,861

(1) Average Weighted Interest from 03-31-2016 Balances
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) Existing debt service allocable to projects in this area as provided by staff
(4) Assumes 20% of new project costs funded through sources other than debt unless otherwise specified
(5) Assumes 80% of new project costs funded through new debt issues unless otherwise specified
(6) Line 11 of the Max Fee Table Report
(7) Assumes new debt issued in equal annual amounts
(8) Estimated interest cost provided by City Staff
(9) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent fully in tenth year; Non-debt funded capital expenditures made in equal annual amounts

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 141,730	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 141,730
2	141,730	148,075	-	-	-	-	-	-	-	-	289,805
3	141,730	148,075	151,300	-	-	-	-	-	-	-	441,106
4	141,730	148,075	151,300	151,300	-	-	-	-	-	-	592,406
5	141,730	148,075	151,300	151,300	154,560	-	-	-	-	-	746,966
6	141,730	148,075	151,300	151,300	154,560	154,560	-	-	-	-	901,525
7	141,730	148,075	151,300	151,300	154,560	154,560	154,560	-	-	-	1,056,085
8	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	-	-	1,210,645
9	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	-	1,365,204
10	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
11	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
12	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
13	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
14	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
15	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
16	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
17	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
18	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
19	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
20	141,730	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,519,764
21	-	148,075	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,378,034
22	-	-	151,300	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,229,959
23	-	-	-	151,300	154,560	154,560	154,560	154,560	154,560	154,560	1,078,658
24	-	-	-	-	154,560	154,560	154,560	154,560	154,560	154,560	927,358
25	-	-	-	-	-	154,560	154,560	154,560	154,560	154,560	772,798
26	-	-	-	-	-	-	154,560	154,560	154,560	154,560	618,239
27	-	-	-	-	-	-	-	154,560	154,560	154,560	463,679
28	-	-	-	-	-	-	-	-	154,560	154,560	309,119
29	-	-	-	-	-	-	-	-	-	154,560	154,560
	$ 2,834,597	$ 2,961,508	$ 3,026,008	$ 3,026,008	$ 3,091,193	$ 3,091,193	$ 3,091,193	$ 3,091,193	$ 3,091,193	$ 3,091,193	$ 30,395,280

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 141,730	$ 1,811,465	$ (1,926,155)	$ 1,369,004	$ (13,298)	$ 1,382,745
2	289,805	2,415,286	(1,926,155)	1,034,413	(23,110)	1,790,239
3	441,106	2,415,286	(1,926,155)	1,031,220	(38,208)	1,923,248
4	592,406	2,415,286	(1,926,155)	1,033,480	(55,775)	2,059,242
5	746,966	2,415,286	(1,926,155)	1,027,807	(75,457)	2,188,447
6	901,525	2,415,286	(1,926,155)	1,033,185	(97,876)	2,325,965
7	1,056,085	2,415,286	(1,926,155)	1,034,895	(122,379)	2,457,731
8	1,210,645	2,415,286	(1,926,155)	1,035,702	(149,009)	2,586,469
9	1,365,204	2,415,286	(1,926,155)	1,011,830	(175,929)	2,690,237
10	1,519,764	3,019,108	(1,926,155)	1,015,424	(206,782)	3,421,359
11	1,519,764	-	-	853,567	-	2,373,331
12	1,519,764	-	-	853,090	-	2,372,854
13	1,519,764	-	-	852,087	-	2,371,851
14	1,519,764	-	-	845,300	-	2,365,064
15	1,519,764	-	-	465,608	-	1,985,372
16	1,519,764	-	-	465,131	-	1,984,895
17	1,519,764	-	-	463,821	-	1,983,585
18	1,519,764	-	-	462,189	-	1,981,953
19	1,519,764	-	-	400,905	-	1,920,669
20	1,519,764	-	-	401,985	-	1,921,749
21	1,378,034	-	-	-	-	1,378,034
22	1,229,959	-	-	-	-	1,229,959
23	1,078,658	-	-	-	-	1,078,658
24	927,358	-	-	-	-	927,358
25	772,798	-	-	-	-	772,798
26	618,239	-	-	-	-	618,239
27	463,679	-	-	-	-	463,679
28	309,119	-	-	-	-	309,119
29	154,560	-	-	-	-	154,560
	$ 30,395,280	$ 24,152,861	$ (19,261,551)	$ 16,690,639	$ (957,823)	$ 51,019,407

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

III. Summary of Principal Paid to Date for Existing Debt[3]

Bond Series	Principal Paid To Date
GO 2008	$ 93,409
GO 2009	32,680
GO 2010	1,180,873
GO 2011	10,142
GO 2012	52,195
GO 2013	4,131
GO 2014	48,380
CO 2014	73,663
GO 2016	-
CO 2016	-
Total Paid to Date	**$ 1,495,473**

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]	$	14,161,394
-Less Principal PTD		1,495,473
Outstanding Debt Principal		12,665,921
New Project Costs Debt Principal[5]		19,261,551
Principal Component	**$**	**31,927,472**

(1) Appendix E - Service Area C, Page 2
(2) Appendix E - Service Area C, Page 1
(3) Existing debt funded, eligible project costs calculated from scheduled annual debt service payments.
(4) Appendix E - Service Area C, Page 8
(5) Appendix E - Service Area C, Page 1

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 2,556	1,904	$ 4,866,511	$ 1,382,745	$ 3,483,766	$ 12,343	3,496,109
2	2,556	1,904	4,866,511	1,790,239	3,076,271	35,674	6,608,055
3	2,556	1,904	4,866,511	1,923,248	2,943,262	57,255	9,608,572
4	2,556	1,904	4,866,511	2,059,242	2,807,269	78,036	12,493,876
5	2,556	1,904	4,866,511	2,188,447	2,678,064	98,024	15,269,964
6	2,556	1,904	4,866,511	2,325,965	2,540,545	117,209	17,927,718
7	2,556	1,904	4,866,511	2,457,731	2,408,780	135,576	20,472,073
8	2,556	1,904	4,866,511	2,586,469	2,280,042	153,149	22,905,265
9	2,556	1,904	4,866,511	2,690,237	2,176,274	170,024	25,251,562
10	2,556	1,904	4,866,511	3,421,359	1,445,152	184,060	26,880,775
11	-	-	-	2,373,331	(2,373,331)	182,076	24,689,520
12	-	-	-	2,372,854	(2,372,854)	166,550	22,483,215
13	-	-	-	2,371,851	(2,371,851)	150,919	20,262,283
14	-	-	-	2,365,064	(2,365,064)	135,205	18,032,424
15	-	-	-	1,985,372	(1,985,372)	120,748	16,167,801
16	-	-	-	1,984,895	(1,984,895)	107,537	14,290,443
17	-	-	-	1,983,585	(1,983,585)	94,238	12,401,096
18	-	-	-	1,981,953	(1,981,953)	80,855	10,499,999
19	-	-	-	1,920,669	(1,920,669)	67,601	8,646,931
20	-	-	-	1,921,749	(1,921,749)	54,466	6,779,647
21	-	-	-	1,378,034	(1,378,034)	43,160	5,444,773
22	-	-	-	1,229,959	(1,229,959)	34,225	4,249,040
23	-	-	-	1,078,658	(1,078,658)	26,288	3,196,669
24	-	-	-	927,358	(927,358)	19,367	2,288,678
25	-	-	-	772,798	(772,798)	13,480	1,529,360
26	-	-	-	618,239	(618,239)	8,647	919,768
27	-	-	-	463,679	(463,679)	4,875	460,964
28	-	-	-	309,119	(309,119)	2,171	154,016
29	-	-	-	154,560	(154,560)	544	(0)
			$ 48,665,106	$ 51,019,407		$ 2,354,300	

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Year	Number of Years to End of Period	Future Value Escalation Interest Rate Factor	Future Value Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.2229	1.0000	1,904	2,329	$ 1,382,745	$ 1,691,006
2	28	1.2143	1.0000	1,904	2,312	1,790,239	2,173,940
3	27	1.2058	1.0000	1,904	2,296	1,923,248	2,319,023
4	26	1.1973	1.0000	1,904	2,280	2,059,242	2,465,531
5	25	1.1889	1.0000	1,904	2,264	2,188,447	2,601,791
6	24	1.1805	1.0000	1,904	2,248	2,325,965	2,745,826
7	23	1.1722	1.0000	1,904	2,232	2,457,731	2,880,961
8	22	1.1640	1.0000	1,904	2,216	2,586,469	3,010,534
9	21	1.1558	1.0000	1,904	2,201	2,690,237	3,109,283
10	20	1.1476	1.0000	1,904	2,185	3,421,359	3,926,464
11	19	1.1396	1.0000	-	-	2,373,331	2,704,547
12	18	1.1315	1.0000	-	-	2,372,854	2,684,977
13	17	1.1236	1.0000	-	-	2,371,851	2,664,957
14	16	1.1157	1.0000	-	-	2,365,064	2,638,634
15	15	1.1078	1.0000	-	-	1,985,372	2,199,436
16	14	1.1000	1.0000	-	-	1,984,895	2,183,436
17	13	1.0923	1.0000	-	-	1,983,585	2,166,641
18	12	1.0846	1.0000	-	-	1,981,953	2,149,626
19	11	1.0770	1.0000	-	-	1,920,669	2,068,499
20	10	1.0694	1.0000	-	-	1,921,749	2,055,099
21	9	1.0619	1.0000	-	-	1,378,034	1,463,287
22	8	1.0544	1.0000	-	-	1,229,959	1,296,861
23	7	1.0470	1.0000	-	-	1,078,658	1,129,328
24	6	1.0396	1.0000	-	-	927,358	964,088
25	5	1.0323	1.0000	-	-	772,798	797,754
26	4	1.0250	1.0000	-	-	618,239	633,712
27	3	1.0178	1.0000	-	-	463,679	471,940
28	2	1.0107	1.0000	-	-	309,119	312,413
29	1	1.0035	1.0000	-	-	154,560	155,107
					22,563	$ 51,019,407	$ 57,664,701

Total Escalated Expense for Entire Period	$	57,664,701
Total Escalated Service Units		22,563
Impact Fee for Service Area C	**$**	**2,556**

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
Rock Prairie Rd. (1)	B-2, C-1	$ 1,967,862	$ 1,058,647	$ 1,058,647	$ -	$ -	$ 1,058,647
Rock Prairie Rd. (2)	B-3, C-2	2,492,500	1,340,886	350,000	792,709	198,177	1,340,886
N Graham Rd.	C-3	1,967,000	1,058,183	-	846,547	211,637	1,058,183
Wellborn Rd. (1)	C-4	1,281,800	689,568	-	551,654	137,914	689,568
Wellborn Rd. (2)	C-5	1,172,000	630,499	-	504,399	126,100	630,499
Capstone/Barron Realignment	C-6	2,289,000	1,231,409	800,000	345,127	86,282	1,231,409
Barron Rd. (1)	C-7	939,000	505,152	-	404,122	101,030	505,152
Barron Rd. (2)	C-8	494,000	265,756	-	212,605	53,151	265,756
Barron Rd. (3)	C-9	7,801,145	4,196,768	4,196,768	-	-	4,196,768
WS Phillips Pkwy. (1)	C-10	1,939,000	1,043,120	-	834,496	208,624	1,043,120
WS Phillips Pkwy. (2)	C-11	1,634,000	879,040	-	703,232	175,808	879,040
Etonburg	C-12	1,665,000	895,717	-	716,574	179,143	895,717
McCullough Rd. Extension	C-13	3,037,000	1,633,809	-	1,307,048	326,762	1,633,809
S. Dowling/McCullough	C-14	2,350,000	1,264,225	-	1,011,380	252,845	1,264,225
Future 2 Lane Major Collector	C-15	1,372,000	738,092	-	590,474	147,618	738,092
Greens Prairie Rd. Extension (1)	C-16	541,000	291,041	-	232,833	58,208	291,041
Greens Prairie Rd. Extension (2)	C-17	1,346,000	724,105	-	579,284	144,821	724,105
Greens Prairie Rd. (1)	C-18	561,000	301,800	-	241,440	60,360	301,800
Greens Prairie Rd. (2)	C-19	3,213,000	1,728,492	-	1,382,793	345,698	1,728,492
Greens Prairie Rd. (3)	C-20	2,592,000	1,394,414	-	1,115,531	278,883	1,394,414
Royder Rd.	C-21	4,930,000	2,652,183	2,652,183	-	-	2,652,183
Greens Prairie Trl. (1)	C-22	6,960,000	3,744,259	3,690,462	-	53,797	3,744,259
Greens Prairie Rd. (4)	C-23	4,230,000	2,275,605	-	1,820,484	455,121	2,275,605
WS Phillips Pkwy. Extension	C-24	11,500,000	6,186,634	-	4,949,307	1,237,327	6,186,634
Victoria Ave.	C-25	1,828,530	983,691	983,691	-	-	983,691
William D Fitch Pkwy. and Victoria Ave. Signal	I-6	776,335	417,644	417,644	-	-	417,644
Wellborn Rd. and S Dowling Rd. Signal	I-7	300,000	161,390	12,000	119,512	29,878	161,390
Roadway Impact Fee Project		22,125	22,125	-	-	22,125	22,125
Total		$ 71,201,297	$ 38,314,255	$ 14,161,394	$ 19,261,551	$ 4,891,310	$ 38,314,255

(1) 2016 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Line 11 of the Max Fee Table Report

(3) Based on Contributions by Project and Planned Future Debt Financing

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

2016 Vehicle Miles (All Service Areas) [1]	214,409	
Ten Year Growth in Vehicle Miles (Service Area C) [2]	19,041	
	10	years
Annual Growth in Vehicle Miles	1,904	

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	$1,510,734	$1,324,218	$1,472,326	$1,625,886	$1,774,773	$1,934,710	$2,090,980	$2,246,346	$2,377,035	$2,535,188	$ 18,892,195
2016 Vehicle Miles plus Service Area C Growth	216,313	218,217	220,121	222,026	223,930	225,834	227,738	229,642	231,546	233,450	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	$ 6.98	$ 6.07	$ 6.69	$ 7.32	$ 7.93	$ 8.57	$ 9.18	$ 9.78	$ 10.27	$ 10.86	
Annual Growth in Service Area C Vehicle Miles (Cumulative)	1,904	3,808	5,712	7,617	9,521	11,425	13,329	15,233	17,137	19,041	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	$ 13,298	$ 23,110	$ 38,208	$ 55,775	$ 75,457	$ 97,876	$ 122,379	$ 149,009	$ 175,929	$ 206,782	$ 957,823

Credit Amount	**$ 957,823**

(1) Engineer's calculation

(2) Line 8 of the Max Fee Table Report

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

I. General Assumptions

Annual Interest Rate on Deposits[1]	0.71%
Annual Service Unit Growth[2]	1,363
Portion of Projects Funded by Existing Debt[3]	$ 2,862,227
Non-debt Funded New Project Cost[4]	7,624,092
New Project Cost Funded Through New Debt[5]	30,407,868
Total Recoverable Project Cost[6]	$ 40,894,187

II. New Debt Issues Assumptions

Year	Principal[7]	Interest[8]	Term
1	$ 3,040,787	4.00%	20
2	3,040,787	4.50%	20
3	3,040,787	4.75%	20
4	3,040,787	4.75%	20
5	3,040,787	5.00%	20
6	3,040,787	5.00%	20
7	3,040,787	5.00%	20
8	3,040,787	5.00%	20
9	3,040,787	5.00%	20
10	3,040,787	5.00%	20
Total	$ 30,407,868		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[9]
1	$ 2,852,397
2	3,803,196
3	3,803,196
4	3,803,196
5	3,803,196
6	3,803,196
7	3,803,196
8	3,803,196
9	3,803,196
10	4,753,995
Total	$ 38,031,960

(1) Average Weighted Interest from 03-31-2016 Balances
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) Existing debt service allocable to projects in this area as provided by staff
(4) Assumes 20% of new project costs funded through sources other than debt unless otherwise specified
(5) Assumes 80% of new project costs funded through new debt issues unless otherwise specified
(6) Line 11 of the Max Fee Table Report
(7) Assumes new debt issued in equal annual amounts
(8) Estimated interest cost provided by City Staff
(9) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent fully in tenth year; Non-debt funded capital expenditures made in equal annual amounts

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 223,746	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 223,746
2	223,746	233,764	-	-	-	-	-	-	-	-	457,510
3	223,746	233,764	238,855	-	-	-	-	-	-	-	696,366
4	223,746	233,764	238,855	238,855	-	-	-	-	-	-	935,221
5	223,746	233,764	238,855	238,855	244,001	-	-	-	-	-	1,179,221
6	223,746	233,764	238,855	238,855	244,001	244,001	-	-	-	-	1,423,222
7	223,746	233,764	238,855	238,855	244,001	244,001	244,001	-	-	-	1,667,223
8	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	-	-	1,911,223
9	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	-	2,155,224
10	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
11	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
12	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
13	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
14	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
15	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
16	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
17	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
18	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
19	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
20	223,746	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,399,224
21	-	233,764	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	2,175,478
22	-	-	238,855	238,855	244,001	244,001	244,001	244,001	244,001	244,001	1,941,714
23	-	-	-	238,855	244,001	244,001	244,001	244,001	244,001	244,001	1,702,859
24	-	-	-	-	244,001	244,001	244,001	244,001	244,001	244,001	1,464,004
25	-	-	-	-	-	244,001	244,001	244,001	244,001	244,001	1,220,003
26	-	-	-	-	-	-	244,001	244,001	244,001	244,001	976,002
27	-	-	-	-	-	-	-	244,001	244,001	244,001	732,002
28	-	-	-	-	-	-	-	-	244,001	244,001	488,001
29	-	-	-	-	-	-	-	-	-	244,001	244,001
	$ 4,474,928	$ 4,675,279	$ 4,777,104	$ 4,777,104	$ 4,880,012	$ 4,880,012	$ 4,880,012	$ 4,880,012	$ 4,880,012	$ 4,880,012	$ 47,984,488

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 223,746	$ 2,852,397	$ (3,040,787)	$ 279,020	$ (3,176)	$ 311,200
2	457,510	3,803,196	(3,040,787)	259,405	(9,001)	1,470,324
3	696,366	3,803,196	(3,040,787)	204,996	(16,869)	1,646,902
4	935,221	3,803,196	(3,040,787)	206,406	(28,311)	1,875,726
5	1,179,221	3,803,196	(3,040,787)	210,700	(42,819)	2,109,511
6	1,423,222	3,803,196	(3,040,787)	212,273	(60,091)	2,337,812
7	1,667,223	3,803,196	(3,040,787)	213,612	(80,133)	2,563,111
8	1,911,223	3,803,196	(3,040,787)	213,982	(102,853)	2,784,762
9	2,155,224	3,803,196	(3,040,787)	215,387	(128,295)	3,004,725
10	2,399,224	4,753,995	(3,040,787)	200,404	(155,387)	4,157,450
11	2,399,224	-	-	201,394	-	2,600,618
12	2,399,224	-	-	128,882	-	2,528,106
13	2,399,224	-	-	30,799	-	2,430,024
14	2,399,224	-	-	30,698	-	2,429,922
15	2,399,224	-	-	30,732	-	2,429,956
16	2,399,224	-	-	30,800	-	2,430,024
17	2,399,224	-	-	30,785	-	2,430,009
18	2,399,224	-	-	23,443	-	2,422,668
19	2,399,224	-	-	23,409	-	2,422,633
20	2,399,224	-	-	23,355	-	2,422,580
21	2,175,478	-	-	-	-	2,175,478
22	1,941,714	-	-	-	-	1,941,714
23	1,702,859	-	-	-	-	1,702,859
24	1,464,004	-	-	-	-	1,464,004
25	1,220,003	-	-	-	-	1,220,003
26	976,002	-	-	-	-	976,002
27	732,002	-	-	-	-	732,002
28	488,001	-	-	-	-	488,001
29	244,001	-	-	-	-	244,001
	$ 47,984,488	$ 38,031,960	$ (30,407,868)	$ 2,770,480	$ (626,934)	$ 57,752,127

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

III. Summary of Principal Paid to Date for Existing Debt[3]

Bond Series	Principal Paid To Date
GO 2008	$ 493,954
GO 2009	-
GO 2010	-
GO 2011	132,667
GO 2012	-
GO 2013	49,998
GO 2014	-
CO 2014	-
GO 2016	-
CO 2016	-
Total Paid to Date	**$ 676,619**

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]	$ 2,862,227
-Less Principal PTD	676,619
Outstanding Debt Principal	2,185,608
New Project Costs Debt Principal[5]	30,407,868
Principal Component	**$ 32,593,476**

(1) Appendix E - Service Area D, Page 2
(2) Appendix E - Service Area D, Page 1
(3) Existing debt funded, eligible project costs calculated from scheduled annual debt service payments.
(4) Appendix E - Service Area D, Page 8
(5) Appendix E - Service Area D, Page 1

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 4,004	1,363	$ 5,457,932	$ 311,200	$ 5,146,732	$ 18,236	5,164,968
2	4,004	1,363	5,457,932	1,470,324	3,987,608	50,729	9,203,305
3	4,004	1,363	5,457,932	1,646,902	3,811,031	78,720	13,093,056
4	4,004	1,363	5,457,932	1,875,726	3,582,207	105,473	16,780,736
5	4,004	1,363	5,457,932	2,109,511	3,348,421	130,777	20,259,933
6	4,004	1,363	5,457,932	2,337,812	3,120,120	154,623	23,534,676
7	4,004	1,363	5,457,932	2,563,111	2,894,821	177,030	26,606,527
8	4,004	1,363	5,457,932	2,784,762	2,673,171	198,013	29,477,711
9	4,004	1,363	5,457,932	3,004,725	2,453,207	217,579	32,148,497
10	4,004	1,363	5,457,932	4,157,450	1,300,482	232,421	33,681,400
11	-	-	-	2,600,618	(2,600,618)	229,462	31,310,244
12	-	-	-	2,528,106	(2,528,106)	212,916	28,995,054
13	-	-	-	2,430,024	(2,430,024)	196,857	26,761,888
14	-	-	-	2,429,922	(2,429,922)	181,033	24,512,998
15	-	-	-	2,429,956	(2,429,956)	165,096	22,248,139
16	-	-	-	2,430,024	(2,430,024)	149,047	19,967,161
17	-	-	-	2,430,009	(2,430,009)	132,883	17,670,035
18	-	-	-	2,422,668	(2,422,668)	116,631	15,363,998
19	-	-	-	2,422,633	(2,422,633)	100,290	13,041,655
20	-	-	-	2,422,580	(2,422,580)	83,833	10,702,909
21	-	-	-	2,175,478	(2,175,478)	68,136	8,595,566
22	-	-	-	1,941,714	(1,941,714)	54,031	6,707,883
23	-	-	-	1,702,859	(1,702,859)	41,500	5,046,525
24	-	-	-	1,464,004	(1,464,004)	30,574	3,613,095
25	-	-	-	1,220,003	(1,220,003)	21,281	2,414,373
26	-	-	-	976,002	(976,002)	13,651	1,452,022
27	-	-	-	732,002	(732,002)	7,696	727,716
28	-	-	-	488,001	(488,001)	3,428	243,142
29	-	-	-	244,001	(244,001)	858	(0)
			$ 54,579,323	$ 57,752,127		$ 3,172,804	

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

Year	Number of Years to End of Period	Future Value Interest Rate Factor	Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.2229	1.0000	1,363	1,667	$ 311,200	$ 380,577
2	28	1.2143	1.0000	1,363	1,655	1,470,324	1,785,458
3	27	1.2058	1.0000	1,363	1,644	1,646,902	1,985,809
4	26	1.1973	1.0000	1,363	1,632	1,875,726	2,245,807
5	25	1.1889	1.0000	1,363	1,620	2,109,511	2,507,947
6	24	1.1805	1.0000	1,363	1,609	2,337,812	2,759,811
7	23	1.1722	1.0000	1,363	1,598	2,563,111	3,004,488
8	22	1.1640	1.0000	1,363	1,587	2,784,762	3,241,338
9	21	1.1558	1.0000	1,363	1,575	3,004,725	3,472,757
10	20	1.1476	1.0000	1,363	1,564	4,157,450	4,771,227
11	19	1.1396	1.0000	-	-	2,600,618	2,963,554
12	18	1.1315	1.0000	-	-	2,528,106	2,860,651
13	17	1.1236	1.0000	-	-	2,430,024	2,730,319
14	16	1.1157	1.0000	-	-	2,429,922	2,710,994
15	15	1.1078	1.0000	-	-	2,429,956	2,691,956
16	14	1.1000	1.0000	-	-	2,430,024	2,673,090
17	13	1.0923	1.0000	-	-	2,430,009	2,654,264
18	12	1.0846	1.0000	-	-	2,422,668	2,627,625
19	11	1.0770	1.0000	-	-	2,422,633	2,609,099
20	10	1.0694	1.0000	-	-	2,422,580	2,590,683
21	9	1.0619	1.0000	-	-	2,175,478	2,310,065
22	8	1.0544	1.0000	-	-	1,941,714	2,047,331
23	7	1.0470	1.0000	-	-	1,702,859	1,782,850
24	6	1.0396	1.0000	-	-	1,464,004	1,521,989
25	5	1.0323	1.0000	-	-	1,220,003	1,259,400
26	4	1.0250	1.0000	-	-	976,002	1,000,431
27	3	1.0178	1.0000	-	-	732,002	745,043
28	2	1.0107	1.0000	-	-	488,001	493,201
29	1	1.0035	1.0000	-	-	244,001	244,865
					16,151	$ 57,752,127	$ 64,672,628

Total Escalated Expense for Entire Period	$	64,672,628
Total Escalated Service Units		16,151
Impact Fee for Service Area D	**$**	**4,004**

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Cost in Service Area[1]	Impact Fee Recoverable Cost(2)	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
Rock Prairie Rd. (1)	A-5, D-1	$ 1,666,500	$ 409,469	$ -	$ 327,575	$ 81,894	$ 409,469
Bird Pond Rd.	A-7, D-2	5,594,000	1,374,479	-	1,099,583	274,896	1,374,479
Rock Prairie Rd. (2)	D-3	5,046,000	1,239,832	-	991,865	247,966	1,239,832
Rock Prairie Rd. (3)	D-4	23,733,000	5,831,337	-	4,665,069	1,166,267	5,831,337
Lakeway Dr. (1)	D-5	8,703,000	2,138,378	2,138,378	-	-	2,138,378
Lakeway Dr. (2)	D-6	2,946,000	723,849	723,849	-	-	723,849
Lakeway Dr. (4)	D-7	4,022,000	988,229		790,583	197,646	988,229
Ritchey Rd.	D-8	3,964,000	973,978	-	779,182	194,796	973,978
Bird Pond Rd. Extension	D-9	8,894,000	2,185,308	-	1,748,246	437,062	2,185,308
Pebble Creek Pkwy. (1)	D-10	9,100,000	2,235,923	-	1,788,739	447,185	2,235,923
Pebble Creek Pkwy. (2)	D-11	896,000	220,152	-	176,122	44,030	220,152
Pebble Creek Pkwy. (3)	D-12	4,886,000	1,200,519	-	960,415	240,104	1,200,519
William D. Fitch Pkwy. (1)	D-13	4,392,000	1,079,140	-	863,312	215,828	1,079,140
William D. Fitch Pkwy. (2)	D-14	40,890,000	10,046,912	-	8,037,530	2,009,382	10,046,912
Future Nantucket Dr.	D-15	19,735,000	4,849,005	-	3,879,204	969,801	4,849,005
Future East-West Major Collector	D-16	5,772,000	1,418,214	-	1,134,571	283,643	1,418,214
Future North-South Major Collector	D-17	3,176,000	780,362	-	624,289	156,072	780,362
Barron Rd. Extension	D-18	12,930,000	3,176,977	-	2,541,581	635,395	3,176,977
Roadway Impact Fee Project		22,125	22,125	-	-	22,125	22,125
Total		$ 166,367,625	$ 40,894,187	$ 2,862,227	$ 30,407,868	$ 7,624,092	$ 40,894,187

(1) 2016 Roadway Impact Fee Study As Assigned to Service Area, Appendix A

(2) Line 11 of the Max Fee Table Report

(3) Based on Contributions by Project and Planned Future Debt Financing

City of College Station 2016 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

2016 Vehicle Miles (All Service Areas) [1]	214,409	
Ten Year Growth in Vehicle Miles (Service Area D) [2]	13,631	
	10	years
Annual Growth in Vehicle Miles	1,363	

		1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees		$ 502,766	$ 716,916	$ 901,361	$ 1,141,627	$ 1,389,922	$ 1,635,495	$ 1,880,835	$ 2,125,205	$ 2,370,611	$ 2,599,629	$ 15,264,365
2016 Vehicle Miles plus Service Area D Growth		215,772	217,135	218,498	219,861	221,224	222,587	223,950	225,313	226,676	228,040	
Total Debt Service Eligible for Impact Fees per Vehicle Mile		$ 2.33	$ 3.30	$ 4.13	$ 5.19	$ 6.28	$ 7.35	$ 8.40	$ 9.43	$ 10.46	$ 11.40	
Annual Growth in Service Area D Vehicle Miles (Cumulative)		1,363	2,726	4,089	5,452	6,815	8,178	9,541	10,904	12,267	13,631	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees		$ 3,176	$ 9,001	$ 16,869	$ 28,311	$ 42,819	$ 60,091	$ 80,133	$ 102,853	$ 128,295	$ 155,387	$ 626,934
Credit Amount	**$ 626,934**											

(1) Engineer's calculation

(2) Line 8 of the Max Fee Table Report