CITY OF PFLUGERVILLE, TEXAS ROADWAY IMPACT FEE STUDY FINAL



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Prepared for the City of Pflugerville

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EXECUTIVE SUMMARY

Introduction

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. 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. Since 1996, they have been used to fund public water and wastewater improvements in the City of Pflugerville. For the purposes of this study, the term "Roadway Impact Fee" is meant to construe applicable requirements for "Roadway Impact Fees" in state law.

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 collector roadways that serve the overall transportation system. The purpose of the 2020 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 mathematical calculation that determines a maximum impact fee that would be equivalent for growth paying for growth. The Maximum Roadway Impact Fee per Service Unit for Roadway Facilities is considered an appropriate measure of the impacts generated by a new unit of development on the City's Roadway System. An impact fee program is anticipated to be designed so that it is predictable for both the development community and City. An impact fee program is equitable since similar developments pay a similar fee regardless if they are the first or last to develop. An impact fee program is proportional. The resulting fees are directly related to the amount of traffic generated by a development and are based on the system impacts, satisfying both the nexus and proportionality requirements required by state law. Lastly, an impact fee program is consistent with other City goals and objectives for growth. The actual collection rate set by Council may be determined to be less than the Maximum Roadway Impact Fee to achieve and be in alignment with other City goals and objectives for growth.



This report describes in detail how the fee is calculated and how a Capital Improvement Advisory Committee (CIAC) monitors the Impact Fee program.

Impact Fee Basics

Roadway Impact Fees are determined by several key variables, each described below in greater detail.

Impact Fee Study

The 2020 Roadway Impact Fee Study is to determine the maximum impact fee per unit of new development chargeable as allowed by the state law. This determination is not a recommendation; the actual fee amount ultimately assessed is at the discretion of the Pflugerville City Council, so long as it does not exceed the maximum assessable fee allowed by law. The study looks at a period of 10 years to project new growth and corresponding capacity needs, as required by state law. The study and corresponding maximum fees must be restudied at least every five years. However, the study can be updated at any time to accommodate significant changes in any of the key variables of the impact fee equation.

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. For Roadway Impact Fees, the Service Area may not exceed 6 miles. In Pflugerville, this restriction necessitated the creation of 3 separate Service Areas. A map of the Service Areas can be found on Page 14.

In defining the Service Area boundaries, the project team considered the corporate boundary, required size limit, adjacent land uses, and regional highway facilities. Since each Service Area has a unique maximum impact fee, the per-unit maximum fee for an identical land use will vary from one Service Area to the next. For this reason, the team avoided drawing a Service Area boundary through uniform land uses where possible. The Service Areas were presented to City Council and approved on May 12, 2020.



Land Use Assumptions

The Impact Fee determination is required to be based on the projected growth and corresponding capacity needs in a 10-year window. This study considers the years 2020-2030. Acknowledging that the parameters of the study (the corporate boundaries, Transportation Master Plan, Water and Wastewater Master Plan, zoning maps, platting history, etc.) are changing constantly, this study is based on conditions as they were on March 31, 2020.

One of the key elements in the determination of the impact fee is the amount of new development anticipated over 10 years. The residential and non-residential growth projections were performed using the City of Pflugerville's 2020 Water and Wastewater Master Plan growth projections and 2019 Transportation Master Plan growth projections where other master plans lacked coverage.

The 2020-2030 growth projections indicate 11,963 residential units and 10,110,000 square feet of non-residential space will be added in the next 10 years. The land use assumptions were presented to City Council on July 28, 2020 and are scheduled to be considered for approval in the September 22nd Pubic Hearing.

Roadway Impact Fee Capital Improvements Plan

The Roadway Impact Fee Capital Improvements Plan (RIF CIP) is distinct and separate from the City's traditional Capital Improvements Plan (CIP). The RIF CIP is a list of projects eligible for funding through impact fees. The City's Transportation Master Plan (TMP) is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. Only those capacity improvements included in the City's TMP are included in the RIF CIP, except for some intersection improvement projects identified through the study. Capacity improvements may include the addition of lanes, intersection improvements, or the extension of a new road. Resurfacing or other maintenance activities do not qualify as capacity improvements under impact fee law in Texas and cannot be funded with Roadway Impact Fees.

The cost of the RIF CIP is one of the fundamental factors in the calculation of the per-unit maximum impact fee. The RIF CIP's cost was calculated through systematic evaluation of each eligible project. The project team visited each project site to determine the project scope, the presence of any special conditions (such as the need for significant drainage improvements) and whether various additional



construction costs were applicable (such as costing for significant grades). In determining project limits, the team identified roadway segments with uniform need. For example, Weiss Lane was previously constructed from Kelly Lane to Pleasanton Parkway as a 4-lane divided roadway using previous transportation bond dollars while the remainder of Weiss Lane to East Pecan Street is shown as widening to a 4-lane divided roadway from the existing 2-lane undivided section. These were split as two different projects based on uniform need. Developing unit costs from recently bid City projects and TxDOT moving average bid prices, uniform costs were determined for the major items of work, additional construction items, and project delivery costs. Section III provides a listing of the 10-Year RIF CIP by service area in Tables 2.A – 2.C and maps of the RIF CIP by service area in Exhibits 2.A – 2.C. Finally, detailed cost projections by project can be found in Appendix A. It should be noted that these cost projections are based on conceptual level planning and are subject to refinement upon final design. Where previous cost estimating efforts or contributions through bonds or other funding agreements are applicable, those estimates are used in lieu of the conceptual level planning costs to accurately reflect eligible recoverable costs incurred by the City.

Only those projects listed in the RIF CIP are eligible to utilize impact fee funds. In order to optimize future flexibility, all capacity improvements included in the TMP are included in the RIF CIP and will be eligible to utilize impact fee funds. In some cases, an interim project designation was used due to the ultimate build out not being needed in the 10-year window. An example of this is Cele Road, which is shown as a 4-lane divided road widening in the RIF CIP, but ultimately will be built out to a 6-lane divided road based on the TMP.

Only the costs associated with providing the additional capacity necessitated by 10 years of growth can be used to calculate the maximum impact fee. To calculate the maximum impact fee, the total cost of the RIF CIP at build-out was reduced to account for

- 1. the portion of new capacity that will address existing needs,
- 2. the portion of new capacity that will not be necessitated until beyond the 10-year growth window, and
- 3. contributions already made by current developments.

A ratio that compares 10 years' demand for capacity to the net supply of capacity (total new capacity in the RIF CIP minus existing needs) can be calculated. That ratio, which may not exceed



100%, is then applied to the cost of the net capacity supplied. The result is a determination of the costs attributable to the next 10 years' growth, which is then used to calculate the maximum impact fee in accordance with state law. The result is known as the recoverable cost of the RIF CIP.

The 2020-2030 growth projections indicate approximately \$184,384,403 of the RIF CIP as attributable to growth. The RIF CIP was presented to City Council on July 28, 2020 and are scheduled to be considered for approval in the September 22nd Pubic Hearing.

Service Unit

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 2020 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. The definition for vehicle-mile is as follows: a vehicle-mile is 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.

Impact Fee Calculation

In simplest terms, the maximum impact fee allowable by law is calculated by dividing the recoverable cost of the RIF CIP by the number of new service units of development. In accordance with state law, both the cost of the RIF CIP and the number of new service units of development used in the equation are based on the growth and corresponding capacity needs projected to occur within a 10-year window. This calculation is performed for each service area individually; each service area has a stand-alone RIF CIP and 10-year growth projection.

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is calculated in Table 8. A detailed discussion of the calculation precedes Table 8, found on Page 41.

Collection and Use of Roadway 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. An existing plat would be assessed at the adoption of the ordinance and



would be exempt from impact fees for one year. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development impacts are introduced to the roadway network. 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 in the designated service area or must be refunded with interest. Fees should be utilized in a first in, first out basis.

Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and RIF CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. The CIAC also reviews the Roadway Impact Fee ordinance and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a public hearing on the Land Use Assumptions, RIF CIP and Impact Fee Ordinance. Two public hearings are required for the 2020 Roadway Impact Fee study, one for Land Use Assumptions and RIF CIP held on September 22, 2020, and another for the Impact Fee Calculation and Ordinance.

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

2020 Roadway Impact Fee Study Results

Below is the listing of the 2020 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

Service Area	Maximum Fee Per Service Unit (per Vehicle-Mile)
А	\$1,590
В	\$2,916
С	\$3,156



I. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure political subdivisions must follow to create and implement impact fees. Chapter 395 defines an Impact Fee as "a charge or assessment imposed by a political subdivision against new development to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development."

The City has retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2020 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 (RIF CIP). Future versions of this report will include the calculation of the maximum Roadway Impact Fee and conversion of land use intensities to service units of transportation demand in the Land Use-Vehicle Mile Equivalency Table.

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

- 1) Land Use Assumptions (Pg. 9)
- 2) Roadway Impact Fee Capital Improvements Plan (RIF CIP) (Pg. 16) Information from these Land Use Assumptions and RIF CIP 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 (Pg. 24)
- 2) Roadway Impact Fee Calculation (Pg. 41)
- 3) Plan for Financing and the Ad Valorem Tax Credit (Pg. 44)



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

- Service Areas (Pg. 24)
- Service Units (Pg. 24)
- Cost Per Service Unit (Pg. 27)
- RIF CIP Costing Methodology (Pg. 27)
- Summary of RIF CIP Costs (Pg. 31)
- Service Unit Calculation (Pg. 35)

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit (Pg. 41)
- Service Unit Demand Per Unit of Development (Pg. 49)

The report also includes a section concerning the Plan for Financing and the Ad Valorem Tax Credit. This involves the calculation of the applicable credit required by law to offset the City's use of ad valorem taxes to help fund the RIF CIP. This plan, prepared by NewGen Strategies, and upon which we relied, details the maximum assessable impact fee per service unit the City of Pflugerville may apply under Chapter 395 of the Texas Local Government Code.



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 residential and employment growth projections within a municipality. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and development in the service area. The land use assumptions are then used in determining the need and timing of transportation improvements to serve future development.

This report documents the process used to develop the Land Use Assumptions for the City of Pflugerville's Roadway Impact Fee (RIF) study. In accordance with Chapter 395 of the Texas Local Government Code, Roadway Impact Fees must be calculated based on reasonable expectations of residential and employment growth within the next ten years (2020 – 2030).

Information from the following sources were consulted to complete the Land Use Assumptions:

- City of Pflugerville Transportation Master Plan (2019)
- City of Pflugerville Water Master Plan (2020)
- City of Pflugerville Wastewater Master Plan (2020)
- City of Pflugerville Historical Building Permit Data 2010-2020
- City of Pflugerville staff



This Land Use Assumptions Summary includes the following components:

- Land Use Assumptions Methodology An overview of the general methodology used to generate the land use assumptions.
- Roadway Impact Fee Service Areas Explanation of the division of Pflugerville into service areas for roadway and infrastructure facilities.
- Residential and Employment Growth Data on residential and employment growth within each service area over the next ten years (2020 – 2030).
- Land Use Assumptions Summary Table A synopsis of the Land Use Assumptions.

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

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

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

<u>Retail</u>: 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.

<u>Service</u>: Land use activities which provide personal and professional services, such as government and other professional offices.

<u>Basic</u>: 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.



The above categories in the Land Use Assumptions match those used to develop the travel demand model for the City of Pflugerville. These broader categories are used in the development of the assumptions for impact fees; however, expanded classifications used in the assessment of impact fees will be included in the Land Use / Vehicle-Mile Equivalency Table in a future version of this report for specific land 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;
- Emerging Projects;
- Growth projections from recently completed studies;
- Historical growth trends

Determination of the ten-year growth within the Roadway Impact Fee study area was accomplished through two general steps:

- Step 1: Determine Base Year (2020)
- Step 2: Determine 10-Year Growth Projections

Step 1: Determine Base Year (2020)

Traffic Analysis Zone (TAZ) data obtained from a combination of the 2020 Water and Wastewater Master Plans and the 2019 Transportation Master Plan were used to determine the 2020 residential units and employment square footage.

Residential units and basic, retail, and service square footage data were estimated for the year 2020 based on the existing developed parcels of land using information from the Travis and Williamson County Central Appraisal District data. A conversion of square footage per unit was utilized to determine the number of units for multifamily units. Single family units were determined from the Central Appraisal District data based on state codes.



Basic, retail, and service square footage information was developed by categorizing parcels based on land use and their state code information into the three employment categories and summing square feet of each by service area for the base year.

Step 2: Determine 10-Year Growth Projections

The 2019 Transportation Master Plan conversion of land uses to expected residential units and square feet of employment was used to determine carrying capacity. Individual parcel growth projections from the 2020 Water and Wastewater Master Plans were used to determine the percent (%) developed and projected land use in the study limits for the year 2030. Where the 2020 Water and Wastewater Master Plans did not have coverage in the corporate limits for growth projections, the 2019 Transportation Master Plan growth projections were used and assumed to develop at an average of 50% from 2020 to 2030. Anticipated Floor Area Ratios (FAR), residential units per acre, and percentages of non-residential land uses by employment type were applied to the percent (%) developed on a parcel by parcel basis and summed to determine growth from 2020 to 2030. In addition, recent emerging projects were added to calibrate growth projections for projects not anticipated in the master plans. Finally, the 2030 projections were compared to historical building permit data for residential units from 2010 to 2019 to calibrate growth projections from the master plans and validate the 10-year growth assumptions.

From 2010 through 2019 (10 years), 7,836 dwelling units were constructed in the City of Pflugerville. Looking at the most recent 5 years from 2015 to 2019, 5,801 dwelling units were constructed in the City of Pflugerville. Projecting the previous 5-years over a 10-year period results in 11,602 dwelling units. Given that the projected residential growth in units was roughly equivalent (within 5%) of this projection, the Land Use Assumptions were determined to be acceptable and were not further calibrated based on historical trends. A summary of the Land Use Assumptions used in this study are shown in Table 1.



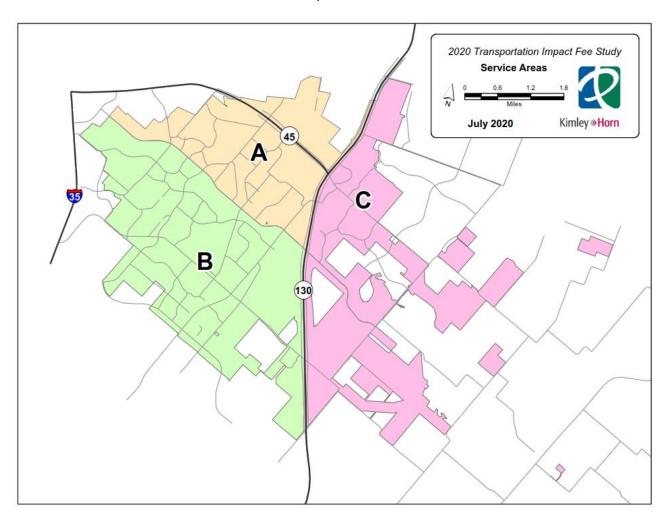
C. Roadway Impact Fee Service Areas

The geographic boundary of the proposed impact fee service areas for transportation facilities is shown in Exhibit 1. The City of Pflugerville is divided into three (3) service areas, each based upon the six (6) mile limit, as required in Chapter 395. For transportation facilities, the service areas as required by state law are limited to areas within the current corporate City limits. In defining the Service Area boundaries, the project team considered the corporate boundary, required six (6) mile size limit, adjacent land uses, and regional highway facilities. Since each Service Area will have a unique maximum impact fee, the perunit maximum fee for an identical land use will vary from one Service Area to the next. For this reason, the areas of uniform land use were contained within the same Service Area where possible.

It should be noted that at locations where Service Area boundaries align with a City roadway, the proposed boundary is intended to follow the centerline of the roadway, unless otherwise noted. In cases where a Service Area boundary follows the City Limits, only those portions of the transportation facility within the City Limits are included in the Service Area. For example, if a Service Area Boundary follows the city limits, and one side of a transportation facility is in the City limits and the other is not, only 50% of the facility may be included in the RIF CIP. Another example is where the Service Area boundary follows the edge Right-of-Way for a transportation facility, but the Right-of-Way and other side of the transportation facility is out of the City Limits. In this case, 50% of the transportation facility is included in the RIF CIP. For intersection projects along a Service Area boundary, only the corners of the intersection that fall within a Service Area boundary are considered for inclusion in the respective Service Area. For example, if one corner of an intersection is outside of the City Limits, one corner is in one service area, and the remaining two corners are in another service area, the first service area would include 25% of the intersection project, and the second would include 50% of the intersection project.



Exhibit 1 – Proposed Service Areas





D. Land Use Assumptions Summary

Table 1 summarizes the residential and employment 10-year growth projections.

Table 1. Residential and Employment 10-Year Projections

Service	Year	Residential (Units)		Employment (Sq. Ft.)				
Area		Single Family	Multi- Family	Basic	Service	Retail	Total	
А		330	4,105	1,220,000	1,560,000	2,470,000	5,250,000	
В	2020- 2030	1,083	1,876	1,440,000	310,000	750,000	2,500,000	
С		2,448	2,101	1,350,000	530,000	480,000	2,360,000	
Citywide		3,861	8,082	4,010,000	2,400,000	3,700,000	10,110,000	



III. ROADWAY IMPACT FEE CAPITAL IMPROVEMENTS PLAN

The City has identified the transportation projects needed to accommodate the projected growth within the City. The City's Transportation Master Plan (TMP) is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. The Roadway Impact Fee Capital Improvements Plan (RIF CIP) consists of 4 categories of projects for roadway facilities as well as intersection projects described on Pg. 17 of this report. They are as follows:

- Previously Built Projects Identified corridors that were previously constructed and have excess capacity for future development to utilize.
- Widening Existing roadways not currently built to the ultimate class in the Transportation Master Plan and must be completely reconstructed.
- Access Existing undivided roadways identified for median construction in the existing center turn lane for access management purposes.
- New All future roadways needed to complete the Transportation Master Plan.

The RIF CIP includes arterial class roadway facilities, collector facilities as well as major intersection improvements. Roadway facilities identified are included in the Transportation Master Plan except for some roadway classification modifications due to City direction and some intersection projects identified through discussion with City Staff. Some collector facilities were identified as being built by others through development agreements, Public Improvement Districts (PIDs), other agencies such as Travis County or TxDOT, or being funded through other measures that would preclude inclusion in the RIF CIP. Through evaluation of the Transportation Master Plan with City staff, some facilities were identified that were upgraded or downgraded from their ultimate functional classification to reflect capacity need in a 10-year window.



In addition to roadway facilities, major intersection improvements were identified by determining capacity needs through either turn lanes or improved traffic control measures based on Transportation Master Plan functional classifications of intersecting roadways. Intersection Improvements were categorized as follows:

- Signal either a new signal or modification to an existing signal due to construction
 of a new roadway approach to an existing signalized intersection;
- Roundabout a new roundabout intersection;
- Turn Lane addition or extension of a turn lane consistent with TxDOT lane length recommendations based on roadway classification;
- Overpass identified new grade separated crossings in TMP;
- Innovative construction of an intersection improvement to be determined after complete analysis. This includes improvements such as special intersections including, but not limited to Continuous Flow Intersections (CFI), Diverging Diamond Intersections (DDI), or grade separation improvements; and
- Ramp Reversal identified frontage road ramp reversal on TxDOT roadways, which involves changing entrance ramps to exit ramps or vice versa.
- New Ramp identified new entrance or exit ramps to access TxDOT roadways

All intersection improvement recommendations are recommended to undergo a design level evaluation before implementation to ensure the most appropriate improvements are made. In the case where a design level evaluation determines improvements contrary to the RIF CIP, such as turn lane improvements in place of a signal, the RIF CIP cost allocated to the intersection may still be applied to the alternate improvements.

The proposed RIF CIP is listed in Tables 2.A - 2.C and mapped in Exhibits 2.A - 2.C. The tables show the length of each project as well as the facility's typology. The RIF CIP was developed in conjunction with input from City of Pflugerville staff and represents projects that will be needed to accommodate the growth projected in the Land Use Assumptions section of this report.



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

Service	Proj. #	IF Class	Roadway	Limits	Length	% In Service
Area					(mi)	Area
	A-1	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (1)	City Limits to 1020' W Of Heatherwilde Blvd	0.53	100%
	A-2	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (2)	City Limits to 955' W Of Heatherwilde Blvd	0.45	100%
	A-3	MAA 4D	Rowe Ln Extension (1)	Heatherwilde Blvd to City Limits	1.20	100%
	A-5	MIA 4D	Kenny Fort Blvd (1)	City Limits to City Limits	0.20	50%
l l	A-7	MIA 4D	Heatherwilde Widening (1)	450' S Of Sh 45 Ebfr to Wilke Ridge Ln	0.94	100%
l l	A-8	MAC 3U	Pfluger Farm Ln North (1)	Sh 45 Ebfr to Town Center Dr	0.66	100%
	A-9	MAC 4U	Schultz Ln (1)	City Limits to 300' N Of Springbrook Rd	0.45	100%
[A-10	MIC 2U	Wilke Ridge Ln (1)	Heatherwilde Blvd to W Pflugerville Pkwy	0.44	100%
	A-11	MAC 3U	Pfluger Farm Ln Phase B (1)	1440' S Of Town Center Dr to 460' N Of E Pflugerville	0.57	100%
ĺ	A-12	MAC 2D	Town Center Dr (1)	Limestone Commercial Dr to 160' N Of Terrell Ln	0.07	100%
ĺ	A-13	MAC 2D	Town Center Dr (2)	160' N Of Terrell Ln to Fm 685	0.10	100%
ĺ	A-14	MIC 2U	Terrell Ln Extension (1)	865' S Of Town Center Dr to Pfluger Farm Ln	0.68	100%
ĺ	A-15	MAA 6D	Fm 685 (1)	Sh 130 Sbfr to E Pflugerville Pkwy	0.77	100%
SA A			Location	Improve ment(s)		% In Service Area
l l	AI-1		Heatherwilde Blvd At Cheyenne Valley Dr	Signal		100%
- I	AI-2	nt s	Heatherwilde Blvd At Rowe Ln (Future)	Signal		100%
I	AI-3; CI-2	Ĭ	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass & Turn Lane		50%
I	AI-4]	Heatherwilde Blvd At New Meister Ln	Signal		100%
I	AI-5	Ĭ ď	E Of Heatherwilde At Sh 45 Wbfr	New Ramp		100%
l l	AI-6] <u>H</u>	E Of Heatherwilde At Sh 45 Ebfr	New Ramp		100%
	AI-7; CI-4	u o	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative & Turn Lane		50%
[AI-8	g cti	Pfluger Farm Ln At Town Center Dr	Roundabout		100%
l l	AI-9; BI-1	ırsı	Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%
	AI-10; BI-2	Intersection Improvements	Fm 685 At E Pflugerville Pkwy	Innovative		50%
	AI-11; CI-7		Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative & Turn Lane		50%
l l	AI-12]	Sh 130 Sbfr At S Of Fm 685	Ramp Reversal		100%
	AI-13; BI-3; CI-12		Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		25%
	-	I	Update ITS and Traffic Management Infrastructure	-		33%

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

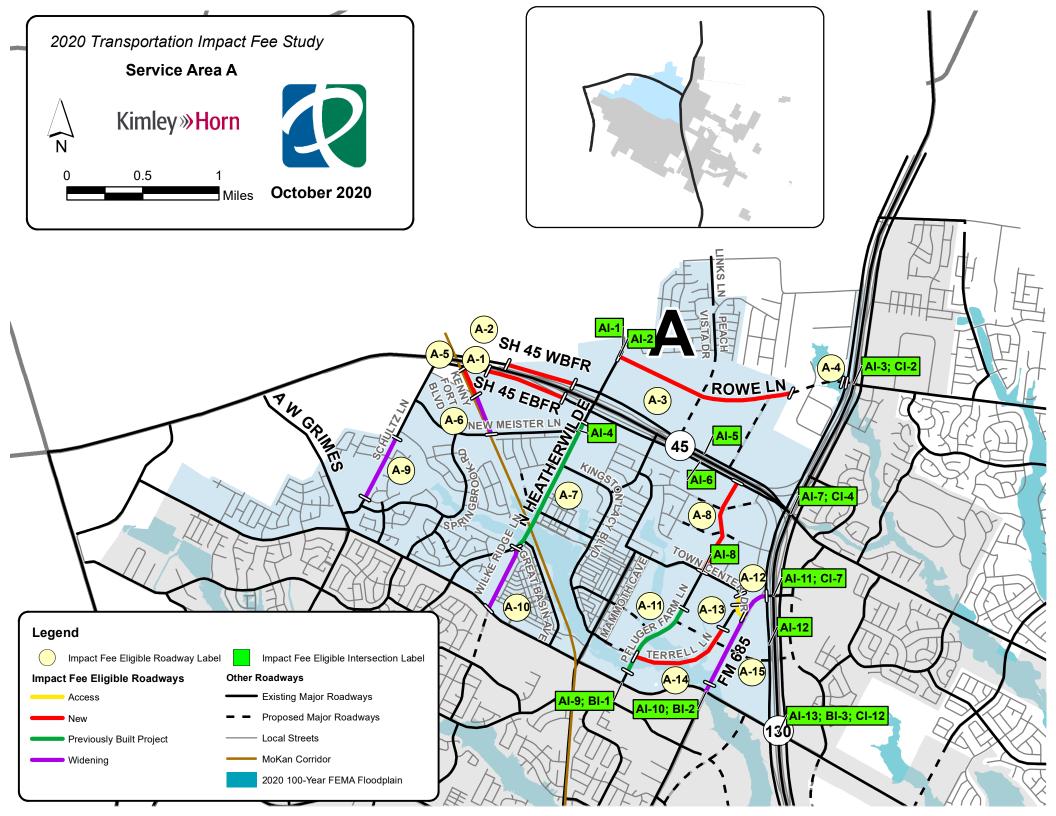




Table 2.B. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area B

Service Area	Proj. #	IF Class	Roadway	Limits	Le ngth (mi)	% In Service Area
	B-1	MAC 3U	Picadilly Dr (1)	City Limits to Central Commerce Dr	0.49	50%
	B-2	MAC 3U	Central Commerce Dr (1)	Picadilly Dr to Royston Ln	0.39	50%
	B-3	MAC 3U	Royston Ln (1)	Central Commerce Dr to Grand Avenue Pkwy	0.60	100%
	B-4	MAC 3U	W Pfennig Ln (1)	Rocky Creek Dr to Limestone Commercial Dwy	0.55	100%
	B-5	MAA 6D	Fm 685 (2)	E Pflugerville Pkwy to 1615' N Of E Pecan St	1.20	100%
	B-6	MAC 3U	Old Austin-Hutto Rd Extension (1)	E Pflugerville Pkwy to Old Austin-Hutto Rd	0.80	100%
	B-7	MIA 4D	E Pfennig Ln (1)	505' E Of Fm 685 to 2355' N Of E Pecan St	1.03	100%
	B-8	URBAN 2-LANE	Main St (1)	N Railroad Ave to Old Austin-Hutto Rd	0.65	100%
	B-9	MAA 6D	Fm 685 (3)	1615' N Of E Pecan St to E Pecan St	0.31	100%
	B-10	MAC 3U	Old Austin-Hutto Rd (1)	Fm 685 to E Pecan St	0.82	100%
	B-11	MAC 3U	Immanuel Rd (1)	E Pecan St to E Wells Branch Pkwy	1.07	100%
	B-12	MAC 3U	E Pfennig Ln (2)	City Limits to E Wells Branch Pkwy	0.48	100%
	B-13	MAC 3U	Biltmore Ave (1)	E Pecan St to Helios Way	0.30	100%
	B-14	MAC 3U	Helios Way West (1)	Biltmore Ave to Sun Light Near Way	0.13	100%
	B-15	MAC 3U	Sun Light Near Way Extension (1)	350' S Of E Pecan St to Helios Way	0.25	100%
	B-16	MAC 3U	Impact Way Extension (1)	Helios Way to 80' W Of Cameron Rd	1.28	100%
SA B			Location	Improvement(s)		% In Service Area
Š	AI-12; BI-1		Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%
	AI-13; BI-2		Fm 685 At E Pflugerville Pkwy Innovative Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy Turn Lane			50%
	AI-16; BI-3; CI-12				***	25%
	BI-4	ıts	Central Commerce Dr At Picadilly Dr	Turn Lane	***	100%
	BI-5	Intersection Improvements	Grand Avenue Pkwy At W Black Locus Dr	Signal		100%
	BI-6	ver	Heatherwilde Blvd At W Black Locust Dr	Signal		100%
	BI-7	ro.	E Black Locust Dr At W Pfennig Ln	Roundabout		100%
	BI-8	iii	Old Austin-Hutto Rd At E Pfennig Ln	Roundabout		100%
	BI-9	n J	Heatherwilde Blvd At W Pfennig Ln	Signal & Turn Lane		100%
	BI-10	i t i	Old Austin-Hutto Rd Ext At Old Austin-Hutto Rd	Roundabout		100%
	BI-11	sec	Edgemere Dr At Grand Avenue Pkwy	Turn Lane		100%
	BI-12	ıţeı	Heatherwilde Blvd At W Pecan St	Innovative		100%
	BI-13	7	Fm 685 At E Pecan St	Innovative & Turn Lane		100%
	BI-14		E Pfennig Ln At E Pecan St	Signal		100%
	BI-15		Biltmore Ave At E Pecan St	Signal & Turn Lane	_	100%
	BI-16; CI-15		Sh 130 Ebfr/Wbfr At E Pecan St	Overpass		50%
	BI-17		Immanuel Rd At E Wells Branch Pkwy	Signal		100%
	BI-18		E Wells Branch Pkwy At E Pfennig Ln	Signal		100%
	-		Update ITS and Traffic Management Infrastructure	-		33%

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

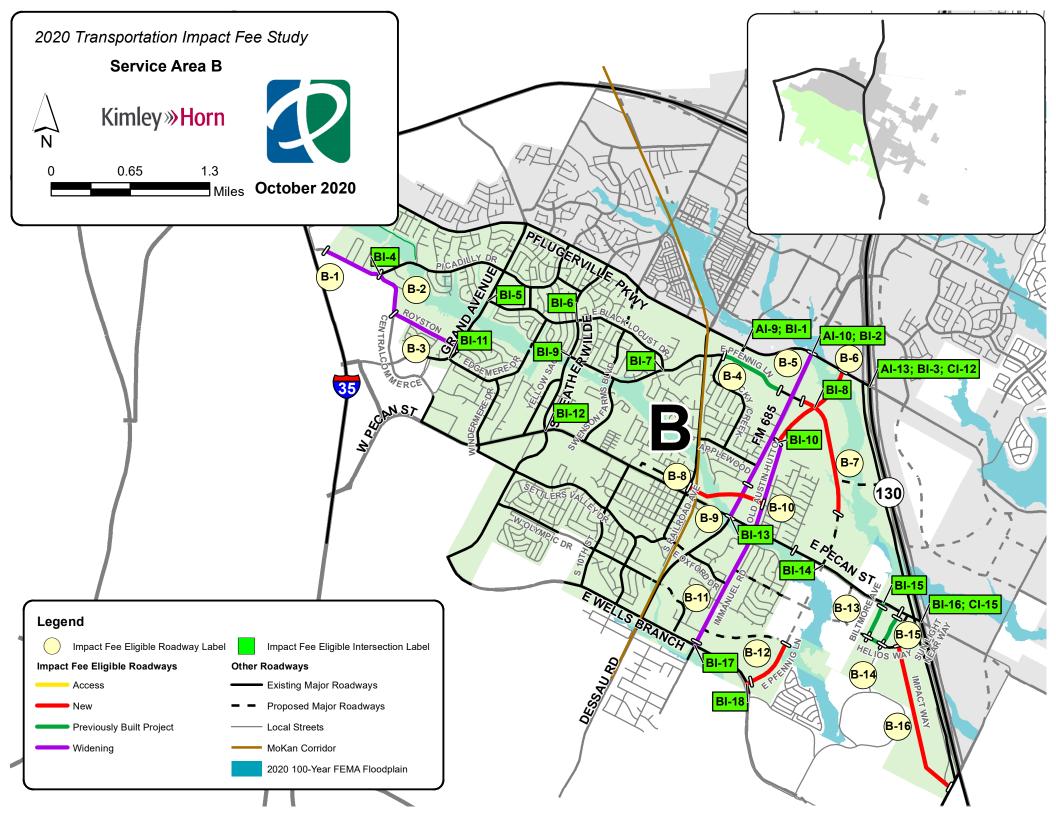
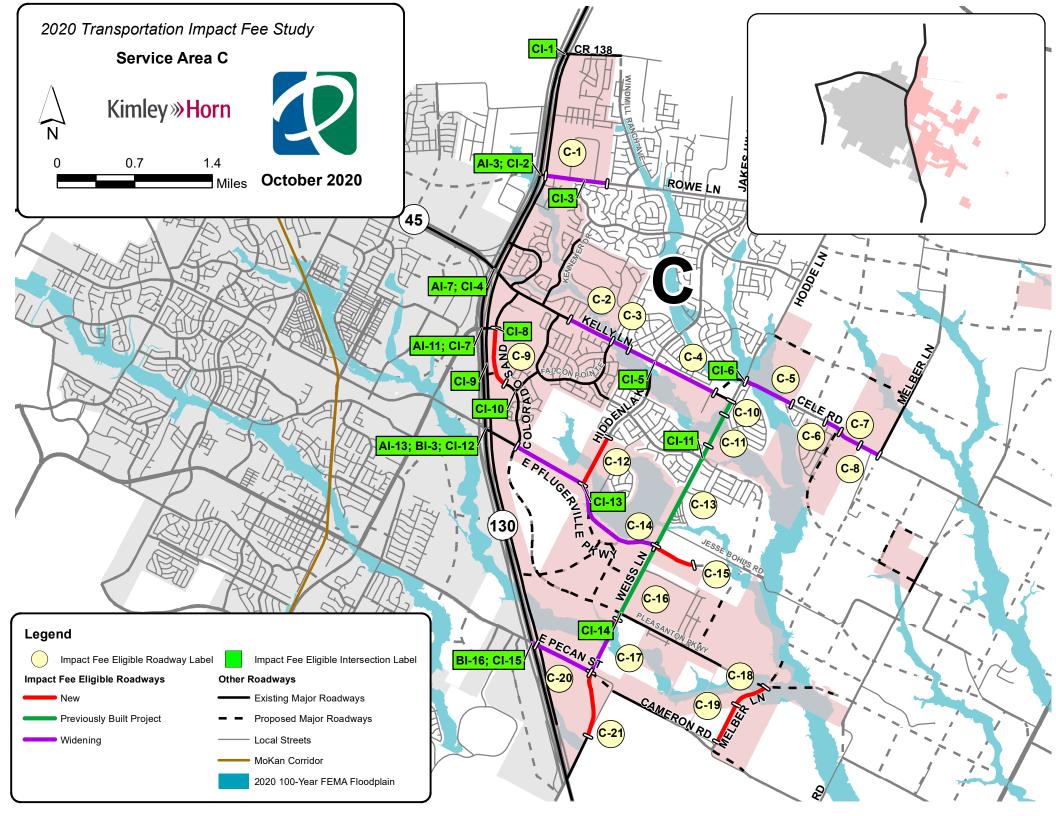




Table 2.C. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area C

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
	C-1	MIA 4D	Rowe Ln (1)	Sh 130 Nbfr to 950' W Of Commons Pkwy	0.56	50%
	C-2	MIA 4D	Kelly Ln (1)	545' E Of W Falcon Pointe Blvd to E Falcon Pointe Blvd	0.43	100%
	C-3	MIA 4D	Kelly Ln (2)	E Falcon Pointe Blvd to Moorlynch Ave	0.17	50%
	C-4	MIA 4D	Kelly Ln (3)	Moorlynch Ave to 870' W Of Weiss Ln	0.87	50%
	C-5	MAA 4D	Cele Rd (1)	Weiss Ln to 2505' E Of Weiss Ln	0.47	50%
	C-6	MAA 4D	Cele Rd (2)	695' W Of New Sweden Church Rd to 200' E Of New	0.17	50%
	C-7	MAA 4D	Cele Rd (3)	200' E Of New Sweden Church Rd to 1025' W Of Melber	0.22	100%
	C-8	MAA 4D	Cele Rd (4)	1025' W Of Melber Ln to Melber Ln	0.19	50%
	C-9	URBAN 3-LANE	Colorado Sand Dr (1)	Copper Mine Dr to Colorado Sand Dr	0.53	100%
	C-10	MAA 4D	Weiss Ln (1)	Kelly Ln to 730' S Of Kelly Ln	0.14	50%
	C-11	MAA 4D	Weiss Ln (2)	730' S Of Kelly Ln to 645' N Of Hidden Lake Crossing	0.32	100%
	C-12	1/2 MIA 4D	Hidden Lake Dr (1)	City Limits to E Pflugerville Pkwy	0.49	100%
	C-13	MAA 4D	Weiss Ln (3)	645' N Of Hidden Lake Crossing to E Pflugerville Pkwy	1.03	50%
	C-14	MAA 4D	E Pflugerville Pkwy (1)	Colorado Sands Dr to Weiss Ln	1.67	100%
	C-15	MAA 4D	E Pflugerville Pkwy Extension (1)	Weiss Ln to City Limits		50%
	C-16	MAA 4D	Weiss Ln (4)	E Pflugerville Pkwy to 2790' N Of E Pecan St	0.74	100%
ľ	C-17	1/2 MAA 4D	Weiss Ln (5)	2790' N Of E Pecan St to E Pecan St		50%
ľ	C-18	1/2 MIA 4D	Melber Ln (1)	Pleasanton Pkwy to 2455' N Of Cameron Rd		100%
ĺ	C-19	1/2 MIA 4D	Melber Ln (2)	2455' N Of Cameron Rd to 440' N Of Cameron Rd	0.38	50%
၁	C-20	MAA 4D	E Pecan St (1)	Sh 130 to Weiss Ln	0.59	100%
SA	C-21	1/2 MIA 4D	Cameron Rd Realignment (1)	E Pecan St to 2305' N Of Sh 130	0.59	100%
			Location	Improvement(s)		% In Service Area
l .	CI-1		Sh 130 At Cr 138	Innovative		25%
	AI-3; CI-2	×o.	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass & Turn Lane		50%
	CI-3	ent	Speidel Dr At Rowe Ln	Signal		100%
	AI-7; CI-4	u a	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative & Turn Lane		50%
	CI-5)A0	Jakes Hill Rd At Kelly Ln	Signal	_	50%
	CI-6	ıbr	Hodde Ln At Cele Rd	Innovative		25%
	AI-11; CI-7	Щ	Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative & Turn Lane	o	50%
	CI-8	ion	Copper Mine Dr At Colorado Sand Dr	Signal		100%
	CI-9	ect	Sh 130 Nbfr At S Of Fm 685	Ramp Reversal		100%
	CI-10	Intersection Improvements	Colorado Sand Dr At Lone Star Ranch Blvd	Roundabout		100%
	CI-11	Ĭ	Weiss Ln At Hidden Lake Crossing	Signal & Turn Lane		25%
	AI-13; BI-3; CI-12	-	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		50%
	CI-13		Hidden Lake Dr At E Pflugerville Pkwy	Signal		100%
	CI-14		Weiss Ln At Pleasanton Pkwy	Signal		100%
	BI-16; CI-15		Sh 130 Ebfr/Wbfr At E Pecan St	Overpass		50%
	_		Update ITS and Traffic Management Infrastructure	-		33%

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





IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. Service Areas

The three (3) service areas used in the 2020 Roadway Impact Fee Study are shown in the previously referenced Exhibit 1. These service areas cover the entire corporate area of the City of Pflugerville. 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." The service areas in the 2020 Roadway Impact Fee Study are consistent with the specification of Chapter 395 of the Texas Local Government Code.

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 2020 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.

<u>Vehicle-Mile</u>: 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.

<u>Total Vehicle-Miles of Supply</u>: Based on the total length (miles), number of lanes, and capacity (vehicles per hour) provided by the Transportation Master Plan (see Appendix B).

<u>Total Vehicle-Miles of Demand</u>: Based on the 10-year growth projections (Pg. 39). The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2020 Roadway Impact Fee Study are based upon Capacity Criteria published by the Capital Area Metropolitan Planning Organization (CAMPO) and modified to reflect local context within the City of Pflugerville corporate limits. Values shown match the values presented in the TMP. Table 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	Thru Lanes	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
6 Lane Divided Major Arterial	6	Divided	840
4 Lane Divided Major Arterial	4	Divided	840
4 Lane Divided Major Arterial (1/2)	4	Divided	840
4 Lane Divided Minor Arterial	4	Divided	760
4 Lane Divided Minor Arterial (1/2)	4	Divided	760
4 Lane Undivided Major Collector	4	Undivided	660
3 Lane Frontage Road	3	Undivided	840
3 Lane Urban Roadway	2	Undivided	720
2 Lane Urban Roadway	2	Undivided	720
3 Lane Major Collector	2	Undivided	660
2 Lane Divided Major Collector	2	Divided	720
2 Lane Minor Collector	2	Divided	480



Table 3B. Service Volumes for Existing Facilities

David		Hourly Vehicle-Mile			
Roadway Type	Description	Capacity per Lane-Mile of			
туре		Roadway Facility			
2U-G	Rural Cross-Section (i.e., gravel, dirt, etc.)	100			
2U-H	Two lane undivided – high capacity rural	720			
2U	Two lane undivided	330			
2U-OP	Two lane undivided with on-street parking	330			
2U-Half	Two lane undivided (half of future four lane)	480			
3U	Three lane undivided (two-way, left-turn lane)	660			
3U-OP	Three lane undivided with on-street parking	600			
4U	Four lane undivided	660			
4D	Four lane divided	760			
5U	Five lane undivided	690			
6U	Six lane undivided	760			
6D	Six lane divided	840			
7U	Seven lane undivided	760			



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.

D. Cost of the RIF CIP

All of the project costs for an arterial or collector facility which serves the overall transportation system are eligible to be included in the Roadway Impact Fee Capital Improvements Plan (RIF CIP). 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."

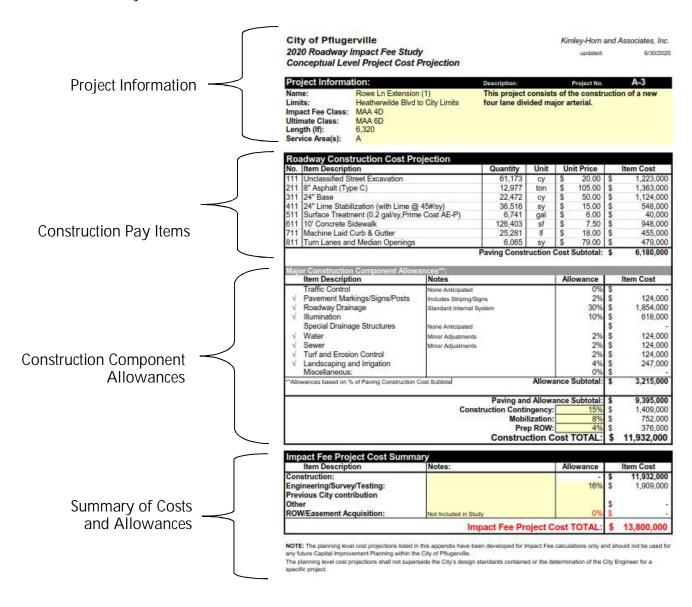
The engineer's opinion of the probable costs of the projects in the RIF CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the 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. The following is a detailed description of the costing worksheet/methodology for the RIF CIP.



1. Overview of RIF CIP Costing Worksheets

For each project a specific costing worksheet was developed (see Appendix A). Each worksheet contained the following four (4) main components:

- Project Information,
- Construction Pay Items,
- Construction Component Allowances and
- Summary of Costs and Allowances





2. Project Information

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

- <u>Project Number</u> 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 A-3 is in Service Area A and is the 3rd project on the list.
- Name A unique identifier for each project. In some cases, abbreviations are used for the project name.
- <u>Limits</u> 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 Transportation Master Plan classification of the roadway. Modification to roadway element widths are utilized in cases where a portion of the facility currently exists and the road is only to be widened, or where the road is planned to be widened to an interim configuration. Examples of these are access management projects, which are designated in the summary sheets at the beginning of each service area's Conceptual Level Cost Projections in Appendix A. Other specialized cases are noted in the short description box located in this section, such as previously constructed projects with a known cost.
- <u>Ultimate Class</u> the ultimate classification of the roadway, if different from the Impact Fee Class based on determination of need in the 10-year window.
- Length (ft) The distance measured in feet that is used to cost out the project.
- <u>Service Area(s)</u> Represents the service areas where the project is located. Multiple service areas will be listed if the project lies along a service area boundary, or if a different jurisdiction lies along the project, it will be noted.



3. Construction Pay Items

A typical roadway project consists of several costs, including the following: planning, survey, design engineering, permitting, right-of way acquisition, and construction and testing. While the construction cost component of a project may consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. The pay items used in the 2020 RIF CIP are as follows:

- Unclassified street excavation;
- HMAC Surface courses (asphalt, in depth);
- Flexible roadway base;
- Lime stabilized subgrade;
- Surface treatment coating;
- Concrete sidewalks:
- Concrete curb and gutter; and
- 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, signs and posts, roadway drainage, illumination, water and sewer adjustments, turf and erosion control, landscaping and irrigation, mobilization, and preparation of right-of-way. These allowance percentages are also based on historical data.

In addition, lump sum dollar allowances are provided for special drainage structures (bridges and culverts). The paving and allowance subtotal is given a fifteen percent (15%) contingency.



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. ROW/easement acquisition is not included in the project costs but is a recoverable cost per Chapter 395 of the Local Government Code.

The Impact Fee Project Cost Total is then the Construction Cost Total plus engineering, surveying, and testing, plus contingency, and minus project contributions by other entities, including developer contributions to specific projects. In situations where other agencies have jurisdiction over roadways within the corporate limits and funding has not yet been identified or secured for a project, it was assumed the city contribution toward such projects would amount to 80% of the Impact Fee Project Cost Total, which aligns with historical contributions. Only the anticipated City contribution to roadway projects are recoverable per state law.

E. Summary of Roadway Impact Fee CIP Costs

Tables 4.A – 4.C are the 10-Year RIF 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 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 project costs listed in the RIF CIP may differ from current 5-year City Capital Improvement Plans or proposed bond project costs. The differences in these project costs stem from inclusion of certain elements such as Right-of-Way acquisition, portions of the projects falling outside the City limits in the 5-year CIP or proposed bonds, and administrative costs associated with the projects for staff time or bond implementation.

The RIF CIP establishes the list of projects for which Impact Fees may be utilized. Projects not included in the RIF 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 4.A. 10-Year RIF CIP with Conceptual Level Cost Projections – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
	A-1	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (1)	City Limits to 1020' W Of Heatherwilde Blvd	0.53	100%	\$ 4,850,896	\$ 4,850,896	
	A-2	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (2)	City Limits to 955' W Of Heatherwilde Blvd	0.45	100%	\$ 4,149,104	\$ 4,149,104	
	A-3	MAA 4D	Rowe Ln Extension (1)	Heatherwilde Blvd to City Limits	1.20	100%	\$ 13,800,000	\$ 13,800,000	
	A-5	MIA 4D	Kenny Fort Blvd (1)	City Limits to City Limits	0.20	50%	\$ 1,800,000	\$ 900,000	
	A-7	MIA 4D	Heatherwilde Widening (1)	450' S Of Sh 45 Ebfr to Wilke Ridge Ln	0.94	100%	\$ 8,091,243	\$ 8,091,243	
	A-8	MAC 3U	Pfluger Farm Ln North (1)	Sh 45 Ebfr to Town Center Dr	0.66	100%	\$ 4,000,000	\$ 4,000,000	
	A-9	MAC 4U	Schultz Ln (1)	City Limits to 300' N Of Springbrook Rd	0.45	100%	\$ 2,860,000	\$ 2,860,000	
	A-10	MIC 2U	Wilke Ridge Ln (1)	Heatherwilde Blvd to W Pflugerville Pkwy	0.44	100%	\$ 2,100,000	\$ 2,100,000	
	A-11	MAC 3U	Pfluger Farm Ln Phase B (1)	1440' S Of Town Center Dr to 460' N Of E Pflugerville Pkwy	0.57	100%	\$ 3,142,358	\$ 3,142,358	
	A-12	MAC 2D	Town Center Dr (1)	Limestone Commercial Dr to 160' N Of Terrell Ln	0.07	100%	\$ 300,000	\$ 300,000	
	A-13	MAC 2D	Town Center Dr (2)	160' N Of Terrell Ln to Fm 685	0.10	100%	\$ 400,000	\$ 400,000	
	A-14	MIC 2U	Terrell Ln Extension (1)	865' S Of Town Center Dr to Pfluger Farm Ln	0.68	100%	\$ 6,500,000	\$ 6,500,000	
	A-15	MAA 6D	Fm 685 (1)	Sh 130 Sbfr to E Pflugerville Pkwy	0.77	100%	\$ 11,680,000	\$ 11,680,000	
	Proj. #		Location	Improvement(s)		% In Service Area	Total Project Cost	Cost in Service Area	
SAA	AI-1		Heatherwilde Blvd At Cheyenne Valley Dr	Signal		100%	\$ 228,159	\$ 228,159	
SZ.	AI-2	s ₃	Heatherwilde Blvd At Rowe Ln (Future)	Signal		100%	\$ 353,000	\$ 353,000	
	AI-3; CI-2	nen	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass & Turn Lane		50%	\$ 8,681,000	\$ 4,340,500	
	AI-4	ven	Heatherwilde Blvd At New Meister Ln	Signal		100%	\$ 254,474	\$ 254,474	
	AI-5	Intersection Improvements	E Of Heatherwilde At Sh 45 Wbfr	New Ramp		100%	\$ 4,000,000	\$ 4,000,000	
	AI-6	ĬĮ.	E Of Heatherwilde At Sh 45 Ebfr	New Ramp		100%	\$ 4,000,000	\$ 4,000,000	
	AI-7; CI-4	ion	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative & Turn Lane		50%	\$ 3,101,000	\$ 1,550,500	
	AI-8	sect	Pfluger Farm Ln At Town Center Dr	Roundabout		100%	\$ 1,500,000	\$ 1,500,000	
	AI-9; BI-1	ters	Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%	\$ 411,000	\$ 205,500	
	AI-10; BI-2	In	Fm 685 At E Pflugerville Pkwy	Innovative		50%	\$ 1,600,000	\$ 800,000	
	AI-11; CI-7		Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative & Turn Lane		50%	\$ 2,116,250	\$ 1,058,125	
	AI-12		Sh 130 Sbfr At S Of Fm 685	Ramp Reversal		100%	\$ 4,000,000	\$ 4,000,000	
	-13; BI-3; CI		Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		25%	\$ 946,560	\$ 236,640	
	-		Update ITS and Traffic Management Infrastructure	-		33%	\$ 2,974,924	\$ 991,641	
							ct Cost Subtotal	\$ 66,473,601	
							ct Cost Subtotal	\$ 23,518,539 \$ 28,333	
	2020 Roadway Impact Fee Study Cost Per Service Area \$								
	Total Cost in SERVICE AREA A \$								

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 Pflugerville.

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



Table 4.B. 10-Year RIF CIP with Conceptual Level Cost Projections – Service Area B

Service Area	Proj.#	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
	B-1	MAC 3U	Picadilly Dr (1)	City Limits to Central Commerce Dr	0.49	50%	\$ 3,300,000	\$ 1,650,000
	B-2	MAC 3U	Central Commerce Dr (1)	Picadilly Dr to Royston Ln	0.39	50%	\$ 2,500,000	\$ 1,250,000
	B-3	MAC 3U	Royston Ln (1)	Central Commerce Dr to Grand Avenue Pkwy	0.60	100%	\$ 3,700,000	\$ 3,700,000
	B-4	MAC 3U	W Pfennig Ln (1)	Rocky Creek Dr to Limestone Commercial Dwy	0.55	100%	\$ 2,192,517	\$ 2,192,517
	B-5	MAA 6D	Fm 685 (2)	E Pflugerville Pkwy to 1615' N Of E Pecan St	1.20	100%	\$ 15,040,000	\$ 15,040,000
	B-6	MAC 3U	Old Austin-Hutto Rd Extension (1)	E Pflugerville Pkwy to Old Austin-Hutto Rd	0.80	100%	\$ 8,300,000	\$ 8,300,000
	B-7	MIA 4D	E Pfennig Ln (1)	505' E Of Fm 685 to 2355' N Of E Pecan St	1.03	100%	\$ 11,000,000	\$ 11,000,000
	B-8	URBAN 2-LANE	Main St (1)	N Railroad Ave to Old Austin-Hutto Rd	0.65	100%	\$ 6,400,000	\$ 6,400,000
	B-9	MAA 6D	Fm 685 (3)	1615' N Of E Pecan St to E Pecan St	0.31	100%	\$ 3,840,000	\$ 3,840,000
	B-10	MAC 3U	Old Austin-Hutto Rd (1)	Fm 685 to E Pecan St	0.82	100%	\$ 3,989,000	\$ 3,989,000
	B-11	MAC 3U	Immanuel Rd (1)	E Pecan St to E Wells Branch Pkwy	1.07	100%	\$ 6,600,000	\$ 6,600,000
	B-12	MAC 3U	E Pfennig Ln (2)	City Limits to E Wells Branch Pkwy	0.48	100%	\$ 3,600,000	\$ 3,600,000
	B-13	MAC 3U	Biltmore Ave (1)	E Pecan St to Helios Way	0.30	100%	\$ 1,531,404	\$ 1,531,404
	B-14	MAC 3U	Helios Way West (1)	Biltmore Ave to Sun Light Near Way	0.13	100%	\$ 659,728	\$ 659,728
	B-15	MAC 3U	Sun Light Near Way Extension (1)	350' S Of E Pecan St to Helios Way	0.25	100%	\$ 1,283,771	\$ 1,283,771
	B-16	MAC 3U	Impact Way Extension (1)	Helios Way to 80' W Of Cameron Rd	1.28	100%	\$ 6,460,000	\$ 6,460,000
	Proj.#		Central Commerce Dr At Picadilly Dr	Turn Lane		% In Service Area	Total Project Cost	Cost in Service Area
	AI-12; BI-1		Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%	\$ 411,000	\$ 205,500
SA B	AI-13; BI-2		Fm 685 At E Pflugerville Pkwy	Innovative		50%	\$ 1,600,000	\$ 800,000
S	-16; BI-3; CI-		Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		25%	\$ 946,560	\$ 236,640
	BI-4		Central Commerce Dr At Picadilly Dr	Turn Lane		100%	\$ 294,677	\$ 294,677
	BI-5	nts	Grand Avenue Pkwy At W Black Locus Dr	Signal		100%	\$ 228,159	\$ 228,159
	BI-6	ime	Heatherwilde Blvd At W Black Locust Dr	Signal	200	100%	\$ 190,941	\$ 190,941
	BI-7	3 40	E Black Locust Dr At W Pfennig Ln	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
	BI-8	Intersection Improvements	Old Austin-Hutto Rd At E Pfennig Ln	Roundabout	000	100%	\$ 1,500,000	\$ 1,500,000
	BI-9	d u	Heatherwilde Blvd At W Pfennig Ln	Signal & Turn Lane	040	100%	\$ 190,941	\$ 190,941
	BI-10	c ti o	Old Austin-Hutto Rd Ext At Old Austin-Hutto Rd	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
	BI-11	rse	Edgemere Dr At Grand Avenue Pkwy	Turn Lane		100%	\$ 294,677	\$ 294,677
	BI-12	in te	Heatherwilde Blvd At W Pecan St	Innovative		100%	\$ 2,017,370	\$ 2,017,370
	BI-13		Fm 685 At E Pecan St	Innovative & Turn Lane	and	100%	\$ 1,145,000	\$ 1,145,000
	BI-14		E Pfennig Ln At E Pecan St	Signal		100%	\$ 411,000	\$ 411,000
	BI-15		Biltmore Ave At E Pecan St	Signal & Turn Lane		100%	\$ 520,000	
	BI-16; CI-15		Sh 130 Ebfr/Wbfr At E Pecan St	Overpass		50%	\$ 8,000,000	
	BI-17		Immanuel Rd At E Wells Branch Pkwy	Signal		100%	\$ 411,000	\$ 411,000
	BI-18		E Wells Branch Pkwy At E Pfennig Ln	Signal		100%	\$ 353,000	
	-		Update ITS and Traffic Management Infrastructure	-		33%	\$ 2,974,924	
							t Cost Subtotal	
							t Cost Subtotal	
				2020 Roadway Imp				
I				Tota	al Cost in	ı SERVI	CE AREA B	\$ 94,315,299

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 Pflugerville.

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 4.C. 10-Year RIF CIP with Conceptual Level Cost Projections – Service Area C

C-2	Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Tot	al Project Cost	Cost in Service Area
C-3		C-1	MIA 4D	Rowe Ln (1)	Sh 130 Nbfr to 950' W Of Commons Pkwy	0.56	50%	\$	5,500,000	\$ 2,750,000
C-4		C-2	MIA 4D	Kelly Ln (1)	545' E Of W Falcon Pointe Blvd to E Falcon Pointe Blvd	0.43	100%	\$	5,164,428	\$ 5,164,428
C.5		C-3	MIA 4D	Kelly Ln (2)	E Falcon Pointe Blvd to Moorlynch Ave	0.17	50%	\$	2,066,572	\$ 1,033,286
C-7		C-4	MIA 4D	Kelly Ln (3)		0.87	50%	\$	7,900,000	\$ 3,950,000
C-7		C-5	MAA 4D	Cele Rd (1)	Weiss Ln to 2505' E Of Weiss Ln	0.47	50%	\$	5,700,000	\$ 2,850,000
C-8		C-6	MAA 4D	Cele Rd (2)	Observable Del	0.17	50%	\$	2,000,000	\$ 1,000,000
C-9		C-7	MAA 4D	Cele Rd (3)	200' E Of New Sweden Church Rd to 1025' W Of Melber Ln	0.22	100%	\$	2,600,000	\$ 2,600,000
C.10		C-8	MAA 4D	Cele Rd (4)	1025' W Of Melber Ln to Melber Ln	0.19	50%	\$	2,300,000	\$ 1,150,000
C-11		C-9	URBAN 3-LANE	Colorado Sand Dr (1)	Copper Mine Dr to Colorado Sand Dr	0.53	100%	\$	3,953,000	\$ 3,953,000
C-12		C-10	MAA 4D	Weiss Ln (1)	Kelly Ln to 730' S Of Kelly Ln	0.14	50%	\$	708,264	\$ 354,132
C-13		C-11	MAA 4D	Weiss Ln (2)	730' S Of Kelly Ln to 645' N Of Hidden Lake Crossing	0.32	100%	\$	1,616,672	\$ 1,616,672
C-14		C-12	1/2 MIA 4D	Hidden Lake Dr (1)	City Limits to E Pflugerville Pkwy	0.49	100%	\$	3,200,000	\$ 3,200,000
C-15		C-13	MAA 4D	Weiss Ln (3)	645' N Of Hidden Lake Crossing to E Pflugerville Pkwy	1.03	50%	\$	5,304,328	\$ 2,652,164
C.16		C-14	MAA 4D	E Pflugerville Pkwy (1)	Colorado Sands Dr to Weiss Ln	1.67	100%	\$	23,100,000	\$ 23,100,000
C-17		C-15	MAA 4D	E Pflugerville Pkwy Extension (1)	Weiss Ln to City Limits	0.39	50%	\$	4,642,000	\$ 2,321,000
C-18		C-16	MAA 4D	Weiss Ln (4)	E Pflugerville Pkwy to 2790' N Of E Pecan St	0.74	100%	\$	3,787,223	\$ 3,787,223
C-19		C-17	1/2 MAA 4D	Weiss Ln (5)	2790' N Of E Pecan St to E Pecan St	0.54	50%	\$	8,800,000	\$ 4,400,000
C-20		C-18	1/2 MIA 4D	Melber Ln (1)	Pleasanton Pkwy to 2455' N Of Cameron Rd	0.32	100%	\$	3,000,000	\$ 3,000,000
C-21		C-19	1/2 MIA 4D	Melber Ln (2)	2455' N Of Cameron Rd to 440' N Of Cameron Rd	0.38	50%	\$	1,800,000	\$ 900,000
Proj. # Location Improvement(s)		C-20	MAA 4D	E Pecan St (1)	Sh 130 to Weiss Ln	0.59	100%	\$	8,700,000	\$ 8,700,000
Proj. # Proj. # Proj. #	ပ	C-21	1/2 MIA 4D	Cameron Rd Realignment (1)	E Pecan St to 2305' N Of Sh 130	0.59	100%	\$	2,900,000	\$ 2,900,000
Proj. # CC-1							% In	Tot	al Project	Cost in Service
CI-1		Proj. #		Location	Improvement(s)			100		
AL-3; C1-2 C1-3 AL-7; C1-4 C1-5 C1-6 AL-1; C1-7 C1-8 C1-9 C1-10 C1-10 C1-10 C1-10 C1-10 C1-11 C1-13 B1-13; C1-1 C1-13 B1-16; C1-15 C1-14 C1-15 C1-14 C1-15 C1-15 C1-16 C1-16 C1-16 C1-16 C1-16 C1-17 C1-18 C		CI 1		Sh 120 A+ C+ 129	Innovertive			•	1,600,000	\$ 400,000
Cl-3						1				
Al-7; Cl-4 Cl-5 Cl-6 Al-11; Cl-7 Cl-8 E							***************************************	· · · · · · · · · · · · · · · · · · ·		
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1-13; B1-3; C1		***************************************	A 0.			1				
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1-13; B1-3; C1			d U							
1-13; B1-3; C1			ctio							
1-13; B1-3; C1			rse							
1-13; B1-3; C1			Ē					-		, , , , , , , , , , , , , , , , , , , ,
CI-13			-		8					
CI-14								· · · · · · · · · · · · · · · · · · ·		
Bi-16; CI-15					<u> </u>					
- Update ITS and Traffic Management Infrastructure - 33% \$ 2,974,924 \$ 991.6 Service Area Roadway Project Cost Subtotal \$ 81,381,90 Service Area Intersection Project Cost Subtotal \$ 20,821,62 2020 Roadway Impact Fee Study Cost Per Service Area \$ 28,33					-			<u> </u>		
Service Area Roadway Project Cost Subtotal \$ 81,381,90 Service Area Intersection Project Cost Subtotal \$ 20,821,62 2020 Roadway Impact Fee Study Cost Per Service Area \$ 28,33										
Service Area Intersection Project Cost Subtotal \$ 20,821,62 2020 Roadway Impact Fee Study Cost Per Service Area \$ 28,33				Optate 113 and 11ame management milastructure	Samina /	rea Road	0070	Ψ	, , ,	4 ,,,,,,,,,
2020 Roadway Impact Fee Study Cost Per Service Area \$ 28,33										
		ı					·			\$ 102,231,859

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 Pflugerville.

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 Pflugerville's Roadway Impact Fees is the vehicle-mile of travel during the afternoon peak-hour (as explained on Pg. 24). 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 2020 to 2030 is based upon projected changes in residential units and employment for the period. To determine this growth, estimates of residential units, basic employment, service employment, and retail employment for 2020 were made, along with growth projections for each of these demographic statistics through 2030. 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 existing and projected number of building square footages for three (3) categories of employment – basic, service, and retail.

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*, 10th 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 over the 10-year study period. 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, 10th Edition and the National Household Travel Survey performed by the Federal Highway Administration (FHWA). The ITE Trip Generation Manual, 10th 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 Capital Area Metropolitan Planning Organization (CAMPO) long-range transportation model and supplemented with the National Household Travel Survey conducted by the FHWA.



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

Variables:

$$TDF = T*(1-P_b)*L_{\max}$$
 where... $L_{\max} = \min(L*OD \text{ or } 6)$ TDF = Transportation Demand Factor,

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

L = Average Trip Length (miles), and OD = Origin-Destination Reduction (50%)

The maximum trip length was limited to six (6) 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 Pflugerville are closely approximated with a six (6) mile distance.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the Roadway Impact Fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Pflugerville to both residential and non-residential land uses. To avoid counting these trips twice as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use, and the total trip is only counted once. This methodology is consistent with that used in the National Household Travel Survey. These lengths were developed based on the CAMPO long-range transportation model.



Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the four (4) 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 5. Transportation Demand Factor Calculations

Variable	Residential, Single Family	Residential, Multifamily	Basic	Service	Retail
T	0.99	0.56	0.63	1.15	3.81
P _b	0%	0%	0%	0%	34%
L	8.59	8.59	12.89	6.76	6.35
L _{max}	4.30	4.30	6.00	3.38	3.18
TDF	4.26	2.41	3.78	3.89	7.98

^{*} L_{max} is less than 6 miles for residential, service, and retail land uses; therefore this lower trip length is used for calculating the TDF for these land uses.

Variables:

TDF = Transportation Demand Factor,

Γ = Trip Rate (peak hour trips / unit),

P_b = Pass-By Discount (% of trips),

 L_{max} = Maximum Trip Length (miles),

L = Average Trip Length (miles), and

OD = Origin-Destination Reduction (50%)

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in Table 6. This table shows the growth in total vehicle-miles by service area between the years 2020 – 2030.



Table 6. 10-Year Growth Projections

SEBVICE		RESIDEN.	RESIDENTIAL VEHICLE-MILES	:-MILES		NON-RESIDI	NON-RESIDENTIAL SQUARE FEET 5	ARE FEET ⁵	TRANS.	TRANS. DEMAND FACTOR $^{\rm 6}$	4CTOR ⁶	NON-RES	NON-RESIDENTIAL VEHICLE-MILES ¹⁰	VEHICLE-	MILES ¹⁰	TOTAL
ARFA	Single	Trip Rate	Trip Rate Multi-Family Trip Rate	Trip Rate	VEHICLE	Jisya	SEBVICE		70.04	81081410	6	0104 0	101/1013	DETAIL	TOTAL	VEHICLE
į	Family Units	TDF ²	Units	TDF	MILES ⁴	D P P P P P P P P P P P P P P P P P P P	SERVICE	אבן און	BASIC	BASIC SERVICE RETAIL BASIC SERVICE RETAIL TOTAL	KEI AIL	20	SERVICE TO IVE	76.7		MILES
		66'0		0.56					0.63	1.15	2.51					
A	330		4,105		11,299	1,220,000	1,560,000	2,470,000				4,612	6,068	19,711	30,391	41,690
Ф	1,083	4.26	1,876	2.41	9,135	1,440,000	310,000	750,000	3.78	3.89	7.98	5,443	1,206	5,985	12,634	21,769
ပ	2,448		2,101		15,492	1,350,000	530,000	480,000				5,103	2,062	3,830	10,995	26,487
Totals	3,861		8.082		35,925	4.010.000		2,400,000 3,700,000				15,158	9.336	29,526	54.020	89.945

From City of Pflugerville 2020 Land Use Assumptions for Roadway Impact Fees

² Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and trip generation rate

³ Transportation Demand Factor for each Service Area (from LUVMET) using Multifamily Housing (Low-Rise) land use and trip generation rate

Calculated by multiplying TDF by the number of dwelling units

⁵ From City of Pflugerville 2020 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

'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



Table 6 (Continued). 10-Year Growth Projections Vehicle Miles of Increase (2020-2030)

SERVICE AREA	VEH-MILES
Α	41,690
В	21,769
С	26,487



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 RIF 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 7 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 8. The Roadway Impact Fee CIP consists of both roadway segment and intersection improvements. The roadway segment component is referred to as the "Roadway Impact Fee CIP," while the intersection component is referred to as the "Intersection Impact Fee CIP."

Table 7. Maximum Assessable Roadway Impact Fee Computation

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

Each project identified in the RIF 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 – Roadway Impact Fee CIP Units of Supply)
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A number of facilities identified in the RIF 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	Net Amount of Vehicle- Miles of Capacity Added	Net Amount of Vehicle-Miles of Capacity Added
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This calculation identifies the portion of the RIF CIP (in vehicle-miles) that may be recoverable through the collection of impact fees.



4	Total Cost of the Roadway Impact Fee CIP	The total cost of the roadway projects within each service area (from Table 4: 10-Year Roadway Impact Fee CIP with Conceptual Level
4	and Study within the Service Area	Cost Projections) plus the portion of the Study cost in each service area, divided equally.

This line simply identifies the total cost of all the roadway projects identified in each service area plus the cost of the Kimley-Horn study divided equally into thirds for the three (3) Service Areas.

5	Cost of Net Capacity Supplied	The total Roadway Impact Fee CIP cost (Line 4) prorated by the ratio of Net Capacity Added (Line 3) to Total Capacity Added (Line 1). [(Line 3 / Line 1) * (Line 4)]
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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 RIF CIP is reduced to the amount available for future growth (i.e. excluding existing usage).

6	Cost to Meet Existing Needs and Usage	The difference between the Total Cost of the Roadway Impact Fee CIP (Line 4) and the Cost of the Net Capacity supplied (Line 5). (Line 5 – Line 4)
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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.

Ī		Total Vehicle-Miles of	Based upon the growth projection provided in the Land Use
	7	New Demand over Ten	Assumptions, an estimate of the number of new vehicle-miles within
		Years	the service area over the next ten years. (from Table 6)

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

8	Percent of Capacity Added Attributable to	The result of dividing Total Vehicle-Miles of New Demand (Line 7) by the Net Amount of Capacity Added (Line 3), limited to 100% (Line
	New Growth	9). This calculation is required by Chapter 395 to ensure capacity
9	Chapter 395 Check	added is attributable to new growth.

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.

		Cost of Roadway Impact	The result of multiplying the Cost of Net Capacity Added (Line 5) by
1	0	Fee CIP Attributable to	the Percent of Capacity Added Attributable to New Growth, limited
		New Growth	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.



		Total Cost of the Intersection	The total cost of the intersection projects within each service area
11	1	Impact Fee CIP within the Service	(from Table 4: 10-Year Roadway Impact Fee Capacity
		Area	Improvements Plan with Conceptual Level Cost Projections)

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

	Percent of Intersection Capacity	The result of dividing Total Residential Vehicle-Miles of New
12	Added Attributable to New	Demand (from Table 6) by the 2030 residential vehicle-mile
	Growth	projection in each service area.

In order to ensure that the capacity added by the Intersection Impact Fee CIP does not account for existing demand, the anticipated residential vehicle mile growth in each service area is calculated as a percentage of the 2030 residential vehicle-miles, including existing demand.

	13	Cost of Intersection Impact Fee CIP Attributable to New Growth	The result of multiplying the Total Cost of Intersection Impact Fee CIP (Line 11) by the Percent of Intersection Capacity Added Attributable to New Growth (Line 12). (Line 11 * Line 12)
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This value is the total Intersection Impact Fee CIP project cost (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.

ſ	1/	Credit for Previous Contributions	The total contributions by development toward the building of
	14	Credit for Frevious Contributions	improvements in the Roadway Impact Fee CIP.

This value is the total of all exactions upon development that resulted in a financial contribution towards future improvements in the Roadway Impact Fee CIP. This line is intended as a credit to development so as not to double charge for previous contributions for roadway capacity improvements.

15	Cost of Total Roadway Impact Fee CIP Attributable to New Growth	The result of adding the Cost of the Roadway Impact Fee CIP Attributable to new growth (Line 10) to the Cost of the Intersection Impact Fee CIP Attributable to new growth (Line 13) less credits for previous contributions (Line 10 + Line 13 – Line 14).
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This value is the Total Roadway Impact Fee CIP project cost (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.

16	Pre-Finance, Pre-Credit Maximum Fee per Service Unit	Found by dividing the Cost of Total Roadway Impact Fee CIP Attributable to New Growth less Developer Contributions (Line 15) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 7). (Line 15 / Line 7)
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This line represents the maximum fee assessable by state law prior to credits given for ad valorem taxes and for additional cost of financing less interest earnings on debt.



B. Plan for Financing and the Ad Valorem Tax Credit

Chapter 395 of the Texas Local Government Code requires the Roadway Impact Fee 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 transportation improvements plan; or
- (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the transportation improvements plan..."

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

Line	Title	Description
17	Financing Costs	The cost to finance the debt anticipated to be incurred for implementation of projects in the RIF CIP (from Appendix C – Plan for Awarding the Street Impact Fee Credit)
18	Interest Earnings	The interest projected to be earned on the debt being financed to implement the RIF CIP, shown as a credit (from Appendix C – Plan for Awarding the Street Impact Fee Credit)
19	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 Street Impact Fee Credit)
20	Recoverable Cost of the Total Roadway Impact Fee CIP and Financing	The Cost of the RCP Attributable to New Growth (Line 15) plus the Financing Costs (Line 17) and the credit for Interest Earnings (Line 18) and the Credit for Ad Valorem Taxes (Line 19). (Line 15 + Line 17 + Line 18 + Line 19)
21	Maximum Assessable Fee Per Service Unit	Found by dividing the Recoverable Cost of the RCP and Financing (Line 20) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 9). (Line 20 / Line 7)



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
 - o Method of financing (i.e. cash or debt financing)
 - o The level of financing (e.g. 50% debt / 50% 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 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 15) 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, unless specific funding has already been determined, it is assumed that the City will debt finance 50% of the future project costs and cash finance 50%. For debt financing, the cost of financing is based on the City's Financial Advisor's input and City Staff estimates of future debt costs for bonds issued with 30-year



terms, as shown in Appendix C. 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 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 debt is issued over 30-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 roadway 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 1.25% based on the January 2020 to June 2020 average return on the City's Corporate Overnight Lone Star Investment Pool.

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 RIF CIP. As an alternative, a credit equal to 50% of the total cost of implementing the RIF 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 RIF 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 RIF 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 RIF 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 debt-funded projects (50% of the new improvement costs included in the RIF 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 C.



Table 8. Maximum Assessable Roadway Impact Fee

	lable 8. Maximum Assessable Ro SERVICE AREA:	Jau	A	LIC	B B		С			
	TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP		A		Б					
1	(FROM ROADWAYIMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B)		18,568		20,555		26,145			
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B)		3,956		7,217		5,975			
3	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2)		14,612		13,338		20,170			
4	TOTAL COST OF THE ROADWAY IMPACT FEE CIP AND STUDY WITHIN SERVICE AREA (FROM TABLES 4A TO 4 C)	\$	66,501,934	\$	77,524,753	\$	81,410,238			
5	COST OF NET CA PACITY SUPPLIED (LINE 3 / LINE 1) * (LINE 4)	\$	52,333,383	\$	50,305,286	\$	62,805,298			
6	COST TO MEET EXISTING NEEDS AND USAGE (LINE 4 - LINE 5)	\$	14,168,551	\$	27,219,467	\$	18,604,940			
7	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 6 AND LAND USE ASSUMPTIONS)		41,690		21,769		26,487			
8	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 7 / LINE 3)		285.3%		163.2%		131.3%			
9	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	100.0%		100.0%	100.0%					
10	COST OF ROADWAY IMPACT FEECIP ATTRIBUTABLE TO GROWTH (LINE 5 * LINE 9)	\$	52,333,383	\$	50,305,286	\$	62,805,298			
11	TOTAL COST OF THE INTERSECTION IMPACT FEE CIP WITHIN SERVICE AREA (FROM TABLES 4A TO 4 C)	\$	23,518,539	\$	16,790,545	\$	20,821,621			
12	PERCENT OF INTERSECTION CAPACITY ADDED ATTRIBUTABLE TO GROWTH (FROM TABLE 6 AND LAND USE ASSUMPTIONS)		33.0%		16.8%		51.3%			
13	COST OF INTERSECTION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 11 * LINE 12)	\$	7,751,100	\$	2,818,484	\$	10,686,115			
14	CREDIT FOR PREVIOUS CONTRIBUTIONS	\$	86,240	\$	65,168	\$	2,163,856			
15	COST OF TOTAL ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 10 + LINE 13 - LINE 14)	\$	59,998,244	\$	53,058,602	\$	71,327,557			
16	PRE-FINANCE, PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 15 / LINE 7)	\$	1,439	\$	2,437	\$	2,693			
17	FINANCING COSTS (FROM APPENDIX C)	\$	25,323,662	\$	23,830,915	\$	29,855,459			
18	INTEREST EARNINGS (FROM APPENDIX C)	\$	(7,899,008)	\$	(8,117,134)	\$	(9,113,427)			
19	CREDIT FOR AD VALOREM TAXES (FROM APPENDIX C)	\$	(11,131,498)	\$	(5,292,355)	\$	(8,467,189)			
20	RECOVERABLE COST OF TOTAL ROADWAY IMPACT FEE CIP AND FINANCING (LINE 15 + LINE 17 + LINE 18 + LINE 19)	\$	66,291,399	\$	63,480,028	0,028 \$ 83,602,3				
21	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 20 / LINE 7)	\$	1,590	\$	2,916	\$	3,156			



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 9. This table lists the predominant land uses that may occur within the City of Pflugerville. 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 10. 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 uses per development unit. The next column in Table 9, if applicable to the land use, presents the percentage of trips to and from certain land uses reduced by pass-by trips, as previously discussed in the Service Unit Calculation beginning on Pg. 35.

The definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual*, 10th 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 10th 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 the CAMPO long range transportation model and supplemented by the *National Household Travel Survey* performed by the FHWA. The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this



stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above six (6) miles, the maximum trip length used for calculation is reduced to six (6) miles. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee 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 9. Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Table 7.	e / Vernicie-ivi	ile Lyu	ivai	Cilcy	abic	(LO V IVI					
Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass- by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev- Unit
PORT AND TERMINAL											
Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.70	50%	5.35	5.35	10.00
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.63			0.63	12.89	50%	6.45	6.00	3.78
Industrial Park	130	1,000 SF GFA	0.40			0.40	12.89	50%	6.45	6.00	2.40
Manufacturing	140	1,000 SF GFA	0.67			0.67	12.89	50%	6.45	6.00	4.02
Warehousing	150	1,000 SF GFA	0.19			0.19	12.89	50%	6.45	6.00	1.14
Mini-Warehouse	151	1,000 SF GFA	0.17			0.17	12.89	50%	6.45	6.00	1.02
RESIDENTIAL		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				0.11					
Single-Family Detached Housing	210	Dwelling Unit	0.99			0.99	8.59	50%	4.30	4.30	4.26
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.56			0.56	8.59	50%	4.30	4.30	2.41
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.44			0.44	8.59	50%	4.30	4.30	1.89
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.36			0.36	8.59	50%	4.30	4.30	1.55
Mobile Home Park / Manufactured Hom	240	Dwelling Unit	0.46			0.46	8.59	50%	4.30	4.30	1.98
Senior Adult Housing-Detached	251	Dwelling Unit	0.30			0.30	8.59	50%	4.30	4.30	1.29
Senior Adult Housing-Detached Senior Adult Housing-Attached	252	Dwelling Unit	0.26			0.26	8.59	50%	4.30	4.30	1.12
Assisted Living	254	Beds	0.26			0.26	8.59	50%	4.30	4.30	1.12
LODGING	234	Deus	0.20			0.20	6.39	30%	4.30	4.30	1.12
	310	D	0.60			0.60	5.41	50%	2.71	2.71	1.62
Hotel Matel (Other Ladeine Facilities	320	Room	0.80			0.60	5.41 5.41	50%	2.71	2.71	1.63
Motel / Other Lodging Facilities RECREATIONAL	320	Room	0.38			0.38	5.41	30%	2.71	2./1	1.05
	422	m	1.05			1.25	< 25	500/	2.10	2.10	2.00
Golf Driving Range	432	Tee	1.25			1.25	6.35	50%	3.18	3.18	3.98
Golf Course	430	Acre	0.28			0.28	6.35	50%	3.18	3.18	0.89
Recreational Community Center	495	1,000 SF GFA	2.31			2.31	6.35	50%	3.18	3.18	7.35
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	6.35	50%	3.18	3.18	4.23
Miniature Golf Course	431	Hole	0.33			0.33	6.35	50%	3.18	3.18	1.05
Multiplex Movie Theater	445	Screens	13.73			13.73	6.35	50%	3.18	3.18	43.66
Racquet / Tennis Club	491	Court	3.82			3.82	6.35	50%	3.18	3.18	12.15
INSTITUTIONAL											
Religious Place of Worship	560	1,000 SF GFA	0.49			0.49	6.30	50%	3.15	3.15	1.54
Day Care Center	565	1,000 SF GFA	11.12	44%	В	6.23	3.39	50%	1.70	1.70	10.59
Elementary and Middle School (K-8)	520/2	Students	0.17			0.17	3.39	50%	1.70	1.70	0.29
High School	530	Students	0.14			0.14	3.39	50%	1.70	1.70	0.24
Junior / Community College	540	Students	0.11			0.11	3.39	50%	1.70	1.70	0.19
University / College	550	Students	0.15			0.15	3.39	50%	1.70	1.70	0.26
MEDICAL											
Clinic	630	1,000 SF GFA	3.28			3.28	6.76	50%	3.38	3.38	11.09
Hospital	610	1,000 SF GFA	0.97			0.97	6.76	50%	3.38	3.38	3.28
Nursing Home	620	Beds	0.22			0.22	6.76	50%	3.38	3.38	0.74
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	В	2.47	6.76	50%	3.38	3.38	8.35
OFFICE				***************************************							
Corporate Headquarters Building	714	1,000 SF GFA	0.60			0.60	6.76	50%	3.38	3.38	2.03
General Office Building	710	1,000 SF GFA	1.15			1.15	6.76	50%	3.38	3.38	3.89
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	6.76	50%	3.38	3.38	11.69
Single Tenant Office Building	715	1,000 SF GFA	1.71			1.71	6.76	50%	3.38	3.38	5.78
Office Park	750	1,000 SF GFA	1.07			1.07	6.76	50%	3.38	3.38	3.62

Key to Sources of Pass-by Rates:

A. ITE Trip Generation Handbook

B. Estimated by Kimley-Horn based on ITE rates for similar categories

C. ITE were adjusted by Kimley-Horn based on logical relationship to other categories.



Table 9 (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	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev- Unit
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	В	1.87	5.41	50%	2.71	2.71	5.07
Automobile Parts Sales	843	1,000 SF GFA	4.91	43%	A	2.80	5.41	50%	2.71	2.71	7.59
Gasoline/Service Station	944	Vehicle Fueling Position	14.03	42%	A	8.14	1.20	50%	0.60	0.60	4.88
Gasoline/Service Station w/ Conv Market and Car Wash	945	Vehicle Fueling Position	13.99	56%	В	6.16	1.20	50%	0.60	0.60	3.70
New Car Sales	841	1,000 SF GFA	2.43	20%	В	1.94	5.41	50%	2.71	2.71	5.26
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	В	2.91	5.41	50%	2.71	2.71	7.89
Self-Service Car Wash	947	Stall	5.54	40%	В	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.98	28%	A	2.87	5.41	50%	2.71	2.71	7.78
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.67	50%	A	16.34	3.39	50%	1.70	1.70	27.78
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	28.34	50%	В	14.17	3.39	50%	1.70	1.70	24.09
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.77	43%	A	5.57	5.41	50%	2.71	2.71	15.09
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	5.41	50%	2.71	2.71	11.84
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	43.38	70%	A	13.01	1.20	50%	0.60	0.60	7.81
Other Retail											
Free-Standing Store	815	1,000 SF GFA	4.83	30%	С	3.38	6.35	50%	3.18	3.18	10.75
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	В	4.86	6.35	50%	3.18	3.18	15.45
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.35	50%	3.18	3.18	3.85
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	6.35	50%	3.18	3.18	12.72
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.29	49%	A	5.25	6.35	50%	3.18	3.18	16.70
Shopping Center	820	1,000 SF GLA	3.81	34%	A	2.51	6.35	50%	3.18	3.18	7.98
Supermarket	850	1,000 SF GFA	9.24	36%	A	5.91	6.35	50%	3.18	3.18	18.79
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	В	3.50	6.35	50%	3.18	3.18	11.13
Department Store	875	1,000 SF GFA	1.95	30%	В	1.37	6.35	50%	3.18	3.18	4.36
SERVICES								_			
Walk-In Bank	911	1,000 SF GFA	12.13	40%	В	7.28	3.39	50%	1.70	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	27.15	35%	A	17.65	3.39	50%	1.70	1.70	30.01
Hair Salon	918	1,000 SF GLA	1.45	30%	В	1.02	3.39	50%	1.70	1.70	1.73

Key to Sources of Pass-by Rates:

A. ITE Trip Generation Handbook

B. Estimated by Kimley-Horn based on ITE rates for similar categories

C. ITE were adjusted by Kimley-Horn based on logical relationship to other categories.



Table 10. 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, between trucks and rail, or between trucks and ports							
INDUSTRIAL									
General Light Industrial	110	Emphasis on activities other than manufacturing in a free-standing facility devoted to a single use							
Industrial Park	130	Contains a number of industrial or related facilities; characterized be a mix of highly diversified facilities							
Manufacturing	140	Primary activity is conversion of raw materials or parts into finished products							
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							
Multifamily Housing (Low-Rise)	220	One or two levels (floor) per building such as duplexes or townhomes							
Multifamily Housing (Mid-Rise)	221	Multi-family housing between three and ten levels (floors) per building							
Multifamily Housing (High-Rise)	222	Multi-family housing more than ten levels (floors) per building							
Mobile Home Park / Manufactured Home	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 stand-along public facilities often including classes and clubs for adults and children including YMCAs.							
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									
Religious Place of Worship	560	All places of worship							
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds							
Elementary and Middle School (K-8)	520/2	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	Facilities that specialize in the medical care and treatment of animals							
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 10 (Cont'd). Land Use Descriptions

		ole to (dont d). Edita 030 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 and Car Wa	946	Gasoline sales with convenience store and car washes where the primary business is gasoline sales
New Car Sales	841	Automobile sales, 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
Car Wash	947	Has stalls for driver to park and wash the vehicle
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.
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

	Roadway Impact Fee Calculation Steps – Example 1
	Determine Development Unit and Vehicle-Miles Per Development Unit
Step	From Table 9 [Land Use – Vehicle-Mile Equivalency Table]
1	Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 4.26
Stop	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
Step 2	From Table 8, Line 21 [Maximum Assessable Fee Per Service Unit]
۷	Service Area A: \$1,590
	Determine Maximum Assessable Impact Fee
Step 3	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 4.26 * \$1,590
	Maximum Assessable Impact Fee = \$6,773.40

Example 2:

Development Type – 100,000 square foot Home Improvement Superstore in Service Area C

	Roadway Impact Fee Calculation Steps – Example 2
	Determine Development Unit and Vehicle-Miles Per Development Unit
Step	From Table 9 [Land Use - Vehicle-Mile Equivalency Table]
1	Development Type: 100,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area
	Veh-Mi Per Development Unit: 3.85
Stan	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
Step 2	From Table 8, Line 21 [Maximum Assessable Fee Per Service Unit]
	Service Area C: \$3,156
	Determine Maximum Assessable Impact Fee
Step 3	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 100 * 3.85 * \$3,156
	Maximum Assessable Impact Fee = \$1,215,060



VII. ADOPTION AND ADMINISTRATION OF ROADWAY IMPACT FEES

A. Service Unit Demand Per Unit of Development

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) 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 CIAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a first public hearing on the Roadway Impact Fee Assumptions (Land Use and Capital Improvements Plan [September 22, 2020]) and a second public hearing on the Roadway Impact Fee Ordinance.

Following policy adoption, the CIAC 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 CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

B. Collection and Use of Roadway 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 Pflugerville 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 Pflugerville, as shown in the previously referenced Table 8.

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 2020 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

Service Area	Maximum Fee Per Service Unit (per Vehicle-Mile)			
Α	\$1,590			
В	\$2,916			
С	\$3,156			



APPENDICES

A. Conceptual Level Project Cost Projections

SERVICE AREA A SERVICE AREA B SERVICE AREA C

- B. Roadway Impact Fee CIP Service Units of Supply
- C. Plan for Awarding the Roadway Impact Fee Credit Summaries
- D. Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits



Appendix A – Conceptual Level Project Cost Projections

City of Pflugerville - 2020 Roadway Impact Fee Study

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

Roadway Improvements - Service Area A

<u>#</u>	<u>IF Class</u>	Project Name	Project Type	<u>L</u>	<u>Limits</u>		Project C	net I	Total Cost in Service Area
				<u>From</u>	<u>To</u>	Service Area			Service Area
A-1	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (1)	New	City Limits	1020' W Of Heatherwilde Blvd	100%	\$ 4,850	896 \$	4,850,896
A-2	FRONTAGE ROAD 3 LN	Sh 45 Frontage Roads (2)	New	City Limits	955' W Of Heatherwilde Blvd	100%	\$ 4,149	104 \$	\$ 4,149,104
A-3	MAA 4D	Rowe Ln Extension (1)	New	Heatherwilde Blvd	City Limits	100%	\$ 13,800	000 \$	13,800,000
A-4	MAA 4D	Rowe Ln Extension (2)	New	City Limits	Sh 130 Sbfr	100%	\$ 1,100	000 \$	1,100,000
A-5	MIA 4D	Kenny Fort Blvd (1)	New	City Limits	City Limits	50%	\$ 1,800	000 \$	900,000
A-6	MIA 4D	Kenny Fort Blvd (2)	Widening	City Limits	New Meister Ln	100%	\$ 2,600	000 \$	2,600,000
A-7	MIA 4D	Heatherwilde Widening (1)	Previously Built Project	450' S Of Sh 45 Ebfr	Wilke Ridge Ln	100%	\$ 8,091	243 \$	8,091,243
A-8	MAC 3U	Pfluger Farm Ln North (1)	New	Sh 45 Ebfr	Town Center Dr	100%	\$ 4,000	000 \$	\$ 4,000,000
A-9	MAC 4U	Schultz Ln (1)	Widening	City Limits	300' N Of Springbrook Rd	100%	\$ 2,860	000 \$	2,860,000
A-10	MIC 2U	Wilke Ridge Ln (1)	Widening	Heatherwilde Blvd	W Pflugerville Pkwy	100%	\$ 2,100	000 \$	2,100,000
A-11	MAC 3U	Pfluger Farm Ln Phase B (1)	Previously Built Project	1440' S Of Town Center Dr	460' N Of E Pflugerville Pkwy	100%	\$ 3,142	358 \$	3,142,358
A-12	MAC 2D	Town Center Dr (1)	Access	Limestone Commercial Dr	160' N Of Terrell Ln	100%	\$ 300	000 \$	300,000
A-13	MAC 2D	Town Center Dr (2)	Access	160' N Of Terrell Ln	Fm 685	100%	\$ 400	000 \$	400,000
A-14	MIC 2U	Terrell Ln Extension (1)	New	865' S Of Town Center Dr	Pfluger Farm Ln	100%	\$ 6,500	000 \$	6,500,000
A-15	MAA 6D	Fm 685 (1)	Widening	Sh 130 Sbfr	E Pflugerville Pkwy	100%	\$ 11,680	000 \$	11,680,000
						TOTAL	\$ 67,373	601 \$	66,473,601

Intersection Improvements - Service Area A

ш	Drainat	Impro	<u>vement</u>	Percent in	Brainet Con	Total Cost in
<u>#</u>	<u>Project</u>	Improvement 1	Improvement 2	Service Area	Project Cos	Service Area
AI-1	Heatherwilde Blvd At Cheyenne Valley Dr	Signal		100%	\$ 228,15	9 \$ 228,159
AI-2	Heatherwilde Blvd At Rowe Ln (Future)	Signal		100%	\$ 353,00	0 \$ 353,000
AI-3; CI-2	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass	Turn Lane	50%	\$ 8,681,00	0 \$ 4,340,500
AI-4	Heatherwilde Blvd At New Meister Ln	Signal		100%	\$ 254,47	4 \$ 254,474
AI-5	E Of Heatherwilde At Sh 45 Wbfr	New Ramp		100%	\$ 4,000,00	0 \$ 4,000,000
AI-6	E Of Heatherwilde At Sh 45 Ebfr	New Ramp		100%	\$ 4,000,00	0 \$ 4,000,000
AI-7; CI-4	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative	Turn Lane	50%	\$ 3,101,00	0 \$ 1,550,500
AI-8	Pfluger Farm Ln At Town Center Dr	Roundabout		100%	\$ 1,500,00	0 \$ 1,500,000
AI-9; BI-1	Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%	\$ 411,00	0 \$ 205,500
AI-10; BI-2	Fm 685 At E Pflugerville Pkwy	Innovative		50%	\$ 1,600,00	0 \$ 800,000
AI-11; CI-7	Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative	Turn Lane	50%	\$ 2,116,25	0 \$ 1,058,125
AI-12	Sh 130 Sbfr At S Of Fm 685	Ramp Reversal		100%	\$ 4,000,00	0 \$ 4,000,000
AI-13; BI-3; CI-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		25%	\$ 946,56	0 \$ 236,640
-	Update ITS and Traffic Management Infrastructure			33%	\$ 2,974,92	4 \$ 991,641
			_	TOTAL	\$ 34,166,36	7 \$ 23,518,539

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 Pflugerville. 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 Pflugerville

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. A-1

Name: Sh 45 Frontage Roads (1) This project consists of the previously
Limits: City Limits to 1020' W Of Heatherwilde Blvd constructed four lane divided minor

Impact Fee Class: FRONTAGE ROAD 3 LN arterial funded by bond debt.

Ultimate Class: FRONTAGE ROAD 3 LN

Length (If): 2,801

Service Area(s):

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,815,332
Engineering/Survey/Testing:	2015 GO Bond	-	\$ 269,494
Previous City contribution		-	
Other	CTTS Revenues Lost	-	\$ 15,468,968
Contributions by Others	Round Rock Interlocal Agreement at 50%	-	\$ (11,776,898
	\$ 11,776,898		
	City C	ontribution:	\$ 4,850,896
	Impact Fee Project		4,850,896

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 Pflugerville.

City of Pflugerville

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. A-2

Name: Sh 45 Frontage Roads (2) This project consists of the previously
Limits: City Limits to 955' W Of Heatherwilde Blvd constructed four lane divided minor

Impact Fee Class: FRONTAGE ROAD 3 LN arterial funded by bond debt.

Ultimate Class: FRONTAGE ROAD 3 LN

Ultimate Class: FRONTAGE R Length (If): 2,396

Service Area(s):

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,684,668
Engineering/Survey/Testing:	2015 GO Bond	-	\$ 230,506
Previous City contribution		-	
Other	CTTS Revenues Lost	-	\$ 13,231,032
Contributions by Others	Costs shared with Round Rock	-	\$ (10,073,102
	Overall Project	Cost Total:	\$ 10,073,102
	City Co	ontribution:	\$ 4,149,104
	Impact Fee Projec		4,149,104

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Rowe Ln Extension (1)
Limits:

Rowe Ln Extension (1)
Heatherwilde Blvd to City Limits

Description:

Project No. A-3

This project consists of the construction of a new four lane divided major arterial.

Impact Fee Class: MAA 4D
Ultimate Class: MAA 6D
Length (If): 6,320
Service Area(s): A

No.	Item Description	Quantity	Unit	Ur	Unit Price		Unit Price		Item Cost
111	Unclassified Street Excavation	61,173	су	\$	20.00	\$	1,223,000		
211	8" Asphalt (Type C)	12,977	ton	\$	105.00	\$	1,363,000		
311	24" Base	22,472	су	\$	50.00	\$	1,124,000		
411	24" Lime Stabilization (with Lime @ 45#/sy)	36,516	sy	\$	15.00	\$	548,000		
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	6,741	gal	\$	6.00	\$	40,000		
611	10' Concrete Sidewalk	126,403	sf	\$	7.50	\$	948,000		
711	Machine Laid Curb & Gutter	25,281	lf	\$	18.00	\$	455,000		
811	Turn Lanes and Median Openings	6,065	sy	\$	79.00	\$	479,000		
		Paving Const	ruction (Cost	Subtotal:	\$	6,180,000		

Maio	or Construction Component Allowa	200***		
Majo	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	\$ -
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$ 124,000
	Roadway Drainage	Standard Internal System	30%	\$ 1,854,000
	Illumination		10%	\$ 618,000
	Special Drainage Structures	None Anticipated		\$ -
	Water	Minor Adjustments	2%	\$ 124,000
	Sewer	Minor Adjustments	2%	\$ 124,000
	Turf and Erosion Control		2%	\$ 124,000
	Landscaping and Irrigation		4%	\$ 247,000
	Miscellaneous:		0%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$ 3,215,000
		Paving and Allowa	nce Subtotal:	\$ 9,395,000
		Construction Contingency:	15%	\$ 1,409,000
		Mobilization:	8%	\$ 752,000
		Prep ROW:	4%	\$ 376,000
		Construction C	ost TOTAL:	\$ 11,932,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 11,932,000
Engineering/Survey/Testing:		16%	\$ 1,909,000
Previous City contribution			
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ _

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Rowe Ln Extension (2)

City Limits:

Description:

Project No.

A-4

This project consists of the construction of a new four lane divided major arterial.

Impact Fee Class: MAA 4D
Ultimate Class: MAA 6D
Length (If): 155
Service Area(s): A

No.	Item Description	Quantity	Unit	Ur	Unit Price		Unit Price		Unit Price		Item Cost
111	Unclassified Street Excavation	1,503	су	\$	20.00	\$	30,000				
211	8" Asphalt (Type C)	319	ton	\$	105.00	\$	33,000				
311	24" Base	552	су	\$	50.00	\$	28,000				
411	24" Lime Stabilization (with Lime @ 45#/sy)	897	sy	\$	15.00	\$	13,000				
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	166	gal	\$	6.00	\$	1,000				
611	10' Concrete Sidewalk	3,106	sf	\$	7.50	\$	23,000				
711	Machine Laid Curb & Gutter	621	lf	\$	18.00	\$	11,000				
811	Turn Lanes and Median Openings	149	sy	\$	79.00	\$	12,000				
Paving Construction Cost Subtotal: \$											

		Faving Constitution (Jost Subtotal.	Ψ	131,000
Maio	or Construction Component Allowa	nces**:			
	Item Description	Notes	Allowance		Item Cost
	Traffic Control	None Anticipated	0%	\$	-
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	3,000
	Roadway Drainage	Standard Internal System	30%	\$	45,000
	Illumination		10%	\$	15,000
	Special Drainage Structures	Bridge Crossing		\$	500,000
	Water	Minor Adjustments	2%	\$	3,000
	Sewer	Minor Adjustments	2%	\$	3,000
	Turf and Erosion Control		2%	\$	3,000
	Landscaping and Irrigation		4%	\$	6,000
	Miscellaneous:		0%	\$	-
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	ınce Subtotal:	\$	578,000
		Paving and Allowa	nce Subtotal:	\$	729,000
		Construction Contingency:	15%	\$	109,000
		Mobilization:	8%	\$	58,000
		Prep ROW:	4%		29,000
		Construction C	ost TOTAL:	\$	925,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 925,000
Engineering/Survey/Testing:		16%	\$ 148,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Kenny Fort Blvd (1)

City Limits to City Limits

Description:

Project No.

A-5

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

Impact Fee Class: MIA 4D
Ultimate Class: MIA 4D
Length (If): 1,038
Service Area(s): A,ETJ/Other

_	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ut	nit Price	Item Cost
109	Unclassified Street Excavation	7,534	су	\$	20.00	\$ 151,000
209	6" Asphalt (Type C)	1,598	ton	\$	105.00	\$ 168,000
309	18" Base	2,768	су	\$	50.00	\$ 138,000
409	18" Lime Stabilization (with Lime @ 45#/sy)	5,997	sy	\$	11.00	\$ 66,000
509	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,107	gal	\$	6.00	\$ 7,000
609	10' Concrete Sidewalk	20,757	sf	\$	7.50	\$ 156,000
709	Machine Laid Curb & Gutter	4,151	lf	\$	18.00	\$ 75,000
809	Turn Lanes and Median Openings	760	sy	\$	64.00	\$ 49,000
		Paving Const	ruction (Cost	Subtotal:	\$ 810.000

		Paving Construction (Cost Subtotal:	\$ 810,000
Majo				
	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	\$ -
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$ 16,000
	Roadway Drainage	Standard Internal System	30%	\$ 243,000
	Illumination		10%	\$ 81,000
	Special Drainage Structures	None Anticipated		\$ -
	Water	Minor Adjustments	2%	\$ 16,000
	Sewer	Minor Adjustments	2%	\$ 16,000
	Turf and Erosion Control		2%	\$ 16,000
	Landscaping and Irrigation		4%	\$ 32,000
	Miscellaneous:		0%	\$
**Allo	owances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 420,000
		Paving and Allowa		1,230,000
		Construction Contingency:		\$ 185,000
		Mobilization:		 98,000
		Prep ROW:		 49,000
		Construction C	ost TOTAL:	\$ 1,562,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,562,000
Engineering/Survey/Testing:		16%	\$ 250,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Roadway Construction Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. **A-6** Name: Kenny Fort Blvd (2) This project consists of the reconstruction of the Limits: City Limits to New Meister Ln existing pavement to a four lane divided minor Impact Fee Class: MIA 4D arterial. **Ultimate Class:** MIA 4D Length (If): 1,439 Service Area(s): Α

Item Description	ection	Quantity	Unit	Ur	nit Price		Item Cost
		10.447	CV	\$	20.00	\$	209.000
		- ,	ton		105.00	\$	233,000
18" Base		3,838	СУ	\$	50.00	\$	192,000
18" Lime Stabilization (with Lime @ 4	15#/sy)	8,315	sy	\$	11.00	\$	91,000
Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 1,535 gal			\$	6.00	\$	9,000	
9 10' Concrete Sidewalk 28,784 sf			\$	7.50	\$	216,000	
Machine Laid Curb & Gutter		5,757	lf	\$	18.00	\$	104,000
Turn Lanes and Median Openings		1,054	sy	\$	64.00	\$	67,000
Paving Construction Cost Subtotal:						\$	1,121,000
Major Construction Component Allowances**:							
Item Description	Notes			All	owance		Item Cost
Traffic Control	Construction Phase	Traffic Control			5%	\$	56,000
Pavement Markings/Signs/Posts	Includes Striping/Signs				2%	\$	22,000
Roadway Drainage	Standard Internal Sys	stem			30%	\$	336,000
Illumination					10%	\$	112,000
Special Drainage Structures	None Anticipated					\$	-
Water	Minor Adjustments				2%	\$	22,000
Sewer	Minor Adjustments				2%	\$	22,000
Turf and Erosion Control					2%	\$	22,000
Landscaping and Irrigation					4%	\$	45,000
Miscellaneous:					0%	\$	
wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	637,000
				nce		\$	1,758,000
	Constr				15%	\$	264,000
					8%	\$	141,000
		Pre	p ROW:		4%	\$	70,000
	18" Lime Stabilization (with Lime @ 4 Surface Treatment (0.2 gal/sy,Prime 10' Concrete Sidewalk Machine Laid Curb & Gutter Turn Lanes and Median Openings or Construction Component Allowal Item Description Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Unclassified Street Excavation 6" Asphalt (Type C) 18" Base 18" Lime Stabilization (with Lime @ 45#/sy) Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 10' Concrete Sidewalk Machine Laid Curb & Gutter Turn Lanes and Median Openings Por Construction Component Allowances**: Item Description Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous: wances based on % of Paving Construction Cost Subtotal	Unclassified Street Excavation 10,447 6" Asphalt (Type C) 2,216 18" Base 3,838 18" Lime Stabilization (with Lime @ 45#/sy) 8,315 Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 1,535 10' Concrete Sidewalk 28,784 Machine Laid Curb & Gutter 5,757 Turn Lanes and Median Openings 1,054 Paving Const Or Construction Component Allowances**: Item Description Notes Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Minor Adjustments Turf and Erosion Control Landscaping and Irrigation Miscellaneous: wances based on % of Paving Construction Cost Subtotal Paving an Construction Conti	Unclassified Street Excavation 10,447 cy 6" Asphalt (Type C) 2,216 ton 18" Base 3,838 cy 18" Lime Stabilization (with Lime @ 45#/sy) 8,315 sy Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 1,535 gal 10' Concrete Sidewalk 28,784 sf Machine Laid Curb & Gutter 5,757 lf Turn Lanes and Median Openings 1,054 sy Paving Construction Cor Construction Component Allowances**: Item Description Notes Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Minor Adjustments Sewer Minor Adjustments Turf and Erosion Control Landscaping and Irrigation Miscellaneous: wances based on % of Paving Construction Cost Subtotal Allowa	Unclassified Street Excavation 10,447 cy \$ 6" Asphalt (Type C) 2,216 ton \$ 18" Base 3,838 cy \$ 18" Lime Stabilization (with Lime @ 45#/sy) 8,315 sy \$ Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 1,535 gal \$ 10' Concrete Sidewalk 28,784 sf \$ Machine Laid Curb & Gutter 5,757 lf \$ Turn Lanes and Median Openings 1,054 sy \$ Paving Construction Cost Or Construction Component Allowances**: Item Description Notes All Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Minor Adjustments Sewer Minor Adjustments Water Sewer Minor Adjustments Minor Adjustments	Unclassified Street Excavation	Unclassified Street Excavation

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,233,000
Engineering/Survey/Testing:		16%	\$ 357,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Construction Cost TOTAL:

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 Pflugerville.

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.

2,233,000

City of Pflugerville

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: A-7 Description: Project No. Name: Heatherwilde Widening (1) This project consists of the previously Limits: 450' S Of Sh 45 Ebfr to Wilke Ridge Ln constructed four lane divided minor Impact Fee Class: MIA 4D arterial funded by bond debt. **Ultimate Class:** MIA 4D Length (If): 4,966 Service Area(s):

Impact Fee Project Cost Sum	mary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,924,973
Engineering/Survey/Testing:		-	\$ 193,079
Other		-	\$ -
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$ 973,191
	Overall Proj	ect Cost Total:	\$ 8,091,243
	City	Contribution:	\$ 8,091,243
	Impact Fee Proje	ect Cost 100%:	\$ 8,091,243

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Pfluger Farm Ln North (1)

Limits:

Sh 45 Ebfr to Town Center Dr

Impact Fee Class:

MAC 3U

MAC 3U

Description:

Project No. A-8

This project consists of the construction of a new three lane undivided major collector.

Ultimate Class: MAC 3U Length (If): 3,463 Service Area(s): A

Roa	adway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		17,956	су	\$	20.00	\$	359,000
203	5" Asphalt (Type C)		4,338	ton	\$	105.00	\$	456,000
303	12" Base		5,643	су	\$	50.00	\$	282,000
403	103 18" Lime Stabilization (with Lime @ 45#/sy) 17,			sy	\$	11.00	\$	195,000
503	503 Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			gal	\$	6.00	\$	20,000
603	603 6' Concrete Sidewalk			sf	\$	7.50	\$	312,000
703	03 Machine Laid Curb & Gutter 6,926 If			\$	18.00	\$	125,000	
803	Turn Lanes and Median Openings		0	sy	\$	58.00	\$	-
	Paving Construction Cost Subtotal:							1,749,000
Majo	or Construction Component Allowar	•						
	Item Description	Notes			All	owance		Item Cost
,	Traffic Control	None Anticipated				0%	\$	-
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%		35,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			30%		525,000
	Illumination					10%	\$	175,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments				2%	\$	35,000
	Sewer	Minor Adjustments				2%	\$	35,000
	Turf and Erosion Control					2%	\$	35,000
	Landscaping and Irrigation					4%	\$	70,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ınce	Subtotal:	\$	910,000
	·		Paving an		nce			2,659,000
		Constr	ruction Conti			15%	\$	399,000
				lization:		8%	\$	213,000
				p ROW:		4%	\$	106,000
			Constru	ction C	ost '	TOTAL:	\$	3,377,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,377,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 625,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

City of Pflugerville

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection Kimley-Horn and Associates, Inc.

updated: 7/20/2020

Project Informa	tion:	Description:	Project No. A-9
Name:	Schultz Ln (1)		This project consists of the
Limits:	City Limits to 300' N Of Springbrook F	₹d	reconstruction of the existing pavement
Impact Fee Class:	MAC 4U		to a four lane undivided major collector.
Ultimate Class:	MAC 4U		•
Length (If):	2,350		
Service Area(s):	A		

Impact Fee Project Cost Summary								
Item Description	Notes:	Allowance		Item Cost				
Construction:		-	\$	2,402,000				
Engineering/Survey/Testing:		16%	\$	458,000				
Previous City contribution								
Other								
ROW/Easement Acquisition:	Not Included in Study	0%	\$	-				
	Impact Fee Pro	ject Cost TOTAL:	\$	2,860,000				

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

to a two lane minor collector.

Project Information:

Name:

Wilke Ridge Ln (1)

Heatherwilde Blvd to W Pflugerville Pkwy

Description:

Project No. A-10

This project consists of the reconstruction of the existing pavement

Impact Fee Class: MIC 2U

Ultimate Class: MIC 2U Length (If): 2,335 Service Area(s): A

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
101	Unclassified Street Excavation	8,072	су	\$	20.00	\$ 161,000
201	4" Asphalt (Type C)	1,884	ton	\$	105.00	\$ 198,000
301	12" Base	3,113	су	\$	50.00	\$ 156,000
401	12" Lime Stabilization (with Lime @ 45#/sy)	9,859	sy	\$	7.50	\$ 74,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,868	gal	\$	6.00	\$ 11,000
601	6' Concrete Sidewalk	28,021	sf	\$	7.50	\$ 210,000
701	Machine Laid Curb & Gutter	4,670	lf	\$	18.00	\$ 84,000
801	Turn Lanes and Median Openings	0	sy	\$	48.00	\$ -

Paving Construction Cost Subto	tai: \$	894,000

Maio	or Construction Component Allowa	nces**·			
HIC.	Item Description	Notes	Allowance	П	Item Cost
	Traffic Control	Construction Phase Traffic Control	5%	\$	45,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	18,000
	Roadway Drainage	Standard Internal System	30%	\$	268,000
	Illumination		10%	\$	89,000
	Special Drainage Structures	None Anticipated		\$	-
	Water	Minor Adjustments	2%	\$	18,000
	Sewer	Minor Adjustments	2%	\$	18,000
	Turf and Erosion Control		2%	\$	18,000
	Landscaping and Irrigation		4%	\$	36,000
	Miscellaneous:		0%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	510,000
		Paving and Allowa	nce Subtotal:	\$	1,404,000
		Construction Contingency:	15%	\$	211,000
		Mobilization:	8%	\$	112,000
		Prep ROW:			56,000
		Construction C	ost TOTAL:	\$	1,783,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,783,000
Engineering/Survey/Testing:		16%	\$ 285,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	A-11
Name:	Pfluger Farm Ln Phase B (1)		This project consi	sts of the
Limits:	1440' S Of Town Center Dr to 460' N	I Of E Pflugerville Pkwy	construction of a	new three
Impact Fee Class:	MAC 3U		lane undivided ma	jor collector.
Ultimate Class:	MAC 3U			
Length (If):	3,022			
Service Area(s):	A			

Impact Fee Project Cost Sun	•	A II	ltara Oaat
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,939,275
Engineering/Survey/Testing:		-	\$ 187,631
Other	Study	-	\$ 15,452
ROW/Easement Acquisition:	No ROW Acquisition Costs included	-	\$ -
	Overall Projec	t Cost Total:	\$ 3,142,358
	City C	ontribution:	\$ 3,142,358
	Impact Fee Project		3,142,358

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. A-12

Name: Town Center Dr (1)
Limits: This project consists of adding a
median in the existing center turn lane.

Impact Fee Class: MAC 2D
Ultimate Class: MAC 2D
Length (If): 366
Service Area(s): A

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost
102	Unclassified Street Excavation	1,504	су	\$	20.00	\$	30,000
202	5" Asphalt (Type C)	269	ton	\$	105.00	\$	28,000
302	12" Base	407	су	\$	50.00	\$	20,000
402	18" Lime Stabilization (with Lime @ 45#/sy)	1,384	sy	\$	11.00	\$	15,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	244	gal	\$	6.00	\$	1,000
602	6' Concrete Sidewalk	4,396	sf	\$	7.50	\$	33,000
702	Machine Laid Curb & Gutter	1,465	lf	\$	18.00	\$	26,000
802	Turn Lanes and Median Openings	222	sy	\$	58.00	\$	13,000
	Paving Construction Cost Subtotal: \$						166,000

Maid	or Construction Component Allowa	neoc**			
iviajo	Item Description	Notes	Unit Price	П	Item Cost
	Traffic Control	Assume 3 months to Construct	\$2,500 / MO	\$	7,500
	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$	1,000
	Roadway Drainage		0%	\$	-
	Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$	16,000
	Special Drainage Structures	None Anticipated		\$	-
	Utilities	Minor Adjustments	\$1,000 / STA	\$	1,000
	ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$	5,000
	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$	15,000
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	ance Subtotal:	\$	45,500
		Paving and Allowa	ance Subtotal:	\$	211,500
		Construction Contingency:	15%	\$	32,000
		Mobilization	5%	\$	11,000
		Prep ROW	\$3,000 / STA	\$	1,000
		Construction C	ost TOTAL:	\$	256,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 256,000
Engineering/Survey/Testing:	Funded through TIA Contribution		\$
Previous City contribution			
Other			
ROW/Easement Acquisition:	ROW Acquisition Costs included	0%	\$

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. A-13

Name: Town Center Dr (2) This project consists of adding a median in the

Limits: 160' N Of Terrell Ln to Fm 685 existing center turn lane.

Impact Fee Class: MAC 2D
Ultimate Class: MAC 2D
Length (If): 526
Service Area(s): A

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ui	nit Price	Item Cost
102	Unclassified Street Excavation	2,160	су	\$	20.00	\$ 43,000
202	5" Asphalt (Type C)	386	ton	\$	105.00	\$ 41,000
302	12" Base	585	су	\$	50.00	\$ 29,000
402	18" Lime Stabilization (with Lime @ 45#/sy)	1,988	sy	\$	11.00	\$ 22,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	351	gal	\$	6.00	\$ 2,000
602	6' Concrete Sidewalk	6,314	sf	\$	7.50	\$ 47,000
702	Machine Laid Curb & Gutter	2,105	lf	\$	18.00	\$ 38,000
802	Turn Lanes and Median Openings	319	sy	\$	58.00	\$ 18,000
	F	Paving Const	ruction (Cost	Subtotal:	\$ 240,000

Mai	on Comptunition Community Allows			
Majo	or Construction Component Allowa Item Description	Notes	Unit Price	Item Cost
	Traffic Control	Assume 3 months to Construct	\$2,500 / MO	\$ 7,500
	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 2,000
	Roadway Drainage		0%	\$ -
	Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 23,000
	Special Drainage Structures	None Anticipated		\$ -
	Utilities	Minor Adjustments	\$1,000 / STA	\$ 1,000
	ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 8,000
	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 21,000
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	nce Subtotal:	\$ 62,500
		Paving and Allowa	nce Subtotal:	\$ 302,500
		Construction Contingency:	15%	\$ 45,000
		Mobilization	5%	\$ 15,000
		Prep ROW	\$3,000 / STA	\$ 2,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 365,000
Engineering/Survey/Testing:	Funded through TIA Contribution		\$
Previous City contribution			
Other			
ROW/Easement Acquisition:	ROW Acquisition Costs included	0%	\$

Construction Cost TOTAL:

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 Pflugerville.

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.

365,000

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Terrell Ln Extension (1)
Limits:

B65' S Of Town Center Dr to Pfluger Farm Ln

Description:

Project No. A-14

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

Impact Fee Class: MIC 2U
Ultimate Class: MIC 2U
Length (If): 3,608
Service Area(s): A

	adway Construction Cost Pro Item Description	JOCOHOM I	Quantity	Unit	Ur	nit Price		Item Cost
101	Unclassified Street Excavation		12,473	су	\$	20.00	\$	249,000
201	4" Asphalt (Type C)		2,911	ton	\$	105.00	\$	306,000
301	12" Base		4.811	СУ	\$	50.00	\$	241,000
401	12" Lime Stabilization (with Lime @	45#/sv)	15,235	sy	\$	7.50	\$	114,000
501	Surface Treatment (0.2 gal/sy,Prime		2,887	gal	\$	6.00	\$	17,000
601	6' Concrete Sidewalk	,	43,301	sf	\$	7.50	\$	325,000
701	Machine Laid Curb & Gutter		7,217	lf	\$	18.00	\$	130,000
801	Turn Lanes and Median Openings		0	sy	\$	48.00	\$	-
		Pa	ving Consti	ruction (Cost	Subtotal:	\$	1,382,000
Majo	or Construction Component Allowa	ances**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	None Anticipated				0%	*	-
	Pavement Markings/Signs/Posts	Includes Striping/Signs	;			2%	\$	28,000
$\sqrt{}$	Roadway Drainage	Standard Internal Syste	em			30%		415,000
	Illumination					10%	\$	138,000
	O						•	0 000 000
	Special Drainage Structures	Bridge Crossing					\$	2,300,000
V	Water	Bridge Crossing Minor Adjustments				2%	-	2,300,000
,	Water Sewer					2%	\$	28,000 28,000
V	Water	Minor Adjustments					\$	28,000
1	Water Sewer	Minor Adjustments				2%	\$ \$ \$	28,000 28,000
\ \ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Minor Adjustments Minor Adjustments				2% 2% 4% 0%	\$ \$ \$ \$ \$	28,000 28,000 28,000 55,000
\ \ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation	Minor Adjustments Minor Adjustments		Allowa	nce	2% 2% 4%	\$ \$ \$ \$ \$	28,000 28,000 28,000
\ \ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Minor Adjustments Minor Adjustments				2% 2% 4% 0% Subtotal:	\$ \$ \$ \$ \$ \$ \$	28,000 28,000 28,000 55,000 - 3,020,000
\ \ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Minor Adjustments Minor Adjustments cost Subtotal	Paving and	d Allowa		2% 2% 4% 0% Subtotal: Subtotal:	\$ \$ \$ \$ \$ \$	28,000 28,000 28,000 55,000 - 3,020,000
\ \ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Minor Adjustments Minor Adjustments cost Subtotal	ction Conti	d Allowa		2% 2% 4% 0% Subtotal: Subtotal:	\$ \$ \$ \$ \$ \$ \$	28,000 28,000 28,000 55,000 - 3,020,000 4,402,000 660,000
\ \ \ \	Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Minor Adjustments Minor Adjustments cost Subtotal	ction Conti Mobi	d Allowa		2% 2% 4% 0% Subtotal: Subtotal:	\$\$\$\$\$ \$ \$	28,000 28,000 28,000 55,000 - 3,020,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,590,000
Engineering/Survey/Testing:		16%	\$ 894,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Construction Cost TOTAL:

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 Pflugerville.

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.

5,590,000

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: A-15 Description: Project No. Name: Fm 685 (1) This project consists of the Limits: Sh 130 Sbfr to E Pflugerville Pkwy reconstruction of the existing pavement Impact Fee Class: MAA 6D to a six lane divided major arterial. **Ultimate Class:** MAA 6D Length (If): 4,043 Service Area(s): Α

Roa	dway Construction Cost Pro	jection					
No.	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
112	Unclassified Street Excavation		53,113	су	\$	20.00	\$ 1,062,000
212	8" Asphalt (Type C)		12,256	ton	\$	105.00	\$ 1,287,000
312	24" Base		20,367	су	\$	50.00	\$ 1,018,000
412	24" Lime Stabilization (with Lime @ 4		32,347	sy	\$	15.00	\$ 485,000
512	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	6,110	gal	\$	6.00	\$ 37,000
612	10' Concrete Sidewalk		80,867	sf	\$	7.50	\$ 607,000
712	Machine Laid Curb & Gutter		16,173	lf	\$	18.00	\$ 291,000
812	Turn Lanes and Median Openings		3,880	sy	\$	79.00	\$ 307,000
		P	Paving Consti	ruction (Cost	Subtotal:	\$ 5,094,000
Majo	or Construction Component Allowa						
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 255,000
√,	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%	\$ 102,000
V	Roadway Drainage	Standard Internal Sys	stem			30%	1,528,000
√	Illumination					10%	\$ 509,000
	Special Drainage Structures	Bridge Crossing					\$ 1,800,000
	Water	Minor Adjustments				2%	\$ 102,000
	Sewer	Minor Adjustments				2%	\$ 102,000
	Turf and Erosion Control					2%	\$ 102,000
	Landscaping and Irrigation					4%	\$ 204,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$ 4,704,000
			Paving an				9,798,000
		Constr	ruction Conti	-		15%	\$ 1,470,000
				lization:		8%	\$ 784,000
				p ROW:		4%	\$ 392,000
			Construc	ction C	ost	TOTAL:	\$ 12,444,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 12,444,000
Engineering/Survey/Testing:		16%	\$ 1,991,000
Previous City contribution			
Other	Corridor Study		\$ 168,305
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

City of Pflugerville - 2020 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	<u>Project</u>	Type	<u>Limits</u>		Percent in	Project Cost	Total Cost in	
				<u>From</u>	<u>To</u>	Service Area		Service Area	
B-1	MAC 3U	Picadilly Dr (1)	Widening	City Limits	Central Commerce Dr	50%	\$ 3,300,000	\$ 1,650,000	
B-2	MAC 3U	Central Commerce Dr (1)	Widening	Picadilly Dr	Royston Ln	50%	\$ 2,500,000	\$ 1,250,000	
B-3	MAC 3U	Royston Ln (1)	Widening	Central Commerce Dr	Grand Avenue Pkwy	100%	\$ 3,700,000	\$ 3,700,000	
B-4	MAC 3U	W Pfennig Ln (1)	Previously Built Project	Rocky Creek Dr	Limestone Commercial Dwy	100%	\$ 2,192,517	\$ 2,192,517	
B-5	MAA 6D	Fm 685 (2)	Widening	E Pflugerville Pkwy	1615' N Of E Pecan St	100%	\$ 15,040,000	\$ 15,040,000	
B-6	MAC 3U	Old Austin-Hutto Rd Extension (1)	New	E Pflugerville Pkwy	Old Austin-Hutto Rd	100%	\$ 8,300,000	\$ 8,300,000	
B-7	MIA 4D	E Pfennig Ln (1)	New	505' E Of Fm 685	2355' N Of E Pecan St	100%	\$ 11,000,000	\$ 11,000,000	
B-8	URBAN 2-LANE	Main St (1)	New	N Railroad Ave	Old Austin-Hutto Rd	100%	\$ 6,400,000	\$ 6,400,000	
B-9	MAA 6D	Fm 685 (3)	Widening	1615' N Of E Pecan St	E Pecan St	100%	\$ 3,840,000	\$ 3,840,000	
B-10	MAC 3U	Old Austin-Hutto Rd (1)	Widening	Fm 685	E Pecan St	100%	\$ 3,989,000	\$ 3,989,000	
B-11	MAC 3U	Immanuel Rd (1)	Widening	E Pecan St	E Wells Branch Pkwy	100%	\$ 6,600,000	\$ 6,600,000	
B-12	MAC 3U	E Pfennig Ln (2)	New	City Limits	E Wells Branch Pkwy	100%	\$ 3,600,000	\$ 3,600,000	
B-13	MAC 3U	Biltmore Ave (1)	Previously Built Project	E Pecan St	Helios Way	100%	\$ 1,531,404	\$ 1,531,404	
B-14	MAC 3U	Helios Way West (1)	Previously Built Project	Biltmore Ave	Sun Light Near Way	100%	\$ 659,728	\$ 659,728	
B-15	MAC 3U	Sun Light Near Way Extension (1)	Previously Built Project	350' S Of E Pecan St	Helios Way	100%	\$ 1,283,771	\$ 1,283,771	
B-16	MAC 3U	Impact Way Extension (1)	New	Helios Way	80' W Of Cameron Rd	100%	\$ 6,460,000	\$ 6,460,000	

TOTAL \$ 80,396,420 \$ 77,496,420

Intersection Improvements - Service Area B

#	Project	Impro	vement	Percent in	Project Cost	Total Cost in
<u>#</u>	<u>FTOJECI</u>	Improvement 1	Improvement 2	Service Area	Froject Cost	Service Area
AI-12; BI-1	Pfluger Farm Ln At E Pflugerville Pkwy	Signal		50%	\$ 411,000	\$ 205,500
AI-13; BI-2	Fm 685 At E Pflugerville Pkwy	Innovative		50%	\$ 1,600,000	\$ 800,000
AI-16; BI-3; CI-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		25%	\$ 946,560	\$ 236,640
BI-4	Central Commerce Dr At Picadilly Dr	Turn Lane		100%	\$ 294,677	\$ 294,677
BI-5	Grand Avenue Pkwy At W Black Locus Dr	Signal		100%	\$ 228,159	\$ 228,159
BI-6	Heatherwilde Blvd At W Black Locust Dr	Signal		100%	\$ 190,941	\$ 190,941
BI-7	E Black Locust Dr At W Pfennig Ln	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
BI-8	Old Austin-Hutto Rd At E Pfennig Ln	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
BI-9	Heatherwilde Blvd At W Pfennig Ln	Signal	Turn Lane	100%	\$ 190,941	\$ 190,941
BI-10	Old Austin-Hutto Rd Ext At Old Austin-Hutto Rd	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
BI-11	Edgemere Dr At Grand Avenue Pkwy	Turn Lane		100%	\$ 294,677	\$ 294,677
BI-12	Heatherwilde Blvd At W Pecan St	Innovative		100%	\$ 2,017,370	\$ 2,017,370
BI-13	Fm 685 At E Pecan St	Innovative	Turn Lane	100%	\$ 1,145,000	\$ 1,145,000
BI-14	E Pfennig Ln At E Pecan St	Signal		100%	\$ 411,000	\$ 411,000
BI-15	Biltmore Ave At E Pecan St	Signal	Turn Lane	100%	\$ 520,000	\$ 520,000
BI-16; CI-15	Sh 130 Ebfr/Wbfr At E Pecan St	Overpass		50%	\$ 8,000,000	\$ 4,000,000
BI-17	Immanuel Rd At E Wells Branch Pkwy	Signal		100%	\$ 411,000	\$ 411,000
BI-18	E Wells Branch Pkwy At E Pfennig Ln	Signal		100%	\$ 353,000	\$ 353,000
-	Update ITS and Traffic Management Infrastructure			33%	\$ 2,974,924	\$ 991,641

TOTAL \$ 24,489,248 \$ 16,790,545

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

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Picadilly Dr (1)

City Limits to Central Commerce Dr Impact Fee Class:

Ultimate Class:

Ultimate Class:

Description:

Project No.

B-1

This project consists of the reconstruction of the existing pavement to a three lane undivided major collector.

Collector.

Length (If): 2,596
Service Area(s): B,ETJ/Other

	adway Construction Cost Pro	ection					
No.	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		13,461	су	\$	20.00	\$ 269,000
203	5" Asphalt (Type C)		3,252	ton	\$	105.00	\$ 341,000
203	12" Base		4,231	су	\$	50.00	\$ 212,000
403	18" Lime Stabilization (with Lime @ 4	15#/sy)	13,268	sy	\$	11.00	\$ 146,000
	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	2,538	gal	\$	6.00	\$ 15,000
603	6' Concrete Sidewalk		31,152	sf	\$	7.50	\$ 234,000
	Machine Laid Curb & Gutter		5,192	lf	\$	18.00	\$ 93,000
803	Turn Lanes and Median Openings		0	sy	\$	58.00	\$ -
		P	Paving Const	ruction (Cost	Subtotal:	\$ 1,310,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 66,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%	\$ 26,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$ 393,000
	Illumination					10%	\$ 131,000
	Special Drainage Structures	Culvert					\$ 250,000
	Water	Minor Adjustments				2%	\$ 26,000
	Sewer	Minor Adjustments				2%	\$ 26,000
	Turf and Erosion Control					2%	\$ 26,000
	Landscaping and Irrigation					4%	\$ 52,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ınce	Subtotal:	\$ 996,000
			Paving an		nce	Subtotal:	\$ 2,306,000
		Constr	ruction Conti	ngency:		15%	\$ 346,000
			Mobi	lization:		8%	\$ 184,000
			Pre	p ROW:		4%	\$ 92,000
			Constru	ction C	ost	TOTAL:	\$ 2,928,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,928,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 404,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Roadway Construction Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/20/2020

Project Information:

Name:

Central Commerce Dr (1)

Limits:

Picadilly Dr to Royston Ln

Impact Fee Class:

Ultimate Class:

MAC 3U

Length (If): 2,057
Service Area(s): B,ETJ/Other

No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		10,666	су	\$	20.00	\$	213,000
203	5" Asphalt (Type C)		2,577	ton	\$	105.00	\$	271,000
203	12" Base		3,352	су	\$	50.00	\$	168,000
403	18" Lime Stabilization (with Lime @ 4	5#/sy)	10,514	sy	\$	11.00	\$	116,000
503	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	2,011	gal	\$	6.00	\$	12,000
603	6' Concrete Sidewalk		24,684	sf	\$	7.50	\$	185,000
703	Machine Laid Curb & Gutter		4,114	lf	\$	18.00	\$	74,000
803	Turn Lanes and Median Openings		0	sy	\$	58.00	\$	-
		P	Paving Const	ruction (Cost	Subtotal:	\$	1,039,000
Mais		**-					_	
Majo	or Construction Component Allowar Item Description	Notes			LAII	owance		Item Cost
	Traffic Control		F - 111 - O - 1 - 1		All		\$	
√ √		Construction Phase				5% 2%	\$	52,000 21,000
V	Pavement Markings/Signs/Posts	Includes Striping/Sign					*	,
√ √	Roadway Drainage Illumination	Standard Internal Sys	stem			30% 10%	\$	312,000 104,000
٧						10%	Τ.	104,000
,	Special Drainage Structures	None Anticipated				00/	\$	-
V	Water	Minor Adjustments				2%	\$	21,000
V	Sewer	Minor Adjustments				2%	\$	21,000
V	Turf and Erosion Control					2%	\$	21,000
V	Landscaping and Irrigation					4%	\$	42,000
** * "	Miscellaneous:			A 11	<u> </u>	0%	\$	-
^^Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ınce	Subtotal:	\$	594,000
			Paving an	d Allowa	ınce	Subtotal:	\$	1,633,000
		Constr	ruction Conti			15%	\$	245,000
				lization:		8%	\$	131,000
			Pre	p ROW:		4%	\$	65,000
			Constru	•		TOTAL:	\$	2,074,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,074,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 413,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: B-3 Description: Project No. Name: Royston Ln (1) This project consists of the Limits: Central Commerce Dr to Grand Avenue Pkwy reconstruction of the existing pavement Impact Fee Class: MAC 3U to a three lane undivided major collector. **Ultimate Class:** MAC 3U Length (If): 3,185 Service Area(s): В

Ros	dway Construction Cost Pro	iection					
	Item Description	jection	Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		16,515	су	\$	20.00	\$ 330,000
203	5" Asphalt (Type C)		3,990	ton	\$	105.00	\$ 419,000
	12" Base		5,190	су	\$	50.00	\$ 260,000
403	18" Lime Stabilization (with Lime @	45#/sy)	16,279	sy	\$	11.00	\$ 179,000
503	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	3,114	gal	\$	6.00	\$ 19,000
603	6' Concrete Sidewalk		38,219	sf	\$	7.50	\$ 287,000
703	Machine Laid Curb & Gutter		6,370	lf	\$	18.00	\$ 115,000
803	Turn Lanes and Median Openings		0	sy	\$	58.00	\$ -
		F	Paving Const	ruction (Cost	Subtotal:	\$ 1,609,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			All	lowance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 80,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns			2%	\$ 32,000
	Roadway Drainage	Standard Internal Sy	stem			30%	\$ 483,000
	Illumination					10%	\$ 161,000
	Special Drainage Structures	None Anticipated					\$ -
	Water	Minor Adjustments				2%	\$ 32,000
	Sewer	Minor Adjustments				2%	\$ 32,000
	Turf and Erosion Control					2%	\$ 32,000
	Landscaping and Irrigation					4%	\$ 64,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	nce	Subtotal:	\$ 916,000
			Paving an		nce	Subtotal:	\$ 2,525,000
		Consti	ruction Conti	ngency:		15%	\$ 379,000
			Mobi	lization:		8%	\$ 202,000
				p ROW:		4%	\$ 101,000
			Constru	ction C	ost	TOTAL:	\$ 3,207,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,207,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 506,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No. B-4
Name:	W Pfennig Ln (1)		This project consists of the
Limits:	Rocky Creek Dr to Limestone Comme	ercial Dwy	reconstruction of the existing pavement
Impact Fee Class:	MAC 3U		to a three lane undivided major
Ultimate Class:	MAC 3U		collector.
Length (If):	2,905		
Service Area(s):	В		

Impact Fee Project Cost Sumr	nary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,614,033
Engineering/Survey/Testing:		-	\$ 206,047
Other		-	
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$ 372,438
	Overall Project	ct Cost Total:	\$ 2,192,517
	City	Contribution:	\$ 2,192,517
	Impact Fee Project	t Cost 100%:	\$ 2,192,517

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: B-5 Description: Project No. Name: Fm 685 (2) This project consists of the Limits: E Pflugerville Pkwy to 1615' N Of E Pecan St reconstruction of the existing pavement Impact Fee Class: MAA 6D to a six lane divided major arterial. **Ultimate Class:** MAA 6D Length (If): 6,355 Service Area(s): В

Roa	adway Construction Cost Pro	ection						
No.	Item Description		Quantity	Unit	Ur	it Price		Item Cost
112	Unclassified Street Excavation		83,479	су	\$	20.00	\$	1,670,000
212	8" Asphalt (Type C)	19,263 ton				105.00	\$	2,023,000
212	24" Base		32,011	су	\$	50.00	\$	1,601,000
412	24" Lime Stabilization (with Lime @ 4	l5#/sy)	50,840	sy	\$	15.00	\$	763,000
512				gal	\$	6.00	\$	58,000
612				sf	\$	7.50	\$	953,000
712	Machine Laid Curb & Gutter	Machine Laid Curb & Gutter 25,420 If				18.00	\$	458,000
812	Turn Lanes and Median Openings		6,098	sy	\$	79.00	\$	482,000
	Paving Construction Cost Subtotal:							8,008,000
Major Construction Component Allowances**:								
	Item Description Notes Allowance						Item Cost	
V	Traffic Control	Construction Phase Traffic Control				5%	\$	400,000
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%		160,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$	2,402,000
	Illumination					10%	\$	801,000
	Special Drainage Structures	None Anticipated					\$	-
$\sqrt{}$	Water	Minor Adjustments				2%	\$	160,000
$\sqrt{}$	Sewer	Minor Adjustments				2%	\$	160,000
$\sqrt{}$	Turf and Erosion Control					2%	\$	160,000
$\sqrt{}$	Landscaping and Irrigation					4%	\$	320,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	4,563,000
			Paving an			Subtotal:	\$	12,571,000
		Constr	ruction Conti	ngency:		15%	\$	1,886,000
			Mobi	lization:		8%	\$	1,006,000
			Pre	p ROW:		4%	\$	503,000
			Construc	ction C	ost	TOTAL:	\$	15,966,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 15,966,000
Engineering/Survey/Testing:		16%	\$ 2,555,000
Previous City contribution			
Other	Corridor Study		\$ 264,530
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Roadway Construction Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Description:

Project No. B-6

Name:

Old Austin-Hutto Rd Extension (1)

Limits:

E Pflugerville Pkwy to Old Austin-Hutto Rd
Impact Fee Class:

MAC 3U

Description:

Project No. B-6

This project consists of the construction of a new three lane undivided major collector.

Ultimate Class: MAC 3U
Length (If): 4,232
Service Area(s): B

	Item Description	jootion	Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		21,942	су	\$	20.00	\$ 439,000
203	5" Asphalt (Type C)		5,301	ton	\$	105.00	\$ 557,000
203	12" Base		6,896	су	\$	50.00	\$ 345,000
403	18" Lime Stabilization (with Lime @	45#/sy)	21,629	sy	\$	11.00	\$ 238,000
503	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	4,138	gal	\$	6.00	\$ 25,000
	6' Concrete Sidewalk		50,780	sf	\$	7.50	\$ 381,000
703	Machine Laid Curb & Gutter		8,463	lf	\$	18.00	\$ 152,000
803	3			sy	\$	58.00	\$ •
Paving Construction Cost Subtotal							\$ 2,137,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	None Anticipated				0%	
	Pavement Markings/Signs/Posts	Includes Striping/Sigi	ns			2%	\$ 43,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$ 641,000
	Illumination					10%	\$ 214,000
	Special Drainage Structures	Bridge Crossing					\$ 2,400,000
\checkmark	Water	Minor Adjustments				2%	\$ 43,000
\checkmark	Sewer	Minor Adjustments				2%	\$ 43,000
	Turf and Erosion Control					2%	\$ 43,000
	Landscaping and Irrigation					4%	\$ 85,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	nce	Subtotal:	\$ 3,512,000
			Paving an	d Allowa	nce	Subtotal:	\$ 5,649,000
		Constr	ruction Conti	ngency:		15%	\$ 847,000
			Mobi	lization:		8%	\$ 452,000
			Pre	p ROW:		4%	\$ 226,000
			Constru	ction C	ost	TOTAL:	\$ 7,174,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,174,000
Engineering/Survey/Testing:		16%	\$ 1,148,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Description:

Project No.

B-7

Name:

E Pfennig Ln (1)

Limits:

Description:

Project No.

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

Impact Fee Class: MIA 4D
Ultimate Class: MIA 4D
Length (If): 5,441
Service Area(s): B

Roa	adway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
109	Unclassified Street Excavation		39,495	су	\$	20.00	\$	790,000
209	6" Asphalt (Type C)		8,379	ton	\$	105.00	\$	880,000
209	18" Base		14,508	су	\$	50.00	\$	725,000
409	(, , , , , , , , , , , , , , , , , , ,			sy	\$	11.00	\$	346,000
509	, , , , , , , , , , , , , , , , , , , ,			gal	\$	6.00	\$	35,000
609	609 10' Concrete Sidewalk			sf	\$	7.50	\$	816,000
709	Machine Laid Curb & Gutter		21,763	lf	\$	18.00	\$	392,000
809	Turn Lanes and Median Openings		3,984	sy	\$	64.00	\$	255,000
Paving Construction Cost Subtotal:								4,239,000
Majo	or Construction Component Allowar	nces**:						
	Item Description	Notes			All	owance		Item Cost
,	Traffic Control	None Anticipated				0%		-
√.	Pavement Markings/Signs/Posts	None Anticipated Includes Striping/Sig	ns			2%	\$	- 85,000
√ √	Pavement Markings/Signs/Posts Roadway Drainage					2% 30%	\$ \$	1,272,000
,	Pavement Markings/Signs/Posts	Includes Striping/Sig				2%	\$ \$	1,272,000 424,000
V	Pavement Markings/Signs/Posts Roadway Drainage	Includes Striping/Sig				2% 30%	\$ \$	1,272,000
√ √	Pavement Markings/Signs/Posts Roadway Drainage Illumination	Includes Striping/Sig Standard Internal Sy				2% 30%	\$ \$ \$ \$	1,272,000 424,000
\ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures	Includes Striping/Sig Standard Internal Sy Bridge Crossing				2% 30% 10%	\$ \$ \$ \$ \$	1,272,000 424,000 1,000,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments				2% 30% 10% 2%	\$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments				2% 30% 10% 2% 2%	\$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments				2% 30% 10% 2% 2% 2%	\$ \$ \$ \$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000 85,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments		Allowa	ance	2% 30% 10% 2% 2% 2% 4%	\$ \$ \$ \$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000 85,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments		Allowa	ance	2% 30% 10% 2% 2% 2% 4% 0%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000 85,000 170,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments				2% 30% 10% 2% 2% 4% 0% Subtotal:	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000 170,000 - 3,206,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments	stem	d Allowa	nce	2% 30% 10% 2% 2% 4% 0% Subtotal:	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1,272,000 424,000 1,000,000 85,000 85,000 170,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,456,000
Engineering/Survey/Testing:		16%	\$ 1,513,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Prep ROW:

Construction Cost TOTAL:

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 Pflugerville.

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.

298,000

9,456,000

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. B-8

Name: Main St (1) This project consists of the construction of a new

Limits: N Railroad Ave to Old Austin-Hutto Rd two lane undivided urban roadway.

Impact Fee Class: URBAN 2-LANE URBAN 2-LANE

Length (If): 3,412 Service Area(s): B

	adway Construction Cost Pro	jection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
104	Unclassified Street Excavation		22,852	су	\$	20.00	\$	457,000
204	5" Asphalt (Type C)		5,734	ton	\$	105.00	\$	602,000
204	12" Base		7,330	су	\$	50.00	\$	366,000
404	18" Lime Stabilization (with Lime @	22,747	sy	\$	11.00	\$	250,000	
				gal	\$	6.00	\$	26,000
604				sf	\$	7.50	\$	512,000
					\$	18.00	\$	123,000
804	Turn Lanes and Median Openings		0	sy	\$	58.00	\$	-
	Paving Construction Cost Subtotal:							2,336,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	lowance		Item Cost
	Traffic Control	None Anticipated				0%	\$	-
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%		47,000
	Roadway Drainage	Standard Internal Sys	stem			30%		701,000
	Illumination					10%	\$	234,000
	Special Drainage Structures	Bridge Crossing					\$	800,000
	Water	Minor Adjustments				2%	\$	47,000
	Sewer	Minor Adjustments				2%	\$	47,000
	Turf and Erosion Control					2%	\$	47,000
	Landscaping and Irrigation					4%	\$	93,000
	Miscellaneous:					0%	,	-
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	nce	Subtotal:	\$	2,016,000
	·	·	Paving an		nce	Subtotal:	\$	4,352,000
		Constr	ruction Conti	-		15%	\$	653,000
				lization:		8%	\$	348,000
				p ROW:		4%	\$	174,000
			Constru	ction C	ost	TOTAL:	\$	5,527,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,527,000
Engineering/Survey/Testing:		16%	\$ 884,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	B-9
Name:	Fm 685 (3)	This project consists of	of the reconstruc	tion of the
Limits:	1615' N Of E Pecan St to E Pecan St	existing pavement to a	six lane divided	major arterial.
Impact Fee Class:	MAA 6D			
Ultimate Class:	MAA 6D			

Length (If): 1,614 Service Area(s): В

RO	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Un	it Price		Item Cost
112	Unclassified Street Excavation		21,196	су	\$	20.00	\$	424,000
212	8" Asphalt (Type C)		4,891	ton	\$	105.00	\$	514,000
212	24" Base		8,128	су	\$	50.00	69	406,000
	24" Lime Stabilization (with Lime @ 4	15#/sy)	12,909	sy	\$	15.00	69	194,000
512	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	2,438	gal	\$	6.00	69	15,000
612				sf	\$	7.50	\$	242,000
712	-, -				\$	18.00	\$	116,000
812	12 Turn Lanes and Median Openings 1,548 sy \$ 79.00						69	122,000
Paving Construction Cost Subtotal:								2,033,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	102,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs				2%	\$	41,000
	Roadway Drainage	Standard Internal System				30%	\$	610,000
	Illumination	·				10%	\$	203,000
	Special Drainage Structures	None Anticipated					\$	-
$\sqrt{}$	Water	Minor Adjustments				2%	\$	41,000
$\sqrt{}$	Sewer	Minor Adjustments				2%	\$	41,000
$\sqrt{}$	Turf and Erosion Control					2%	\$	41,000
	Landscaping and Irrigation					4%	\$	81,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	1,160,000
			Paving an	d Allowa	nce	Subtotal:	\$	3,193,000
		Constr	ruction Conti	ngency:		15%	\$	479,000
			Mobi	lization:		8%	\$	255,000
			Pre	p ROW:		4%	\$	128,000
			Constru	ction C	ost	TOTAL:	\$	4,055,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,055,000
Engineering/Survey/Testing:		16%	\$ 649,000
Previous City contribution			
Other	Corridor Study		\$ 67,165
ROW/Easement Acquisition:	Included in 2020 GO Bond amount	0%	\$ -

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 Pflugerville.

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.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information	tion:	Description:	Project No.	B-10		
Name:	Old Austin-Hutto Rd (1)	This project consi	sts of the reconstru	ction of the		
Limits:	Fm 685 to E Pecan St	existing pavement	existing pavement to a three lane undivided major			
Impact Fee Class:	MAC 3U	collector.		-		
Ultimate Class:	MAC 3U					
Length (If):	4,335					
Service Area(s):	В					

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:	2018 GO Bond	-	\$ 3,700,000
Engineering/Survey/Testing:	2015 CO Bond	-	\$ 289,000
Other		-	
ROW/Easement Acquisition:	No ROW Acquisition Costs included	-	\$ -
	\$ 3,989,000		
	\$ 3,989,000		
	Impact Fee Project		3,989,000

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informat	tion:	Description:	Project No.	B-11	
Name:	Immanuel Rd (1)	This project consists of the reconstruction of the			
Limits:	E Pecan St to E Wells Branch Pkwy	existing pavement to a three lane undivided major			
Impact Fee Class:	MAC 3U	collector.			
Ultimate Class:	MAC 3U				
Length (If):	5,650				
Service Area(s):	В				

Roadway Construction Cost Projection								
No.	Item Description		Quantity	Unit	Ur	it Price		Item Cost
103	Unclassified Street Excavation		29,299	су	\$	20.00	\$	586,000
203	5" Asphalt (Type C)		7,079	ton	\$	105.00	\$	743,000
203	12" Base		9,208	су	\$	50.00	\$	460,000
403	18" Lime Stabilization (with Lime @ 4	• ,	28,880	sy	\$	11.00	\$	318,000
	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	5,525	gal	\$	6.00	\$	33,000
	6' Concrete Sidewalk		67,806	sf	\$	7.50	\$	509,000
	Machine Laid Curb & Gutter		11,301	lf	\$	18.00	\$	203,000
803	Turn Lanes and Median Openings		0	sy	\$	58.00	\$	-
		P	aving Const	ruction (Cost	Subtotal:	\$	2,852,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
V	Traffic Control	Construction Phase	Traffic Control			5%	\$	143,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%	\$	57,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$	856,000
	Illumination					10%	\$	285,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments				2%	\$	57,000
	Sewer	Minor Adjustments				2%	\$	57,000
	Turf and Erosion Control					2%	\$	57,000
	Landscaping and Irrigation					4%	\$	114,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	1,626,000
			Paving an	d Allowa	nce	Subtotal:	\$	4,478,000
		Constr	uction Conti	ngency:		15%	\$	672,000
			Mobi	lization:		8%	\$	358,000
			Pre	p ROW:		4%	\$	179,000
	Construction Cost TOTAL:							5,687,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,687,000
Engineering/Survey/Testing:		16%	\$ 910,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Description:

Project No.

B-12

Name:

E Pfennig Ln (2)

City Limits to E Wells Branch Pkwy

This project consists of the construction of a new three lane undivided major collector.

Impact Fee Class: MAC 3U
Ultimate Class: MAC 3U
Length (If): 2,522
Service Area(s): B

Roa	dway Construction Cost Projection								
No.	Item Description	Quantity	Unit	Unit Price		Unit Price			Item Cost
103	Unclassified Street Excavation	13,078	су	\$	20.00	\$	262,000		
203	5" Asphalt (Type C)	3,160	ton	\$	105.00	\$	332,000		
203	12" Base	4,110	су	\$	50.00	\$	206,000		
403	18" Lime Stabilization (with Lime @ 45#/sy)	12,891	sy	\$	11.00	\$	142,000		
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,466	gal	\$	6.00	\$	15,000		
603	6' Concrete Sidewalk	30,267	sf	\$	7.50	\$	227,000		
703	Machine Laid Curb & Gutter	5,044	lf	\$	18.00	\$	91,000		
803	Turn Lanes and Median Openings	0	sy	\$	58.00	\$	-		
	Paving Construction Cost Subtotal: \$						1,275,000		

	Faving Constitution (Jost Jubiotal.	Ψ	1,273,000		
Major Construction Component Allowances**:						
Item Description	Notes	Allowance	П	Item Cost		
Traffic Control	None Anticipated	0%	\$	-		
√ Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	26,000		
√ Roadway Drainage	Standard Internal System	30%	\$	383,000		
$\sqrt{}$ Illumination		10%	\$	128,000		
√ Special Drainage Structures	Bridge Crossing		\$	500,000		
√ Water	Minor Adjustments	2%	\$	26,000		
√ Sewer	Minor Adjustments	2%	\$	26,000		
√ Turf and Erosion Control		2%	\$	26,000		
√ Landscaping and Irrigation		4%	\$	51,000		
Miscellaneous:		0%	\$	-		
**Allowances based on % of Paving Construction	Cost Subtotal Allowa	nce Subtotal:	\$	1,166,000		
	Paving and Allowa	nce Subtotal:	\$	2,441,000		
	\$	366,000				
	Mobilization:	8%	\$	195,000		
	Prep ROW:			98,000		
	Construction C	ost TOTAL:	\$	3,100,000		

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,100,000
Engineering/Survey/Testing:		16%	\$ 496,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:		Description:	Project No.	B-13	
Name:	Biltmore Ave (1)	This project consists of	of the construct	ion of a	
Limits:	E Pecan St to Helios Way	previously constructed three lane undivided major			
Impact Fee Class:	MAC 3U	collector.		•	
Ultimate Class:	MAC 3U				
Length (If):	1,599				
Service Area(s):	В				

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,315,023
Engineering/Survey/Testing:		-	\$ 203,181
Other		-	\$ 13,200
ROW/Easement Acquisition:		-	\$ -
	Overall Project	t Cost Total:	\$ 1,531,404
	City (Contribution:	\$ 1,531,404
	Impact Fee Project	t Cost 100%:	\$ 1,531,404

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	B-14
Name: Limits: Impact Fee Class: Ultimate Class: Length (If):	Helios Way West (1) Biltmore Ave to Sun Light Near Way	This project consists of previously constructed collector.		
Service Area(s):	В			

Impact Fee Project Cost Summ	ary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 566,511
Engineering/Survey/Testing:		-	\$ 87,530
Other		-	\$ 5,687
ROW/Easement Acquisition:		-	\$ -
	Overall Project	Cost Total:	\$ 659,728
	City Co	ontribution:	\$ 659,728
	Impact Fee Project	Cost 100%:	\$ 659,728

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:		Description:	Project No.	B-15		
Name:	Sun Light Near Way Extension (1)	This project consists of the construction of a				
Limits:	350' S Of E Pecan St to Helios Way	ay previously constructed three lane undivided major				
Impact Fee Class:	MAC 3U	collector.		•		
Ultimate Class:	MAC 3U					
Length (If):	1,340					
Service Area(s):	В					

Item Description	Notes:		Allowance	Item Cost
Construction:			-	\$ 1,102,379
Engineering/Survey/Testing:			-	\$ 170,326
Other			-	\$ 11,066
ROW/Easement Acquisition:			-	\$ -
		Overall Project	Cost Total:	\$ 1,283,771
		City Co	ontribution:	\$ 1,283,771
		Impact Fee Project	Cost 100%:	\$ 1,283,771

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/20/2020

Project Information: Description: Project No. B-16

Name: Impact Way Extension (1) This project consists of the construction of a new Limits: Helios Way to 80' W Of Cameron Rd three lane undivided major collector.

Impact Fee Class: MAC 3U
Ultimate Class: MAC 3U
Length (If): 6,752
Service Area(s): B

Impact Fee Project Cost Summary							
Item Description	Notes:	Allowance		Item Cost			
Construction:		-	\$	5,426,000			
Engineering/Survey/Testing:		16%	\$	1,034,000			
Previous City contribution							
Other							
ROW/Easement Acquisition:	Not Included in Study	0%	\$	_			
	Impact Fee Project (Cost TOTAL:	\$	6,460,000			

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 Pflugerville.

City of Pflugerville - 2020 Roadway Impact Fee Study

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

Roadway Improvements - Service Area C

<u>#</u>	IF Class	<u>Project</u>	<u>Type</u>	<u>Limits</u>		Percent in Service Area	Project Cost	Total Cost in Service Area
				<u>From</u>	<u>To</u>	Service Area		Service Area
C-1	MIA 4D	Rowe Ln (1)	New	Sh 130 Nbfr	950' W Of Commons Pkwy	50%	\$ 5,500,000	\$ 2,750,000
C-2	MIA 4D	Kelly Ln (1)	Widening	545' E Of W Falcon Pointe Blvd	E Falcon Pointe Blvd	100%	\$ 5,164,428	\$ 5,164,428
C-3	MIA 4D	Kelly Ln (2)	Widening	E Falcon Pointe Blvd	Moorlynch Ave	50%	\$ 2,066,572	\$ 1,033,286
C-4	MIA 4D	Kelly Ln (3)	Widening	Moorlynch Ave	870' W Of Weiss Ln	50%	\$ 7,900,000	\$ 3,950,000
C-5	MAA 4D	Cele Rd (1)	Widening	Weiss Ln	2505' E Of Weiss Ln	50%	\$ 5,700,000	\$ 2,850,000
C-6	MAA 4D	Cele Rd (2)	Widening	695' W Of New Sweden Church Rd	200' E Of New Sweden Church Rd	50%	\$ 2,000,000	\$ 1,000,000
C-7	MAA 4D	Cele Rd (3)	Widening	200' E Of New Sweden Church Rd	1025' W Of Melber Ln	100%	\$ 2,600,000	\$ 2,600,000
C-8	MAA 4D	Cele Rd (4)	Widening	1025' W Of Melber Ln	Melber Ln	50%	\$ 2,300,000	\$ 1,150,000
C-9	URBAN 3-LANE	Colorado Sand Dr (1)	New	Copper Mine Dr	Colorado Sand Dr	100%	\$ 3,953,000	\$ 3,953,000
C-10	MAA 4D	Weiss Ln (1)	Previously Built Project	Kelly Ln	730' S Of Kelly Ln	50%	\$ 708,264	\$ 354,132
C-11	MAA 4D	Weiss Ln (2)	Previously Built Project	730' S Of Kelly Ln	645' N Of Hidden Lake Crossing	100%	\$ 1,616,672	\$ 1,616,672
C-12	1/2 MIA 4D	Hidden Lake Dr (1)	New	City Limits	E Pflugerville Pkwy	100%	\$ 3,200,000	\$ 3,200,000
C-13	MAA 4D	Weiss Ln (3)	Previously Built Project	645' N Of Hidden Lake Crossing	E Pflugerville Pkwy	50%	\$ 5,304,328	\$ 2,652,164
C-14	MAA 4D	E Pflugerville Pkwy (1)	Widening	Colorado Sands Dr	Weiss Ln	100%	\$ 23,100,000	\$ 23,100,000
C-15	MAA 4D	E Pflugerville Pkwy Extension (1)	New	Weiss Ln	City Limits	50%	\$ 4,642,000	\$ 2,321,000
C-16	MAA 4D	Weiss Ln (4)	Previously Built Project	E Pflugerville Pkwy	2790' N Of E Pecan St	100%	\$ 3,787,223	\$ 3,787,223
C-17	1/2 MAA 4D	Weiss Ln (5)	Widening	2790' N Of E Pecan St	E Pecan St	50%	\$ 8,800,000	\$ 4,400,000
C-18	1/2 MIA 4D	Melber Ln (1)	New	Pleasanton Pkwy	2455' N Of Cameron Rd	100%	\$ 3,000,000	\$ 3,000,000
C-19	1/2 MIA 4D	Melber Ln (2)	New	2455' N Of Cameron Rd	440' N Of Cameron Rd	50%	\$ 1,800,000	\$ 900,000
C-20	MAA 4D	E Pecan St (1)	Widening	Sh 130	Weiss Ln	100%	\$ 8,700,000	\$ 8,700,000
C-21	1/2 MIA 4D	Cameron Rd Realignment (1)	New	E Pecan St	2305' N Of Sh 130	100%	\$ 2,900,000	\$ 2,900,000

TOTAL \$ 104,742,487 \$ 81,381,905

City of Pflugerville - 2020 Roadway Impact Fee Study

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

Intersection Improvements - Service Area C

#	Project	Imp	rovement	Percent in	Project Cost	Total Cost in
<u>#</u>	<u>Project</u>	Improvement 1	Improvement 2	Service Area	Project Cost	Service Area
CI-1	Sh 130 At Cr 138	Innovative		25%	\$ 1,600,000	\$ 400,000
AI-3; CI-2	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass	Turn Lane	50%	\$ 8,681,000	\$ 4,340,500
CI-3	Speidel Dr At Rowe Ln	Signal		100%	\$ 353,000	\$ 353,000
AI-7; CI-4	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative	Turn Lane	50%	\$ 3,408,850	\$ 1,704,425
CI-5	Jakes Hill Rd At Kelly Ln	Signal		50%	\$ 411,000	\$ 205,500
CI-6	Hodde Ln At Cele Rd	Innovative		25%	\$ 2,000,000	\$ 500,000
AI-11; CI-7	Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative	Turn Lane	50%	\$ 2,116,250	\$ 1,058,125
CI-8	Copper Mine Dr At Colorado Sand Dr	Signal		100%	\$ 411,000	\$ 411,000
CI-9	Sh 130 Nbfr At S Of Fm 685	Ramp Reversal		100%	\$ 4,000,000	\$ 4,000,000
CI-10	Colorado Sand Dr At Lone Star Ranch Blvd	Roundabout		100%	\$ 1,500,000	\$ 1,500,000
CI-11	Weiss Ln At Hidden Lake Crossing	Signal	Turn Lane	25%	\$ 480,600	\$ 120,150
AI-13; BI-3; CI-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane		50%	\$ 946,560	\$ 473,280
CI-13	Hidden Lake Dr At E Pflugerville Pkwy	Signal		100%	\$ 353,000	\$ 353,000
CI-14	Weiss Ln At Pleasanton Pkwy	Signal		100%	\$ 411,000	\$ 411,000
BI-16; CI-15	Sh 130 Ebfr/Wbfr At E Pecan St	Overpass		50%	\$ 8,000,000	\$ 4,000,000
-	Update ITS and Traffic Management Infrastructure			33%	\$ 2,974,924	\$ 991,641

TOTAL \$ 37,647,184 \$ 20,821,621

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

Roadway Construction Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:

Rowe Ln (1)

Limits:

Sh 130 Nbfr to 950' W Of Commons Pkwy

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

Impact Fee Class: MIA 4D
Ultimate Class: MIA 6D
Length (If): 2,958
Service Area(s): C

ROS	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
109	Unclassified Street Excavation		21,474	су	\$	20.00	\$	429,000
209	6" Asphalt (Type C)		4,556	ton	\$	105.00	\$	478,000
309	18" Base		7,888	су	\$	50.00	\$	394,000
409	18" Lime Stabilization (with Lime @ 4	15#/sy)	17,091	sy	\$	11.00	\$	188,000
509	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	3,155	gal	\$	6.00	\$	19,000
609	10' Concrete Sidewalk		59,162	sf	\$	7.50	\$	444,000
709	Machine Laid Curb & Gutter		11,832	lf	\$	18.00	\$	213,000
809	Turn Lanes and Median Openings		2,166	sy	\$	64.00	\$	139,000
		Р	aving Const	ruction (Cost	Subtotal:	\$	2,304,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	None Anticipated				0%	\$	-
	Pavement Markings/Signs/Posts	Includes Striping/Sigr	ns			2%	\$	46,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$	691,000
	Illumination					10%	\$	230,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments				2%	\$	46,000
	Sewer	Minor Adjustments				2%	\$	46,000
	Turf and Erosion Control					2%	\$	46,000
	Landscaping and Irrigation					4%	\$	92,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	1,197,000
			Paving an	d Allowa	nce	Subtotal:	\$	3,501,000
		Constr	uction Conti	ngency:		15%	\$	525,000
			Mobi	lization:		8%	\$	280,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,446,000
Engineering/Survey/Testing:		16%	\$ 711,000
Previous City contribution	2015 CO Bond		\$ 860,475
Other	Travis County Contribution to 2015 CO Bond Pro	ject	\$ (564,783
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Prep ROW:

Construction Cost TOTAL:

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 Pflugerville.

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.

140,000

4,446,000

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	C-2	
Name:	Kelly Ln (1)		This project cons	ists of the	
Limits:	545' E Of W Falcon Pointe Blvd to	o E Falcon Pointe Blvd	reconstruction of	the existing	
Impact Fee Class:	MIA 4D		pavement to a four lane divid		
Ultimate Class:	MIA 4D		minor arterial.		
Length (If):	2,277				
Service Area(s):	C				

Impact Fee Project Cost Sun Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,956,195
Engineering/Survey/Testing:		-	\$ 201,662
Other		-	\$ -
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$ 6,571
	Overall Proj	ect Cost Total:	\$ 5,164,428
	City	y Contribution:	\$ 5,164,428
	Impact Fee Proj	ect Cost 100%:	\$ 5,164,428

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	C-3	
Name:	Kelly Ln (2)		This project cons	ists of the	
Limits:	E Falcon Pointe Blvd to Moorlynch A	ve	reconstruction of the existing		
Impact Fee Class:	MIA 4D		pavement to a four lane divi		
Ultimate Class:	MIA 4D		minor arterial.		
Length (If):	911				
Service Area(s):	С				

Impact Fee Project Cost Summa						
Item Description	Notes:	Allowance		Item Cost		
Construction:		-	\$	1,983,246		
Engineering/Survey/Testing:		-	\$	80,696		
Other		-	\$	-		
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$	2,629		
	Overall Project Cost Total:					
	City Co	ontribution:	\$	2,066,572		
	Impact Fee Project	Cost 100%:	\$	2,066,572		

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: C-4 Description: Project No. Name: Kelly Ln (3) This project consists of the Limits: Moorlynch Ave to 870' W Of Weiss Ln reconstruction of the existing pavement Impact Fee Class: MIA 4D to a four lane divided minor arterial. **Ultimate Class:** MIA 4D Length (If): 4,580 Service Area(s): С

Roa	dway Construction Cost Pro	jection					
No.	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
109	Unclassified Street Excavation		33,250	су	\$	20.00	\$ 665,000
209	6" Asphalt (Type C)		7,054	ton	\$	105.00	\$ 741,000
309	18" Base		12,214	су	\$	50.00	\$ 611,000
409	18" Lime Stabilization (with Lime @ 4	15#/sy)	26,464	sy	\$	11.00	\$ 291,000
509	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	4,886	gal	\$	6.00	\$ 29,000
609	10' Concrete Sidewalk		91,606	sf	\$	7.50	\$ 687,000
709	Machine Laid Curb & Gutter		18,321	lf	\$	18.00	\$ 330,000
809	Turn Lanes and Median Openings		3,354	sy	\$	64.00	\$ 215,000
		P	Paving Const	ruction (Cost	Subtotal:	\$ 3,569,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			All	lowance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 178,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%	71,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			30%	1,071,000
	Illumination					10%	\$ 357,000
	Special Drainage Structures	None Anticipated					\$ -
$\sqrt{}$	Water	Minor Adjustments				2%	\$ 71,000
	Sewer	Minor Adjustments				2%	\$ 71,000
	Turf and Erosion Control					2%	\$ 71,000
	Landscaping and Irrigation					4%	\$ 143,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$ 2,033,000
			Paving an			Subtotal:	\$ 5,602,000
		Constr	ruction Conti	ngency:		15%	\$ 840,000
			Mobi	lization:		8%	\$ 448,000
			Pre	p ROW:		4%	\$ 224,000
			Construc	ction C	ost	TOTAL:	\$ 7,114,000

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,114,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 820,000
Previous City contribution			\$ -
Other	From TIA		\$ (44,255)
ROW/Easement Acquisition:	Not Included in Study	0%	\$ _
	Impact Fee Pr	oject Cost TOTAL:	\$ 7,900,000

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: Description: Project No. C-5

Name: Cele Rd (1) This project consists of the

Limits:
Weiss Ln to 2505' E Of Weiss Ln reconstruction of the existing pavement to a four lane divided major arterial.

Ultimate Class: MAA 6D Length (If): 2,505

Service Area(s): C,ETJ/OTHER

No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
111	Unclassified Street Excavation	24,243	су	\$	20.00	\$ 485,000
211	8" Asphalt (Type C)	5,143	ton	\$	105.00	\$ 540,000
311	24" Base	8,905	су	\$	50.00	\$ 445,000
411	24" Lime Stabilization (with Lime @ 45#/sy)	14,471	sy	\$	15.00	\$ 217,000
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,672	gal	\$	6.00	\$ 16,000
611	10' Concrete Sidewalk	50,093	sf	\$	7.50	\$ 376,000
711	Machine Laid Curb & Gutter	10,019	lf	\$	18.00	\$ 180,000
811	Turn Lanes and Median Openings	2,403	sy	\$	79.00	\$ 190,000
	, , ,	Paving Const	ruction (net	Subtotal:	\$ 2.44

011	Turri Laries and Median Openings	2,403 39	ψ 79.00	_	190,000
		Paving Construction (Jost Subtotal:	\$	2,449,000
Maio	or Construction Component Allowa	nces**:	_		_
	Item Description	Notes	Allowance		Item Cost
	Traffic Control	Construction Phase Traffic Control	5%	\$	122,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	49,000
	Roadway Drainage	Standard Internal System	30%	\$	735,000
	Illumination		10%	\$	245,000
	Special Drainage Structures	None Anticipated		\$	-
	Water	Minor Adjustments	2%	\$	49,000
	Sewer	Minor Adjustments	2%	\$	49,000
	Turf and Erosion Control		2%	\$	49,000
	Landscaping and Irrigation		4%	\$	98,000
	Miscellaneous:		0%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	1,396,000
		Paving and Allowa	nce Subtotal:	\$	3,845,000
		Construction Contingency:	15%	\$	577,000
		Mobilization:	8%	\$	308,000
		Prep ROW:	4%	\$	154,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,884,000
Engineering/Survey/Testing:		16%	\$ 781,000
Previous City contribution			\$ -
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Construction Cost TOTAL:

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 Pflugerville.

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.

4,884,000

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	C-6
Name:	Cele Rd (2)		This project consis	ts of the
Limits:	695' W Of New Sweden Church Rd to	200' E Of New Swede	reconstruction of t	he existing
Impact Fee Class:	MAA 4D		pavement to a four	lane divided
Ultimate Class:	MAA 6D		major arterial.	
Length (If):	893		•	
Service Area(s):	C,ETJ/OTHER			

Roa	adway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
111	Unclassified Street Excavation	8,647	су	\$	20.00	\$	173,000
211	8" Asphalt (Type C)	1,834	ton	\$	105.00	\$	193,000
311	24" Base	3,176	су	\$	50.00	\$	159,000
411	24" Lime Stabilization (with Lime @ 45#/sy)	5,162	sy	\$	15.00	\$	77,000
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	953	gal	\$	6.00	\$	6,000
611	10' Concrete Sidewalk	17,867	sf	\$	7.50	\$	134,000
711	Machine Laid Curb & Gutter	3,573	lf	\$	18.00	\$	64,000
811	Turn Lanes and Median Openings	857	sy	\$	79.00	\$	68,000
		Paving Const	ruction (^net	Subtotal:	¢	874 000

Mai					
Majo	or Construction Component Allowa Item Description	Notes	Allowance	П	Item Cost
	Traffic Control	Construction Phase Traffic Control	5%	\$	44,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	17,000
	Roadway Drainage	Standard Internal System	30%	\$	262,000
	Illumination		10%	\$	87,000
	Special Drainage Structures	None Anticipated		\$	-
	Water	Minor Adjustments	2%	\$	17,000
	Sewer	Minor Adjustments	2%	\$	17,000
	Turf and Erosion Control		2%	\$	17,000
	Landscaping and Irrigation		4%	\$	35,000
	Miscellaneous:		0%	\$	-
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	nce Subtotal:	\$	496,000
		Paving and Allowa	nce Subtotal:	\$	1,370,000
		Construction Contingency:	15%	\$	206,000
		Mobilization:	8%	\$	110,000
		Prep ROW:	4%	\$	55,000
		Construction C	ost TOTAL:	\$	1,741,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,741,000
Engineering/Survey/Testing:		16%	\$ 279,000
Previous City contribution			\$ -
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informat	ion:	Description:	Project No.	C-7
Name:	Cele Rd (3)		This project consi	sts of the
Limits:	200' E Of New Sweden Church Rd to	1025' W Of Melber Ln	reconstruction of	the existing
Impact Fee Class:	MAA 4D		pavement to a fou	r lane divided
Ultimate Class:	MAA 6D		major arterial.	
Length (If):	1,160		•	
Service Area(s):	C			

Roa	dway Construction Cost Pro	ection						
	Item Description		Quantity	Unit	Un	it Price		Item Cost
111	Unclassified Street Excavation		11,224	су	\$	20.00	\$	224,000
211	8" Asphalt (Type C)		2,381	ton	\$	105.00	\$	250,000
311	24" Base		4,123	су	\$	50.00	\$	206,000
411	24" Lime Stabilization (with Lime @ 4	l5#/sy)	6,700	sy	\$	15.00	\$	101,000
511	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	1,237	gal	\$	6.00	\$	7,000
611	10' Concrete Sidewalk		23,193	sf	\$	7.50	\$	174,000
	Machine Laid Curb & Gutter		4,639	lf	\$	18.00	\$	83,000
811	Turn Lanes and Median Openings		1,113	sy	\$	79.00	\$	88,000
		P	Paving Const	ruction (Cost	Subtotal:	\$	1,133,000
Majo	or Construction Component Allowa							
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	-	57,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%		23,000
	Roadway Drainage	Standard Internal Sys	stem			30%		340,000
	Illumination					10%	\$	113,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments				2%	\$	23,000
	Sewer	Minor Adjustments				2%	\$	23,000
	Turf and Erosion Control					2%	\$	23,000
	Landscaping and Irrigation					4%	\$	45,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	647,000
			Paving an		nce			1,780,000
		Constr	ruction Conti	-		15%		267,000
				lization:		8%	\$	142,000
				p ROW:		4%		71,000
			Constru	ction C	ost	TOTAL:	\$	2,260,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,260,000
Engineering/Survey/Testing:		16%	\$ 362,000
Previous City contribution			\$ -
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ _

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

to a four lane divided major arterial.

Project Information: C-8 Description: Project No. Name: Cele Rd (4) This project consists of the Limits: 1025' W Of Melber Ln to Melber Ln reconstruction of the existing pavement

Impact Fee Class: MAA 4D **Ultimate Class:** MAA 6D Length (If): 1,025

Service Area(s): C,ETJ/OTHER

	adway Construction Cost Prolitem Description		Quantity	Unit	Ur	nit Price		Item Cost
111	Unclassified Street Excavation	9,923 cy		\$	20.00	\$	198,000	
211	11 8" Asphalt (Type C)		2,105	ton	\$	105.00	\$	221,000
311	11 24" Base		3,645	су	\$	50.00	\$	182,000
411	411 24" Lime Stabilization (with Lime @ 45#/sy)		5,924	sy	\$	15.00	\$	89,000
511	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	1,094	gal	\$	6.00	\$	7,000
611	10' Concrete Sidewalk		20,505	sf	\$	7.50	\$	154,000
711	Machine Laid Curb & Gutter		4,101	lf	\$	18.00	\$	74,000
811	Turn Lanes and Median Openings		984	sy	\$	79.00	\$	78,000
Paving Construction Cost Subtotal:							\$	1,003,000
Major Construction Component Allowances**:								
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	50,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs			2%	\$	20,000	
	Roadway Drainage	Standard Internal System			30%	\$	301,000	
	Illumination				10%	\$	100,000	
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments			2%	\$	20,000	
	Sewer	Minor Adjustments			2%	\$	20,000	
	Turf and Erosion Control					2%	\$	20,000
	Landscaping and Irrigation					4%	\$	40,000
	Miscellaneous:					0%	\$	-
**Allo	**Allowances based on % of Paving Construction Cost Subtotal Allowance Subtotal:					Subtotal:	\$	571,000
Paving and Allowance Subtotal:						\$	1,574,000	
		Const	ruction Conti	ngency:		15%	\$	236,000
			Mobi	lization:		8%	\$	126,000
			_					

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,999,000
Engineering/Survey/Testing:		16%	\$ 320,000
Previous City contribution			\$ -
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

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.

Prep ROW:

Construction Cost TOTAL:

63,000

1,999,000

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 7/20/2020

Project Information: Description: Project No. C-9

Name: Colorado Sand Dr (1) This project consists of the construction of a new

Limits: Copper Mine Dr to Colorado Sand Dr three lane undivided urban roadway.

Impact Fee Class: URBAN 3-LANE URBAN 3-LANE

Length (If): 2,817 Service Area(s): C

Impact Fee Project Cost Sun			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,551,500
Engineering/Survey/Testing:	2018 GO Bond	-	\$ 400,000
Other	2018 GO Bond	-	\$ 1,500
ROW/Easement Acquisition:	No ROW Acquisition Costs included	-	\$ -
	Overall Project	Cost Total:	\$ 3,953,000
	\$ 3,953,000		
	Impact Fee Project	Cost 100%:	\$ 3,953,000

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informat	tion:	Description:	Project No.	C-10
Name: Limits: Impact Fee Class: Ultimate Class: Length (If): Service Area(s):	Weiss Ln (1) Kelly Ln to 730' S Of Kelly Ln MAA 4D MAA 6D 729 C		sts of the reconstru t to a four lane divid	

Item Description	Notes:	Allowance		Item Cost
Construction:		-	\$	868,304
Engineering/Survey/Testing:		-	\$	114,015
Previous City contribution		-		
Other	Travis County Contribution	-	\$	(407,191)
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$	133,136
	\$	1,115,455		
	\$	708,264		
Impact Fee Project Cost 63%:				708,264

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:		Description:	Project No.	C-11	
Name: Weiss Ln (2)			This project cons	sists of the	
Limits: 730' S Of Kelly Ln to 645' N Of		Lake Crossing	reconstruction of the exist		
Impact Fee Class:	MAA 4D		pavement to a fo	ur lane divided	
Ultimate Class:	MAA 6D		major arterial.		
Length (If):	1,665		•		
Service Area(s): C					

Item Description	Notes:	Allowance		Item Cost
Construction:		-	\$	1,981,978
Engineering/Survey/Testing:		-	\$	260,248
Previous City contribution		-		
Other	Travis County Contribution	-	\$	(929,449)
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$	303,895
Overall Project Cost Total:				2,546,120
City Contribution:				1,616,672
Impact Fee Project Cost 63%:			\$	1,616,672

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:
Hidden Lake Dr (1)
City Limits to E Pflugerville Pkwy

Description:
Project No.
C-12

This project consists of the construction of one half of a new four lane divided minor arterial.

Impact Fee Class: 1/2 MIA 4D
Ultimate Class: MIA 4D
Length (If): 2,561
Service Area(s): C

No.	Item Description	Quantity	Unit	Unit Price			Item Cost		
108	Unclassified Street Excavation	9,296	су	\$	20.00	\$	186,000		
208	6" Asphalt (Type C)	1,972	ton	\$	105.00	\$	207,000		
308	18" Base	3,415	су	\$	50.00	\$	171,000		
408	18" Lime Stabilization (with Lime @ 45#/sy)	7,399	sy	\$	11.00	\$	81,000		
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,366	gal	\$	6.00	\$	8,000		
608	10' Concrete Sidewalk	25,611	sf	\$	7.50	\$	192,000		
708	Machine Laid Curb & Gutter	5,122	lf	\$	18.00	\$	92,000		
808	Turn Lanes and Median Openings	1,876	sy	\$	64.00	\$	120,000		
		Paving Const	ruction (Paving Construction Cost Subtotal: \$					

	Taving Construction	oost oubtotal.	Ψ	1,001,000
Major Construction Component Al	owances**:	_		
Item Description	Notes	Allowance		Item Cost
Traffic Control	None Anticipated	0%	\$	-
√ Pavement Markings/Signs/Post	S Includes Striping/Signs	2%	\$	21,000
√ Roadway Drainage	Standard Internal System	30%	\$	317,000
√ Illumination		10%	\$	106,000
√ Special Drainage Structures	Bridge Crossing		\$	600,000
√ Water	Minor Adjustments	2%	\$	21,000
√ Sewer	Minor Adjustments	2%	\$	21,000
√ Turf and Erosion Control		2%	\$	21,000
√ Landscaping and Irrigation		4%	\$	42,000
Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construc	ion Cost Subtotal Allowa	ance Subtotal:	\$	1,149,000
	Paving and Allowa	ance Subtotal:	\$	2,206,000
	\$	331,000		
	Mobilization:	8%	\$	176,000
	Prep ROW:	4%	\$	88,000
	\$	2,801,000		

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,801,000
Engineering/Survey/Testing:		16%	\$ 448,000
Previous City contribution			\$ -
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	C-13			
Name:	Weiss Ln (3)	This project consists of the reconstruction of the					
Limits:	645' N Of Hidden Lake Crossing to E	existing pavement to a	four lane divided	d major			
Impact Fee Class:	MAA 4D	arterial.		-			
Ultimate Class:	MAA 6D						
Length (If):	5,462						
Service Area(s):	C						

Item Description	Notes:	Allowance		Item Cost
Construction:		-	\$	6,502,903
Engineering/Survey/Testing:		-	\$	853,879
Previous City contribution		-		
Other	Travis County Contribution	-	\$	(3,049,538
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$	997,084
	\$	8,353,866		
	City	Contribution:	\$	5,304,328
Impact Fee Project Cost 63%:				5,304,328

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Informat	tion:	Description:	Project No.	C-14		
Name:	E Pflugerville Pkwy (1)	This project consists of the reconstruction of t				
Limits:	Colorado Sands Dr to Weiss Ln	existing pavement to a four lane divided major				
Impact Fee Class:	MAA 4D	arterial.				
Ultimate Class:	MAA 6D					
Length (If):	8,818					
Service Area(s):	С					

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 15,257,000
Engineering/Survey/Testing:	2019 CO Bond; Proposed 2020 GO Bond		\$ 3,150,000
Previous City contribution	2015 CO Bond		\$ 4,713,541
Other			\$ -
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection Kimley-Horn and Associates, Inc.

updated: 7/20/2020

Project Informa	tion:	Description:	Project No.	C-15		
Name: E Pflugerville Pkwy Extension (1)		This project consists of the construction of a new				
Limits:	Weiss Ln to City Limits	four lane divided major arterial.				
Impact Fee Class:	MAA 4D					
Ultimate Class:	MAA 6D					
Length (If):	2,045					
Service Area(s):	C					

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:	2018 CO Bond	-	\$ 4,918,039
Engineering/Survey/Testing:	2018 CO Bond	-	\$ 196,461
Other	Travis County Contribution	-	\$ (472,500)
ROW/Easement Acquisition:	No ROW Acquisition Costs included	-	\$ -
	Overall Project	Cost Total:	\$ 5,114,500
	\$ 4,642,000		
	\$ 4,642,000		

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 Pflugerville.

2020 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:		Description:	Project No.	C-16
Name:	Weiss Ln (4)		This project consists o	f the
Limits:	E Pflugerville Pkwy to 2790' N Of E P	ecan St	reconstruction of the e	xisting pavement
Impact Fee Class:	MAA 4D		to a four lane divided n	najor arterial.
Ultimate Class:	MAA 6D			•
Length (If):	3,900			
Service Area(s):	С			

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,642,991
Engineering/Survey/Testing:		-	\$ 609,659
Previous City contribution		-	
Other	Travis County Contribution	-	\$ (2,177,331)
ROW/Easement Acquisition:	ROW Acquisition Costs included	-	\$ 711,905
	Overall Proje	ect Cost Total:	\$ 5,964,555
	\$ 3,787,223		
	\$ 3,787,223		

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 Pflugerville.

updated: 7/20/2020

Project Information:

Name:

Weiss Ln (5)

Limits:

2790' N Of E Pecan St to E Pecan S

Ultimate Class: MAA 6
Length (If): 2,829
Service Area(s): C

Roadway Construction Cost Projection								
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
110	Unclassified Street Excavation		13,689	су	\$	20.00	\$	274,000
210	0 8" Asphalt (Type C) 2,904 ton			\$	105.00	\$	305,000	
310	24" Base		5,029	су	\$	50.00	69	251,000
410	18" Lime Stabilization (with Lime @ 4	15#/sy)	8,171	sy	\$	11.00	69	90,000
510	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	1,509	gal	\$	6.00	\$	9,000
610	10' Concrete Sidewalk		28,286	sf	\$	7.50	\$	212,000
710	Machine Laid Curb & Gutter		5,657	lf	\$	18.00	69	102,000
810	Turn Lanes and Median Openings		2,071	sy	\$	75.00	69	155,000
		F	Paving Const	ruction (Cost	Subtotal:	\$	1,398,000
_								
Majo	Major Construction Component Allowances**:							
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	70,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs				2%	\$	28,000
	Roadway Drainage	Standard Internal System				30%	\$	419,000
	Illumination					10%	\$	140,000
	Special Drainage Structures	Bridge Crossing					\$	1,900,000
	Water	Minor Adjustments				2%	\$	28,000
	Sewer	Minor Adjustments				2%	\$	28,000
	Turf and Erosion Control					2%	\$	28,000
	Landscaping and Irrigation					4%	\$	56,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	2,697,000
			Paving an	d Allowa	nce	Subtotal:	\$	4,095,000
		Consti	ruction Conti	ngency:		15%	\$	614,000
			Mobi	lization:		8%	\$	328,000
			Pre	p ROW:		4%	\$	164,000
			Constru	ction C	ost	TOTAL:	\$	5,201,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,201,000
Engineering/Survey/Testing:		16%	\$ 832,000
Previous City contribution	2015 CO Bond		\$ 4,326,452
Other	Travis County Contribution		\$ (1,579,350
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:
Limits:
Project No.

Melber Ln (1)
Pleasanton Pkwy to 2455' N Of Cameron Rd
Impact Fee Class:

1/2 MIA 4D

Description:
Project No.

C-18

This project consists of the construction of one half of a new four lane divided minor arterial.

Ultimate Class: MIA 4D
Length (If): 1,681
Service Area(s): C

Roa	adway Construction Cost Pro	jection									
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost			
108	Unclassified Street Excavation		6,100	су	\$	20.00	\$	122,000			
208	6" Asphalt (Type C)		1,294	ton	\$	105.00	\$	136,000			
308	18" Base		2,241	су	\$	50.00	\$	112,000			
408	18" Lime Stabilization (with Lime @ 4		4,855	sy	\$	11.00	\$	53,000			
508	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	896 16,806	gal	\$	6.00	\$	5,000			
608				sf	\$	7.50	\$	126,000			
	Machine Laid Curb & Gutter		3,361 1,231	lf	\$ \$	18.00 64.00	\$	61,000			
808	Turn Lanes and Median Openings	\$	79,000								
		F	Paving Const	ruction (Cost	Subtotal:	\$	694,000			
Majo	Major Construction Component Allowances**: Item Description Notes Allowance							lt Ot			
	Item Description	Notes			All			Item Cost			
,	Traffic Control	None Anticipated				0%	\$ 6	-			
V	Pavement Markings/Signs/Posts	Includes Striping/Sign				2%		14,000			
V	Roadway Drainage	Standard Internal Sys	stem			30%		208,000			
V	Illumination					10%	\$	69,000			
٧,	Special Drainage Structures	Bridge Crossing					\$	1,200,000			
V	Water	Minor Adjustments				2%	\$	14,000			
V	Sewer	Minor Adjustments				2%	\$	14,000			
V	Turf and Erosion Control					2%	\$	14,000			
V	Landscaping and Irrigation					4%	\$	28,000			
	Miscellaneous:	<u> </u>				0%	\$	-			
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	ınce	Subtotal:	\$	1,561,000			
							Ļ				
		•	Paving an					2,255,000			
		Constr	uction Conti	-		15%	\$	338,000			
				lization:		8%	\$	180,000			
				p ROW:		4%	\$	90,000			
			Constru	ction C	ost	TOTAL:	\$	2,863,000			

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,863,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 282,792
Previous City contribution			
Other	From TIA Carmel Agreement		\$ (119,078
ROW/Easement Acquisition:	Not Included in Study	0%	\$ _

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:
Limits:

Melber Ln (2)

2455' N Of Cameron Rd to 440' N Of Cameron Rd
Impact Fee Class:

1/2 MIA 4D

Description:

Project No. C-19

This project consists of the construction of one half of a new four lane divided minor arterial.

Impact Fee Class: 1/2 MIA 4D
Ultimate Class: MIA 4D
Length (If): 2,015

Service Area(s): C,ETJ/OTHER

No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
108	Unclassified Street Excavation	7,314	су	\$	20.00	\$ 146,000
208	6" Asphalt (Type C)	1,552	ton	\$	105.00	\$ 163,000
308	18" Base	2,687	су	\$	50.00	\$ 134,000
408	18" Lime Stabilization (with Lime @ 45#/sy)	5,821	sy	\$	11.00	\$ 64,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,075	gal	\$	6.00	\$ 6,000
608	10' Concrete Sidewalk	20,150	sf	\$	7.50	\$ 151,000
708	Machine Laid Curb & Gutter	4,030	lf	\$	18.00	\$ 73,000
808	Turn Lanes and Median Openings	1,476	sy	\$	64.00	\$ 94,000
		Paving Consti	ruction (Cost	Subtotal:	\$ 831,000

Maio	or Construction Component Allowa	nces**:				
	Item Description	Notes	Allowance	П	Item Cost	
	Traffic Control	None Anticipated	0%	\$	-	
\checkmark	Pavement Markings/Signs/Posts	Includes Striping/Signs	2%	\$	17,000	
	Roadway Drainage	Standard Internal System	Standard Internal System 30%			
	Illumination		\$	83,000		
	Special Drainage Structures	None Anticipated	\$	-		
	Water	Minor Adjustments	\$	17,000		
	Sewer	Minor Adjustments	\$	17,000		
	Turf and Erosion Control		\$	17,000		
	Landscaping and Irrigation		4%	\$	33,000	
	Miscellaneous:		0%	\$	-	
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	433,000	
		Paving and Allowa	nce Subtotal:	\$	1,264,000	
		Construction Contingency:	15%	\$	190,000	
		Mobilization:			101,000	
		Prep ROW:			51,000	
		Construction C	ost TOTAL:	\$	1,606,000	

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,606,000
Engineering/Survey/Testing:	2019 CO Bond		\$ 338,861
Previous City contribution			
Other	From TIA Carmel Agreement		\$ (142,771
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

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 Pflugerville.

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information: C-20 Description: Project No. Name: E Pecan St (1) This project consists of the reconstruction of the Limits: Sh 130 to Weiss Ln existing pavement to a four lane divided major Impact Fee Class: MAA 4D arterial. **Ultimate Class:** MAA 6D Length (If): 3,135 Service Area(s): С

		way Construction Cost Projection									
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost			
111	Unclassified Street Excavation		30,345	су	\$	20.00	\$	607,000			
211	8" Asphalt (Type C)		6,438	ton	\$	105.00	\$	676,000			
311	24" Base		11,147	су	\$	50.00	\$	557,000			
411	24" Lime Stabilization (with Lime @ 4	15#/sy)	18,114	sy	\$	15.00	\$	272,000			
511	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	3,344	gal	\$	6.00	\$	20,000			
611	10' Concrete Sidewalk		62,703	sf	\$	7.50	\$	470,000			
711	Machine Laid Curb & Gutter		12,541	lf	\$	18.00	\$	226,000			
811	Turn Lanes and Median Openings		3,008	sy	\$	79.00	\$	238,000			
		F	Paving Const	ruction (Cost	Subtotal:	\$	3,066,000			
Majo	Major Construction Component Allowances**:										
	Item Description	cription Notes						Item Cost			
	Traffic Control	Construction Phase	Traffic Control			5%		153,000			
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns			2%	\$	61,000			
	Roadway Drainage	Standard Internal Sys	stem			30%	\$	920,000			
	Illumination					10%	\$	307,000			
	Special Drainage Structures	None Anticipated					\$	-			
	Water	Minor Adjustments				2%	\$	61,000			
	Sewer	Minor Adjustments				2%	\$	61,000			
	Turf and Erosion Control					2%	\$	61,000			
	Landscaping and Irrigation					4%	\$	123,000			
	Miscellaneous:					0%	\$	-			
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	1,747,000			
			Paving an	d Allowa	nce	Subtotal:	\$	4,813,000			
		Consti	ruction Conti	ngency:		15%	\$	722,000			
			Mobi	lization:		8%	\$	385,000			
			Pre	p ROW:		4%	\$	193,000			

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,113,000
Engineering/Survey/Testing:		16%	\$ 978,000
Previous City contribution	2015 CO Bond		\$ 1,616,951
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ _

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 Pflugerville.

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.

6,113,000

Construction Cost TOTAL: \$

Kimley-Horn and Associates, Inc. updated: 7/20/2020

Project Information:

Name:
Cameron Rd Realignment (1)
Limits:
Cameron Rd Realignment (1)
E Pecan St to 2305' N Of Sh 130
This project consists of the construction of one half of a new four lane divided minor arterial.

Impact Fee Class: 1/2 MIA 4D
Ultimate Class: MIA 4D
Length (If): 3,121
Service Area(s): C

Roa	dway Construction Cost Pro	jection						
No.	Item Description	_	Quantity	Unit	Un	it Price		Item Cost
108	Unclassified Street Excavation		11,329	су	\$	20.00	\$	227,000
208	6" Asphalt (Type C)		2,403	ton	\$	105.00	\$	252,000
308	18" Base		4,162	су	\$	50.00	\$	208,000
408	\			sy	\$	11.00	\$	99,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			gal	\$	6.00	\$	10,000
608	608 10' Concrete Sidewalk			sf	\$	7.50	\$	234,000
708	Machine Laid Curb & Gutter	6,243	lf	\$	18.00	\$	112,000	
808	808 Turn Lanes and Median Openings 2,286 sy \$ 64.00							
		F	Paving Const	ruction (Cost	Subtotal:	\$	1,288,000
Majo	or Construction Component Allowa							
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	None Anticipated				0%	\$	-
$\sqrt{}$	Traffic Control Pavement Markings/Signs/Posts	None Anticipated Includes Striping/Sig	ns			2%	\$ \$	26,000
$\sqrt{}$	Pavement Markings/Signs/Posts Roadway Drainage					2% 30%	\$ \$	386,000
,	Pavement Markings/Signs/Posts Roadway Drainage Illumination	Includes Striping/Sig				2%	\$	-,
,	Pavement Markings/Signs/Posts Roadway Drainage	Includes Striping/Sig				2% 30%	\$ \$	386,000
,	Pavement Markings/Signs/Posts Roadway Drainage Illumination	Includes Striping/Sig Standard Internal Sy				2% 30% 10% 2%	\$ \$ \$	386,000 129,000 - 26,000
1	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures	Includes Striping/Sig Standard Internal Sy None Anticipated				2% 30% 10% 2% 2%	\$ \$ \$ \$ \$	386,000 129,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments				2% 30% 10% 2% 2% 2%	\$ \$ \$ \$ \$	386,000 129,000 - 26,000
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments				2% 30% 10% 2% 2%	\$ \$ \$ \$ \$ \$ \$	386,000 129,000 - 26,000 26,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments Minor Adjustments				2% 30% 10% 2% 2% 2% 4% 0%	• • • • • • • • • •	386,000 129,000 - 26,000 26,000 26,000 52,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments Minor Adjustments		Allowa	ance :	2% 30% 10% 2% 2% 4%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	386,000 129,000 - 26,000 26,000 26,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments Minor Adjustments	stem			2% 30% 10% 2% 2% 4% 0% Subtotal:	• • • • • • • • • •	386,000 129,000 - 26,000 26,000 26,000 52,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments Minor Adjustments		d Allowa	nce	2% 30% 10% 2% 2% 4% 0% Subtotal:	• • • • • • • • • •	386,000 129,000 - 26,000 26,000 26,000 52,000

Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,488,000
Engineering/Survey/Testing:		16%	\$ 398,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Not Included in Study	0%	\$ -

Mobilization:

Prep ROW:

Construction Cost TOTAL:

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 Pflugerville.

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.

\$

8%

4%

157,000

78,000

2,488,000



Appendix B – Roadway Impact Fee CIP Service Units of Supply

CIP Service Units of Supply

Service Area A

7	28	/20	120

301 VIOC 741 C	,u , ,													
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		OTAL PROJECT OST IN SERVICE AREA
A-1	Sh 45 Frontage Roads (1)	City Limits to 1020' W Of Heatherwilde Blvd	0.53	3	FRONTAGE ROAD 3 LN	New	100%	840	1337	0	1,337	\$ 4,850,896	6 \$	4,850,896
A-2	Sh 45 Frontage Roads (2)	City Limits to 955' W Of Heatherwilde Blvd	0.45	3	FRONTAGE ROAD 3 LN	New	100%	840	1143	0	1143	\$ 4,149,104	1 \$	4,149,104.00
A-3	Rowe Ln Extension (1)	Heatherwilde Blvd to City Limits	1.20	4	MAA 4D	New	100%	840	4022	0	4022	\$ 13,800,000) \$	13,800,000
A-4	Rowe Ln Extension (2)	City Limits to Sh 130 Sbfr	0.03	4	MAA 4D	New	100%	840	99	0	99	\$ 1,100,000) \$	1,100,000
A-5	Kenny Fort Blvd (1)	City Limits to City Limits	0.20	4	MIA 4D	New	50%	760	299	0	299	\$ 1,800,000) \$	900,000
A-6	Kenny Fort Blvd (2)	City Limits to New Meister Ln	0.27	4	MIA 4D	New	100%	760	829	0	829	\$ 2,600,000) \$	2,600,000
A-7	Heatherwilde Widening (1)	450' S Of Sh 45 Ebfr to Wilke Ridge Ln	0.94	4	MIA 4D	1618	100%	760	2859	1,522	1,337	\$ 8,091,243	3 \$	8,091,243
A-8	Pfluger Farm Ln North (1)	Sh 45 Ebfr to Town Center Dr	0.66	2	MAC 3U	New	100%	660	866	0	866	\$ 4,000,000) \$	4,000,000
A-9	Schultz Ln (1)	City Limits to 300' N Of Springbrook Rd	0.45	4	MAC 4U	408	100%	660	1175	181	994	\$ 2,860,000) \$	2,860,000
A-10	Wilke Ridge Ln (1)	Heatherwilde Blvd to W Pflugerville Pkwy	0.44	2	MIC 2U	n/a	100%	480	425	0	425	\$ 2,100,000) \$	2,100,000
A-11	Pfluger Farm Ln Phase B (1)	1440' S Of Town Center Dr to 460' N Of E Pflugerville Pkwy	0.57	2	MAC 3U	125	100%	660	755	72	683	\$ 3,142,358	3 \$	3,142,358
A-12	Town Center Dr (1)	Limestone Commercial Dr to 160' N Of Terrell Ln	0.07	2	MAC 2D	960	100%	720	100	67	33	\$ 300,000) \$	300,000
A-13	Town Center Dr (2)	160' N Of Terrell Ln to Fm 685	0.10	2	MAC 2D	1125	100%	720	143	112	31	\$ 400,000) \$	400,000
A-14	Terrell Ln Extension (1)	865' S Of Town Center Dr to Pfluger Farm Ln	0.68	2	MIC 2U	New	100%	480	656	0	656	\$ 6,500,000) \$	6,500,000
A-15	Fm 685 (1)	Sh 130 Sbfr to E Pflugerville Pkwy	0.77	6	MAA 6D	2614	100%	840	3860	2,002	1,858	\$ 11,680,000	\$	11,680,000
SUBTOTAL									18,568	3,956	14,612	\$ 67,373,60	1 \$	66,473,601
Al-1	Heatherwilde Blvd At Cheyenne Valley Dr	Signal	-	-			100%					\$ 228,159	9 \$	228,159
Al-2	Heatherwilde Blvd At Rowe Ln (Future)	Signal	-	-			100%					\$ 353,000) \$	353,000
Al-3; Cl-2	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass & Turn Lane	-	-			50%					\$ 8,681,000	\$	4,340,500
Al-4	Heatherwilde Blvd At New Meister Ln	Signal	-	-			100%					\$ 254,474	1 \$	254,474
AI-5	E Of Heatherwilde At Sh 45 Wbfr	New Ramp	-	-			100%					\$ 4,000,000	\$	4,000,000
AI-6	E Of Heatherwilde At Sh 45 Ebfr	New Ramp	-	-			100%					\$ 4,000,000) \$	4,000,000
Al-7; Cl-4	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative & Turn Lane	-	-	Intersection		50%					\$ 3,101,000	\$	1,550,500
AI-8	Pfluger Farm Ln At Town Center Dr	Roundabout	-	-	Improvements		100%					\$ 1,500,000	\$	1,500,000
AI-9; BI-1	Pfluger Farm Ln At E Pflugerville Pkwy	Signal	-	-			50%					\$ 411,000) \$	205,500
AI-10; BI-2	Fm 685 At E Pflugerville Pkwy	Innovative	-	-			50%					\$ 1,600,000	\$	800,000
Al-11; Cl-7	Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative & Turn Lane	-				50%					\$ 2,116,250		1,058,125
Al-12	Sh 130 Sbfr At S Of Fm 685	Ramp Reversal	-	-			100%					\$ 4,000,000	\$	4,000,000
N-13; BI-3; CI-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane	-	-			25%					\$ 946,560		236,640
-	Update ITS and Traffic Management Infrastructure	-	-	-			33%					\$ 2,974,924	1 \$	991,641
SUBTOTAL				·			· ·					\$ 34,166,36	7 \$	23,518,539
									2020 Roa	adway Impac	t Fee Study C	ost Per Service Area	a \$	28,333

2020 Roadway Impact Fee Study Cost Per Service Area \$

TOTAL COST IN SERVICE AREA A \$ 90,020,473

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280].

^{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]

[&]quot;n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors without volumes from existing counts or model volumes.

CIP Service Units of Supply

Service Area B

SUBTOTAL

Service Are	ea B													7/28/2020
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	тот	FAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
B-1	Picadilly Dr (1)	City Limits to Central Commerce Dr	0.49	2	MAC 3U	423	50%	660	325	104	221	\$	3,300,000	
B-2	Central Commerce Dr (1)	Picadilly Dr to Royston Ln	0.39	2	MAC 3U	987	50%	660	257	192	65	\$	2,500,000	
B-3	Royston Ln (1)	Central Commerce Dr to Grand Avenue Pkwy	0.60	2	MAC 3U	2,456	100%	660	796	1481	-685	\$	3,700,000	
B-4	W Pfennig Ln (1)	Rocky Creek Dr to Limestone Commercial Dwy	0.55	2	MAC 3U	598	100%	660	726	329	397	\$	2,192,517	
B-5	Fm 685 (2)	E Pflugerville Pkwy to 1615' N Of E Pecan St	1.20	6	MAA 6D	2,534	100%	840	6066	3050	3016	\$	15,040,000	
B-6	Old Austin-Hutto Rd Extension (1)	E Pflugerville Pkwy to Old Austin-Hutto Rd	0.80	2	MAC 3U	New	100%	660	1058	0	1058	\$	8,300,000	
B-7	E Pfennig Ln (1)	505' E Of Fm 685 to 2355' N Of E Pecan St	1.03	4	MIA 4D	New	100%	760	3133	0	3133	\$	11,000,000	\$ 11,000,000
B-8	Main St (1)	N Railroad Ave to Old Austin-Hutto Rd	0.65	2	URBAN 2-LANE	New	100%	720	931	0	931	\$	6,400,000	
B-9	Fm 685 (3)	1615' N Of E Pecan St to E Pecan St	0.31	6	MAA 6D	2,458	100%	840	1540	751	789	\$	3,840,000	\$ 3,840,000
B-10	Old Austin-Hutto Rd (1)	Fm 685 to E Pecan St	0.82	2	MAC 3U	584	100%	660	1084	480	604	\$	3,989,000	
B-11	Immanuel Rd (1)	E Pecan St to E Wells Branch Pkwy	1.07	2	MAC 3U	776	100%	660	1413	830	583	\$	6,600,000	\$ 6,600,000
B-12	E Pfennig Ln (2)	City Limits to E Wells Branch Pkwy	0.48	2	MAC 3U	New	100%	660	631	0	631	\$	3,600,000	\$ 3,600,000
B-13	Biltmore Ave (1)	E Pecan St to Helios Way	0.30	2	MAC 3U	New	100%	660	400	0	400	\$	1,531,404	\$ 1,531,404
B-14	Helios Way West (1)	Biltmore Ave to Sun Light Near Way	0.13	2	MAC 3U	New	100%	660	172	0	172	\$	659,728	\$ 659,728
B-15	Sun Light Near Way Extension (1)	350' S Of E Pecan St to Helios Way	0.25	2	MAC 3U	New	100%	660	335	0	335	\$	1,283,771	
B-16	Impact Way Extension (1)	Helios Way to 80' W Of Cameron Rd	1.28	2	MAC 3U	New	100%	660	1688	0	1688	\$	6,460,000	\$ 6,460,000
SUBTOTAL									20,555	7,217	13,338	\$	80,396,420	
Al-12; Bl-1	Pfluger Farm Ln At E Pflugerville Pkwy	Signal	-	-			50%					\$	411,000	
Al-13; Bl-2	Fm 685 At E Pflugerville Pkwy	Innovative	-	-			50%					\$	1,600,000	
Al-16; Bl-3; Cl-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane	-	-			25%					\$	946,560	
BI-4	Central Commerce Dr At Picadilly Dr	Turn Lane	-	-			100%					\$	294,677	
BI-5	Grand Avenue Pkwy At W Black Locus Dr	Signal	-	-			100%					\$	228,159	
BI-6	Heatherwilde Blvd At W Black Locust Dr	Signal	-	-			100%					\$	190,941	\$ 190,941
BI-7	E Black Locust Dr At W Pfennig Ln	Roundabout	-	-			100%					\$	1,500,000	
BI-8	Old Austin-Hutto Rd At E Pfennig Ln	Roundabout	-	-			100%					\$	1,500,000	\$ 1,500,000
BI-9	Heatherwilde Blvd At W Pfennig Ln	Signal & Turn Lane	-	-	Intersection		100%					\$	190,941	\$ 190,941
BI-10	Old Austin-Hutto Rd Ext At Old Austin-Hutto Rd	Roundabout	-	-	Improvements		100%					\$	1,500,000	
BI-11	Edgemere Dr At Grand Avenue Pkwy	Turn Lane	-	-	improvements		100%					\$	294,677	
BI-12	Heatherwilde Blvd At W Pecan St	Innovative	-	-			100%					\$	2,017,370	
BI-13	Fm 685 At E Pecan St	Innovative & Turn Lane	-	-			100%					\$	1,145,000	
BI-14	E Pfennig Ln At E Pecan St	Signal	-	-			100%					\$	411,000	
BI-15	Biltmore Ave At E Pecan St	Signal & Turn Lane	-	-			100%					\$	520,000	
BI-16; CI-15	Sh 130 Ebfr/Wbfr At E Pecan St	Overpass	-	-			50%					\$	8,000,000	
BI-17	Immanuel Rd At E Wells Branch Pkwy	Signal	-	-			100%					\$	411,000	
BI-18	E Wells Branch Pkwy At E Pfennig Ln	Signal	-	-			100%					\$	353,000	
-	Update ITS and Traffic Management Infrastructure	-	-	-		1	33%	1				\$	2,974,924	\$ 991,641

2020 Roadway Impact Fee Study Cost Per Service Area \$

TOTAL COST IN SERVICE AREA B \$ 94,315,298

24,489,248 \$

16,790,545

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280].

^{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]

[&]quot;h/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors without volumes from existing counts or model volumes.

CIP Service Units of Supply

Service Area C

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	тот	AL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
C-1	Rowe Ln (1)	Sh 130 Nbfr to 950' W Of Commons Pkwy	0.56	4	MIA 4D	n/a	50%	760	852	0	852	\$	5,500,000	\$ 2,750,000
C-2	Kelly Ln (1)	545' E Of W Falcon Pointe Blvd to E Falcon Pointe Blvd	0.43	4	MIA 4D	2846	100%	760	1311	1227	84	\$	5,164,428	\$ 5,164,428
C-3	Kelly Ln (2)	E Falcon Pointe Blvd to Moorlynch Ave	0.17	4	MIA 4D	1585	50%	760	262	137	125	\$	2,066,572	
C-4	Kelly Ln (3)	Moorlynch Ave to 870' W Of Weiss Ln	0.87	4	MIA 4D	1585	50%	760	1319	687	632	\$	7,900,000	\$ 3,950,000
C-5	Cele Rd (1)	Weiss Ln to 2505' E Of Weiss Ln	0.47	4	MAA 4D	141	50%	840	797	33	764	\$	5,700,000	\$ 2,850,000
C-6	Cele Rd (2)	W Of New Sweden Church Rd to 200' E Of New Sweden Churc	0.17	4	MAA 4D	147	50%	840	284	12	272	\$	2,000,000	\$ 1,000,000
C-7	Cele Rd (3)	200' E Of New Sweden Church Rd to 1025' W Of Melber Ln	0.22	4	MAA 4D	147	100%	840	738	32	706	\$	2,600,000	\$ 2,600,000
C-8	Cele Rd (4)	1025' W Of Melber Ln to Melber Ln	0.19	4	MAA 4D	147	50%	840	326	14	312	\$	2,300,000	\$ 1,150,000
C-9	Colorado Sand Dr (1)	Copper Mine Dr to Colorado Sand Dr	0.53	2	URBAN 3-LANE	New	100%	720	768	0	768	\$	3,953,000	\$ 3,953,000
C-10	Weiss Ln (1)	Kelly Ln to 730' S Of Kelly Ln	0.14	4	MAA 4D	649	50%	840	232	45	187	\$	708,264	\$ 354,132
C-11	Weiss Ln (2)	730' S Of Kelly Ln to 645' N Of Hidden Lake Crossing	0.32	4	MAA 4D	649	100%	840	1059	205	854	\$	1,616,672	\$ 1,616,672
C-12	Hidden Lake Dr (1)	City Limits to E Pflugerville Pkwy	0.49	4	1/2 MIA 4D	New	100%	760	1475	0	1475	\$	3,200,000	\$ 3,200,000
C-13	Weiss Ln (3)	645' N Of Hidden Lake Crossing to E Pflugerville Pkwy	1.03	4	MAA 4D	1088	50%	840	1738	563	1175	\$	5,304,328	\$ 2,652,164
C-14	E Pflugerville Pkwy (1)	Colorado Sands Dr to Weiss Ln	1.67	4	MAA 4D	631	100%	840	5611	1054	4557	\$	23,100,000	\$ 23,100,000
C-15	E Pflugerville Pkwy Extension (1)	Weiss Ln to City Limits	0.39	4	MAA 4D	New	50%	840	651	0	651	\$	4,642,000	\$ 2,321,000
C-16	Weiss Ln (4)	E Pflugerville Pkwy to 2790' N Of E Pecan St	0.74	4	MAA 4D	1121	100%	840	2482	828	1654	\$	3,787,223	\$ 3,787,223
C-17	Weiss Ln (5)	2790' N Of E Pecan St to E Pecan St	0.54	4	1/2 MAA 4D	1062	50%	840	900	284	616	\$	8,800,000	\$ 4,400,000
C-18	Melber Ln (1)	Pleasanton Pkwy to 2455' N Of Cameron Rd	0.32	4	1/2 MIA 4D	New	100%	760	968	0	968	\$	3,000,000	\$ 3,000,000
C-19	Melber Ln (2)	2455' N Of Cameron Rd to 440' N Of Cameron Rd	0.38	4	1/2 MIA 4D	New	50%	760	580	0	580	\$	1,800,000	\$ 900,000
C-20	E Pecan St (1)	Sh 130 to Weiss Ln	0.59	4	MAA 4D	1439	100%	840	1995	854	1141	\$	8,700,000	\$ 8,700,000
C-21	Cameron Rd Realignment (1)	E Pecan St to 2305' N Of Sh 130	0.59	4	1/2 MIA 4D	n/a	100%	760	1797	0	1797	\$	2,900,000	\$ 2,900,000
SUBTOTAL									26,145	5,975	20,170	\$	104,742,487	\$ 81,381,905
CI-1	Sh 130 At Cr 138	Innovative	-	-			25%					\$	1,600,000	\$ 400,000
Al-3; Cl-2	Fm 685 Nbfr/Sbfr At Rowe Ln	Overpass & Turn Lane	-	-			50%					\$	8,681,000	\$ 4,340,500
CI-3	Speidel Dr At Rowe Ln	Signal	-	-			100%					\$	353,000	\$ 353,000
Al-7; Cl-4	Fm 685 Nbfr/Sbfr At Kelly Ln	Innovative & Turn Lane	-	-			50%					\$	3,408,850	\$ 1,704,425
CI-5	Jakes Hill Rd At Kelly Ln	Signal	-	-			50%					\$	411,000	\$ 205,500
CI-6	Hodde Ln At Cele Rd	Innovative	-	-			25%					\$	2,000,000	\$ 500,000
Al-11; Cl-7	Fm 685 Nbfr/Sbfr At Copper Mine Dr	Innovative & Turn Lane	-	-			50%					\$	2,116,250	\$ 1,058,125
CI-8	Copper Mine Dr At Colorado Sand Dr	Signal	-	-	Intersection		100%					\$	411,000	\$ 411,000
CI-9	Sh 130 Nbfr At S Of Fm 685	Ramp Reversal	-	-	Improvements		100%					\$	4,000,000	\$ 4,000,000
CI-10	Colorado Sand Dr At Lone Star Ranch Blvd	Roundabout	-	-			100%					\$	1,500,000	\$ 1,500,000
CI-11	Weiss Ln At Hidden Lake Crossing	Signal & Turn Lane	-	-			25%					\$	480,600	\$ 120,150
Al-13; Bl-3; Cl-12	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy	Turn Lane	-	-			50%					\$	946,560	\$ 473,280
CI-13	Hidden Lake Dr At E Pflugerville Pkwy	Signal	-	-			100%					\$	353,000	\$ 353,000
CI-14	Weiss Ln At Pleasanton Pkwy	Signal	-	-			100%					\$	411,000	\$ 411,000
BI-16; CI-15	Sh 130 Ebfr/Wbfr At E Pecan St	Overpass	-	-			50%					\$	8,000,000	\$ 4,000,000
-	Update ITS and Traffic Management Infrastructure	<u>:</u>	-	-			33%					\$	2,974,924	\$ 991,641
SUBTOTAL														

2020 Roadway Impact Fee Study Cost Per Service Area \$ 28,333 TOTAL COST IN SERVICE AREA C \$ 102,231,859

7/28/2020

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280].

^{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]

[&]quot;n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors without volumes from existing counts or model volumes.



Appendix C – Plan for Awarding the Roadway Impact Fee Credit Summaries

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Roadway Service Area A

Recoverable Impact Fee CIP Costs	\$ 59,998,244	Table 4
Financing Cost	25,323,662	See Detail Below
Interest Earnings	(7,899,008)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 77,422,898	Sum of Above
Credit for Ad Valorem Revenues	(11,131,498)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 66,291,400	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Table 4.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 41,095,924 Roadway Appendices - page 3
Existing Annual Debt Service	24,085,116 Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(39,857,378) Roadway Appendices - page 1
Financing Costs	\$ 25.323.662

Interest Earnings

Represents the interest earned on cash flows and assumes a 1.25% annual interest rate.

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 4 of Roadway Appendices.

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, LGC Chapter 395 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 7 of Roadway Appendices.

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

Roadway Service Area B

Recoverable Impact Fee CIP Costs	\$ 53,058,602	Table 4
Financing Cost	23,830,915	See Detail Below
Interest Earnings	(8,117,134)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 68,772,383	Sum of Above
Credit for Ad Valorem Revenues	(5,292,355)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 63,480,028	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Table 4.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 37,855,223	Roadway Appendices - page 3
Existing Annual Debt Service	21,077,409	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(35,101,717)	Roadway Appendices - page 1
Financing Costs	\$ 23.830.915	•

Interest Earnings

Represents the interest earned on cash flows and assumes a 1.25% annual interest rate.

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 4 of Roadway Appendices.

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, LGC Chapter 395 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 6 of Roadway Appendices.

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

Roadway Service Area C

Recoverable Impact Fee CIP Costs	\$ 71,327,557	Table 4
Financing Cost	29,855,459	See Detail Below
Interest Earnings	(9,113,427)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 92,069,589	Sum of Above
Credit for Ad Valorem Revenues	(8,467,189)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 83,602,400	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Table 4.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 37,783,165 Roadway Appendices - page 3
Existing Annual Debt Service	42,061,570 Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(49,989,275) Roadway Appendices - page 1
Financing Costs	\$ 29.855.459

Interest Earnings

Represents the interest earned on cash flows and assumes a 1.25% annual interest rate.

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 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Ad Valorem Revenues

In 2001, LGC Chapter 395 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 7 of Roadway Appendices.

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 D – Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits

Capital Improvement Plan for Impact Fees Impact Fee Calculation Assumptions Roadway Service Area A

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾
Annual Vehicle Mile Growth ⁽²⁾
Existing Fund Balance ⁽³⁾

1.25%
4,169
-

Portion of Projects Funded by Existing Debt ⁽⁴⁾ Non-debt Funded Project Cost ⁽⁵⁾ New Project Cost Funded Through New Debt ⁽⁶⁾ Total Recoverable Project Cost ⁽⁷⁾

\$ 15,433,734
20,140,866
24,423,644
\$ 59,998,244

II. New Debt Issues Assumptions

<u>Year</u>	Principal ⁽⁸⁾	Interest (9)	<u>Term</u>
1	\$ 2,442,364	3.75%	30
2	2,442,364	3.75%	30
3	2,442,364	3.75%	30
4	2,442,364	3.75%	30
5	2,442,364	3.75%	30
6	2,442,364	3.75%	30
7	2,442,364	3.75%	30
8	2,442,364	3.75%	30
9	2,442,364	3.75%	30
10	2,442,364	3.75%	30
Total	\$ 24.423.644		-

III. Capital Expenditure Assumptions

	Annual Capital
<u>Year</u>	Expenditures (10)
1	\$ 2,014,087
2	2,828,208
3	3,642,329
4	4,456,451
5	4,456,451
6	4,456,451
7	4,456,451
8	4,456,451
9	4,456,451
10	4,456,451
11	2,442,364
12	1,628,243
13	814,121
Total	44,564,509

- (1) Lone Star Corporate Overnight Investment Pool Average Interest Rate from January 2020 to June 2020
- (2) Derived from Appendix B
- (3) There is no existing fund balance because this is a new impact fee
- (4) Per discussions with City Staff and City files
- (5) This assumes 50% of new project costs funded through sources other than debt, unless specified otherwise
- (6) This assumes 50% of new project costs funded through new debt issues, unless specified otherwise
- (7) Table 4
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest on future debt from City Staff and recent Financial Advisor projections
- (10) Assumes new debt proceeds expended over a 3-year timeframe

Non-debt funded capital expenditures allocated per discussions with City Staff

Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Roadway Service Area A

I. New Debt Service Detail

<u>Year</u>		Series		Series		Series		Series		Series <u>5</u>		Series		Series		Series <u>8</u>		Series		Series <u>10</u>	N	Total Annual lew Debt Service
1	\$	136,986	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	136,986
2	Ψ	136,986	Ψ	136,986	Ψ	-	Ψ	_	Ψ.	_	•	_	Ψ.	_	۳	_	۳	_	Ψ	-	Ψ	273,973
3		136,986		136,986		136,986		_		_		_		_		_		_		-		410,959
4		136,986		136,986		136,986		136,986		_		_		_		_		_		-		547,946
5		136,986		136,986		136,986		136,986		136,986		_		_		_		_		-		684,932
6		136,986		136,986		136,986		136,986		136,986		136,986		-		-		_		-		821,918
7		136,986		136,986		136,986		136,986		136,986		136,986		136,986		-		_		-		958,905
8		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		_		-		1,095,891
9		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		-		1,232,878
10		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
11		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
12		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
13		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
14		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
15		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
16		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
17		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
18		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
19		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
20		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
21		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
22		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
23		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
24		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
25		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
26		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
27		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
28		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
29		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
30		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,369,864
31		-		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,232,878
32		-		-		136,986		136,986		136,986		136,986		136,986		136,986		136,986		136,986		1,095,891
33		-		-		-		136,986		136,986		136,986		136,986		136,986		136,986		136,986		958,905
34		-		-		-		-		136,986		136,986		136,986		136,986		136,986		136,986		821,918
35		-		-		-		-		-		136,986		136,986		136,986		136,986		136,986		684,932
36		-		-		-		-		-		-		136,986		136,986		136,986		136,986		547,946
37		-		-		-		-		-		-		-		136,986		136,986		136,986		410,959
38		-		-		-		-		-		-		-		-		136,986		136,986		273,973
39		-		-		-		-		-		-		-		-		-		136,986		136,986
	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$	4,109,592	\$ 4	11,095,924

Capital Improvement Plan for Impact Fees Debt Service and Expense Summary Roadway Service Area A

II. Summary of Annual Expenses

<u>Year</u>	New Annual Debt <u>Service⁽¹⁾</u>	Annual Capital <u>Expenditures⁽²</u>	Annual Bond <u>Proceeds⁽²⁾</u>	Existing Annual Debt Service ⁽³⁾	Annual <u>Credit⁽⁴⁾</u>	Total <u>Expense</u>		
1	\$ 136,986	\$ 2,014,087	\$ (2,442,364)	\$ 615,093	\$ (21,636)	\$ 302,166		
2	273,973	2,828,208	(2,442,364)	962,818	(67,001)	1,555,634		
3	410,959	3,642,329	(2,442,364)	971,397	(106,127)	2,476,194		
4	547,946	4,456,451	(2,442,364)	967,138	(146,975)	3,382,195		
5	684,932	4,456,451	(2,442,364)	834,398	(175,073)	3,358,343		
6	821,918	4,456,451	(2,442,364)	922,276	(229,758)	3,528,524		
7	958,905	4,456,451	(2,442,364)	880,450	(269,891)	3,583,550		
8	1,095,891	4,456,451	(2,442,364)	876,191	(316,396)	3,669,773		
9	1,232,878	4,456,451	(2,442,364)	873,952	(364,495)	3,756,421		
10	1,369,864	4,456,451	(2,442,364)	882,493	(415,728)	3,850,716		
11	1,369,864	2,442,364	-	867,063	(412,880)	4,266,412		
12	1,369,864	1,628,243	-	861,480	(411,849)	3,447,738		
13	1,369,864	814,121	-	854,584	(410,576)	2,627,993		
14	1,369,864	-	-	1,079,788	(452,143)	1,997,509		
15	1,369,864	-	-	988,574	(435,308)	1,923,130		
16	1,369,864	-	-	1,596,436	(547,503)	2,418,797		
17	1,369,864	-	-	706,473	(383,239)	1,693,098		
18	1,369,864	-	-	707,626	(383,452)	1,694,038		
19	1,369,864	-	-	706,768	(383,293)	1,693,339		
20	1,369,864	-	-	706,490	(383,242)	1,693,112		
21 22	1,369,864 1,369,864	-	-	706,786 707,031	(383,297) (383,342)	1,693,354 1,693,553		
23	1,369,864	-	-		(383,181)			
24	1,369,864	-	-	706,157 706,770	(383,294)	1,692,841 1,693,341		
25	1,369,864			706,776	(383,252)	1,693,158		
26	1,369,864	-	_	705,754	(383,106)	1,692,512		
27	1,369,864	_	_	475,785	(340,660)	1,504,989		
28	1,369,864	_	_	390,148	(324,853)	1,435,158		
29	1,369,864	_	_	389,590	(324,750)	1,434,704		
30	1,369,864	_	_	390,058	(324,837)	1,435,085		
31	1,232,878	-	-	339,002	(290,129)	1,281,751		
32	1,095,891	-	-	-	(202,274)	893,618		
33	958,905	-	-	-	(176,989)	781,915		
34	821,918	-	-	-	(151,705)	670,213		
35	684,932	-	-	-	(126,421)	558,511		
36	547,946	-	-	-	(101,137)	446,809		
37	410,959	-	-	-	(75,853)	335,107		
38	273,973	-	-	-	(50,568)	223,404		
39	136,986		-	-	(25,284)	111,702		
	\$ 41,095,924	\$ 44,564,509	\$(24,423,644)	\$ 24,085,116	\$(11,131,498)	\$ 74,190,407		

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⁽¹⁾ Roadway Appendices - page 2 Section I

⁽²⁾ Roadway Appendices - page 1

⁽³⁾ Eligible outstanding debt funded projects as a percent of total principal times original annual debt service

⁽⁴⁾ Roadway Appendices - page 7

Capital Improvement Plan for Impact Fees Revenue Test Roadway Service Area A

<u>Year</u>	Impact <u>Fee</u>	Vehicle <u>Miles</u>	Impact Fee <u>Revenue</u>	Annual <u>Expenses</u>	Sub-Total	Accumulated Interest	Estimated Fund <u>Balance</u>
Initial							\$ -
1	\$ 1,590	4,169	\$ 6,629,140	\$ 302,166	\$ 6,326,974	\$ 39,544	6,366,517
2	1,590	4,169	6,629,140	1,555,634	5,073,506	111,291	11,551,314
3	1,590	4,169	6,629,140	2,476,194	4,152,946	170,347	15,874,608
4	1,590	4,169	6,629,140	3,382,195	3,246,945	218,726	19,340,279
5	1,590	4,169	6,629,140	3,358,343	3,270,797	262,196	22,873,272
6	1,590	4,169	6,629,140	3,528,524	3,100,616	305,295	26,279,183
7	1,590	4,169	6,629,140	3,583,550	3,045,590	347,525	29,672,297
8	1,590	4,169	6,629,140	3,669,773	2,959,367	389,400	33,021,064
9	1,590	4,169	6,629,140	3,756,421	2,872,719	430,718	36,324,501
10	1,590	4,169	6,629,140	3,850,716	2,778,424	471,421	39,574,346
11	-	-	-	4,266,412	(4,266,412)	468,014	35,775,948
12	-	-	-	3,447,738	(3,447,738)	425,651	32,753,861
13	-	-	-	2,627,993	(2,627,993)	392,998	30,518,866
14	-	-	-	1,997,509	(1,997,509)	369,001	28,890,359
15	-	-	-	1,923,130	(1,923,130)	349,110	27,316,338
16	-	-	-	2,418,797	(2,418,797)	326,337	25,223,879
17	-	-	-	1,693,098	(1,693,098)	304,717	23,835,497
18	-	-	-	1,694,038	(1,694,038)	287,356	22,428,815
19	-	-	-	1,693,339	(1,693,339)	269,777	21,005,253
20	-	-	-	1,693,112	(1,693,112)	251,984	19,564,124
21	-	-	-	1,693,354	(1,693,354)	233,968	18,104,738
22	-	-	-	1,693,553	(1,693,553)	215,725	16,626,910
23	-	-	-	1,692,841	(1,692,841)	197,256	15,131,325
24	-	-	-	1,693,341	(1,693,341)	178,558	13,616,543
25	-	-	-	1,693,158	(1,693,158)	159,625	12,083,010
26	-	-	-	1,692,512	(1,692,512)	140,459	10,530,957
27	-	-	-	1,504,989	(1,504,989)	122,231	9,148,198
28	-	-	-	1,435,158	(1,435,158)	105,383	7,818,423
29	-	-	-	1,434,704	(1,434,704)	88,763	6,472,482
30	-	-	-	1,435,085	(1,435,085)	71,937	5,109,334
31	-	-	-	1,281,751	(1,281,751)	55,856	3,883,438
32	-	-	-	893,618	(893,618)	42,958	3,032,779
33 34	-	-	-	781,915	(781,915)	33,023	2,283,886
34 35	-	-	-	670,213 558,511	(670,213)	24,360 16,985	1,638,032
36	-	-	-	446,809	(558,511) (446,809)	10,914	1,096,506
36 37	-	-	-	335,107	(335,107)	6,163	660,611 331,668
3 <i>1</i> 38	-	-	- -	223,404	(223,404)	2,750	111,013
39	-	-	-	111,702	(111,702)	690	-
33	-	-	\$ 66,291,399	\$ 74,190,407	(111,702)	\$ 7,899,008	-
			Ψ 00,201,000	Ψ 17,100,401		Ψ 1,000,000	

City of Pflugerville - 2020 Roadway Impact Fee Study Capital Improvement Plan for Impact Fees

Capital Improvement Plan for Impact Fees Impact Fee Calculation Roadway Service Area A

	Number of	Interest	Recovery						
	Years to	Rate	Fee	Annual Vel	hicle Miles		Annual	Ехр	ense
'ear	End of Period	<u>Factor</u>	<u>Factor</u>	<u>Actual</u>	Escalated		<u>Actual</u>		Escalated
1	39	1.6133	1.0000	4,169	6,726	\$	302,166	\$	487,48
2	38	1.5934	1.0000	4,169	6,643	Ψ	1,555,634	Ψ	2,478,73
3	37	1.5737	1.0000	4,169	6,561		2,476,194		3,896,83
4	36	1.5543	1.0000	4,169	6,480		3,382,195		5,256,91
5	35	1.5351	1.0000	4,169	6,400		3,358,343		5,256,91
6	34	1.5161	1.0000	4,169	6,321		3,528,524		5,135,39
7	33	1.4974	1.0000	4,169	6,243		3,583,550		5,366,12
8	32	1.4789	1.0000	4,169	6,166		3,669,773		5,427,39
9	32 31	1.4607	1.0000	4,169	6,090				
10	30	1.4427		4,169	6,014		3,756,421		5,486,95
11	29	1.4248	1.0000 1.0000	4,109	-		3,850,716		5,555,24
12	28	1.4246	1.0000	-			4,266,412 3,447,738		6,078,96
13	26 27	1.3899	1.0000	-	-				4,851,83
14	26	1.3727		-	-		2,627,993		3,652,59
15	26 25		1.0000	-			1,997,509		2,742,01
	25 24	1.3558	1.0000				1,923,130		2,607,32
16 17	24	1.3390	1.0000		-		2,418,797		3,238,85
	23 22	1.3225	1.0000	-	-		1,693,098		2,239,12
18		1.3062	1.0000		-		1,694,038		2,212,71
19	21	1.2900	1.0000	-	-		1,693,339		2,184,49
20	20	1.2741	1.0000				1,693,112		2,157,23
21	19	1.2584	1.0000	-	-		1,693,354		2,130,90
22	18	1.2429	1.0000	-	-		1,693,553		2,104,84
23	17	1.2275	1.0000	-	-		1,692,841		2,077,98
24	16	1.2124	1.0000	-	-		1,693,341		2,052,93
25	15	1.1974	1.0000	-	-		1,693,158		2,027,37
26	14	1.1826	1.0000	-	-		1,692,512		2,001,58
27	13	1.1680	1.0000	-	-		1,504,989		1,757,84
28	12	1.1536	1.0000	-	-		1,435,158		1,655,58
29	11	1.1393	1.0000	-	-		1,434,704		1,634,62
30	10	1.1253	1.0000	-	-		1,435,085		1,614,87
31	9	1.1114	1.0000	-	-		1,281,751		1,424,52
32	8	1.0977	1.0000	-	-		893,618		980,89
33	7	1.0841	1.0000	-	-		781,915		847,68
34	6	1.0707	1.0000	-	-		670,213		717,61
35	5	1.0575	1.0000	-	-		558,511		590,63
36	4	1.0445	1.0000	-	-		446,809		466,67
37	3	1.0316	1.0000	-	-		335,107		345,68
38	2	1.0188	1.0000	-	-		223,404		227,61
39	1	1.0063	1.0000	-	-		111,702		112,40
					63,642				101,198,26

Impact Fee for Roadway Service Area A	\$ 1,590
Total Escalated Vehicle Miles	 63,642
Total Escalated Expense for Entire Period Less Future Value of Initial Impact Fee Fund Balance Sub-Total	 101,198,265 - 101,198,265
Present Value of Initial Impact Fee Fund Balance	\$ -
Annual Interest Rate:	1.25%

Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Roadway Service Area A

				Cost In		Impact Fee	Debt Funded ⁽²⁾				Non-Debt	
<u>Class</u>	Impact Fee Project Name ⁽¹⁾		Project Cost	Service Area A (1)	R	lecoverable Cost ⁽¹⁾	Existing		Proposed		Funded ⁽²⁾	
E ROAD 3	Sh 45 Frontage Roads (1)	\$	4,850,896	\$ 4,850,896	\$	3,810,656	\$ 2,154,797	\$	1,655,859	\$	-	
E ROAD 3	Sh 45 Frontage Roads (2)		4,149,104	4,149,104		3,259,358	1,843,056		1,416,302		-	
MAA 4D	Rowe Ln Extension (1)		13,800,000	13,800,000		10,840,688	-		5,420,344		5,420,344	
MAA 4D	Rowe Ln Extension (2)		1,100,000	1,100,000		864,113	-		432,056		432,056	
MIA 4D	Kenny Fort Blvd (1)		1,800,000	900,000		707,001	-		353,501		353,501	
MIA 4D	Kenny Fort Blvd (2)		2,600,000	2,600,000		2,042,448	-		1,021,224		1,021,224	
MIA 4D	Heatherwilde Widening (1)		8,091,243	8,091,243		6,356,133	6,123,005		-		233,128	
MAC 3U	Pfluger Farm Ln North (1)		4,000,000	4,000,000		3,142,228	1,922,400		1,219,829		-	
MAC 4U	Schultz Ln (1)		2,860,000	2,860,000		2,246,693	-		1,123,347		1,123,347	
MIC 2U	Wilke Ridge Ln (1)		2,100,000	2,100,000		1,649,670	-		824,835		824,835	
MAC 3U	Pfluger Farm Ln Phase B (1)		3,142,358	3,142,358		2,468,502	1,862,055		-		606,447	
MAC 2D	Town Center Dr (1)		300,000	300,000		235,667	-		117,834		117,834	
MAC 2D	Town Center Dr (2)		400,000	400,000		314,223	-		157,111		157,111	
MIC 2U	Terrell Ln Extension (1)		6,500,000	6,500,000		5,106,121	-		2,553,061		2,553,061	
MAA 6D	Fm 685 (1)		11,680,000	11,680,000		9,175,307	713,762		4,534,898		3,926,646	
	Heatherwilde Blvd At Cheyenne Valley Dr		228,159	228,159		75,195	75,195		-		-	
	Heatherwilde Blvd At Rowe Ln (Future)		353,000	353,000		116,340	-		58,170		58,170	
	Fm 685 Nbfr/Sbfr At Rowe Ln		8,681,000	4,340,500		1,430,516	46,305		692,106		692,106	
	Heatherwilde Blvd At New Meister Ln		254,474	254,474		83,868	83,868		-		-	
	E Of Heatherwilde At Sh 45 Wbfr		4,000,000	4,000,000		1,318,296	-		659,148		659,148	
	E Of Heatherwilde At Sh 45 Ebfr		4,000,000	4,000,000		1,318,296	-		659,148		659,148	
	Fm 685 Nbfr/Sbfr At Kelly Ln		3,101,000	1,550,500		511,005	247,345		131,830		131,830	
	Pfluger Farm Ln At Town Center Dr		1,500,000	1,500,000		494,361	-		247,181		247,181	
	Pfluger Farm Ln At E Pflugerville Pkwy		411,000	205,500		67,727	-		33,864		33,864	
	Fm 685 At E Pflugerville Pkwy		1,600,000	800,000		263,659	142,351		121,308		-	
	Fm 685 Nbfr/Sbfr At Copper Mine Dr		2,116,250	1,058,125		348,731	219,594		129,136		-	
	Sh 130 Sbfr At S Of Fm 685		4,000,000	4,000,000		1,318,296	-		659,148		659,148	
	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy		946,560	236,640		77,990	-		38,995		38,995	
	Update ITS and Traffic Management Infrastructure		2,974,924	991,641		326,819	-		163,410		163,410	
	Impact Fee Study	\$	28,333	28,333		28,333	-		-		28,333	
	Total		101,568,301	\$ 90,020,474	\$	59,998,244	\$ 15,433,734	\$	24,423,644	\$	20,140,866	

⁽¹⁾ Table 4

⁽²⁾ Per discussions with City staff and City files

Capital Improvement Plan for Impact Fees Credit Determination Roadway Service Area A

<u>Year</u>	Eligible Debt <u>Service⁽¹⁾</u>	Annual Vehicle <u>Miles</u>	Eligible Debt Service per <u>Vehicle Mile</u>	Annual Growth in Vehicle Miles (Cumulative)	Credit for Annual Roadway <u>Rate Revenues</u>
1	\$ 752,079	144,920	\$ 5.19	4,169	\$ 21,636
2	1,236,791	153,914	8.04	8,338	67,001
3	1,382,356	162,909	8.49	12,507	106,127
4	1,515,083	171,903	8.81	16,676	146,975
5	1,519,330	180,898	8.40	20,845	175,073
6	1,744,195	189,892	9.19	25,014	229,758
7	1,839,355	198,887	9.25	29,183	269,891
8	1,972,082	207,881	9.49	33,352	316,396
9	2,106,830	216,876	9.71	37,521	364,495
10	2,252,357	225,870	9.97	41,690	415,728
11	2,236,928	225,870	9.90	41,690	412,880
12	2,231,344	225,870	9.88	41,690	411,849
13	2,224,448	225,870	9.85	41,690	410,576
14	2,449,652	225,870	10.85	41,690	452,143
15	2,358,438	225,870	10.44	41,690	435,308
16	2,966,300	225,870	13.13	41,690	547,503
17	2,076,337	225,870	9.19	41,690	383,239
18	2,077,490	225,870	9.20	41,690	383,452
19	2,076,633	225,870	9.19	41,690	383,293
20	2,076,354	225,870	9.19	41,690	383,242
21	2,076,651	225,870	9.19	41,690	383,297
22	2,076,895	225,870	9.20	41,690	383,342
23	2,076,022	225,870	9.19	41,690	383,181
24	2,076,634	225,870	9.19	41,690	383,294
25	2,076,410	225,870	9.19	41,690	383,252
26	2,075,618	225,870	9.19	41,690	383,106
27	1,845,649	225,870	8.17	41,690	340,660
28	1,760,012	225,870	7.79	41,690	324,853
29	1,759,454	225,870	7.79	41,690	324,750
30	1,759,922	225,870	7.79	41,690	324,837
31	1,571,880	225,870	6.96	41,690	290,129
32	1,095,891	225,870	4.85	41,690	202,274
33	958,905	225,870	4.25	41,690	176,989
34	821,918	225,870	3.64	41,690	151,705
35	684,932	225,870	3.03	41,690	126,421
36	547,946	225,870	2.43	41,690	101,137
37	410,959	225,870	1.82	41,690	75,853
38	273,973	225,870	1.21	41,690	50,568
39	136,986	_ 225,870	0.61	41,690	25,284
Total	\$ 65,181,040				\$ 11,131,498
	2020 Vehicle Miles ⁽²⁾		135,925		
	Ten Year Growth in Vehicle Mi	iles ⁽³⁾	41.690		

⁽¹⁾ Roadway Appendices - page 3 Section II

⁽²⁾ Derived from Kimley-Horn Impact Fee Study

⁽³⁾ Derived from Appendix B

Capital Improvement Plan for Impact Fees Impact Fee Calculation Assumptions Roadway Service Area B

I. General Assumptions

Annual Interest Rate on Deposits (1) 1.25%

Annual Vehicle Mile Growth (2) 2,177

Existing Fund Balance (3) -

Portion of Projects Funded by Existing Debt (4)

Non-debt Funded Project Cost (5)

New Project Cost Funded Through New Debt (6)

Total Recoverable Project Cost (7)

\$

\$ 53,058,602

12,604,049

17,956,885

22,497,668

II. New Debt Issues Assumptions

<u>Year</u>	Principal ⁽⁸⁾	Interest (9)	<u>Term</u>
1	\$ 2,249,767	3.75%	30
2	2,249,767	3.75%	30
3	2,249,767	3.75%	30
4	2,249,767	3.75%	30
5	2,249,767	3.75%	30
6	2,249,767	3.75%	30
7	2,249,767	3.75%	30
8	2,249,767	3.75%	30
9	2,249,767	3.75%	30
10	2,249,767	3.75%	30

Total \$ 22,497,668

III. Capital Expenditure Assumptions

	Annual Capital
<u>Year</u>	Expenditures (10)
1	\$ 1,795,689
2	2,545,611
3	3,295,533
4	4,045,455
5	4,045,455
6	4,045,455
7	4,045,455
8	4,045,455
9	4,045,455
10	4,045,455
11	2,249,767
12	1,499,845
13	749,922
Total	40,454,553

- (1) Lone Star Corporate Overnight Investment Pool Average Interest Rate from January 2020 to June 2020
- (2) Derived from Appendix B
- (3) There is no existing fund balance because this is a new impact fee
- (4) Per discussions with City Staff and City files
- (5) This assumes 50% of new project costs funded through sources other than debt, unless specified otherwise
- (6) This assumes 50% of new project costs funded through new debt issues, unless specified otherwise
- (7) Table 4
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest on future debt from City Staff and recent Financial Advisor projections
- (10) Assumes new debt proceeds expended over a 3-year timeframe Non-debt funded capital expenditures allocated per discussions with City Staff

Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Roadway Service Area B

I. New Debt Service Detail

Year	Series <u>1</u>	Series	Series <u>3</u>	Series	Series <u>5</u>	Series	Series <u>7</u>	Series <u>8</u>	Series <u>9</u>	Series <u>10</u>	Total Annual New Debt <u>Service</u>
1 9	\$ 126,184	- 9	- 9	5 - \$	- \$	- \$	-	\$ -	\$ -	\$ -	\$ 126,184
2	126,184	126,184	-	- '	-	- '	-	-	-	-	252,368
3	126,184	126,184	126,184	-	-	-	-	-	-	-	378,552
4	126,184	126,184	126,184	126,184	-	-	-	-	-	-	504,736
5	126,184	126,184	126,184	126,184	126,184	-	-	-	-	-	630,920
6	126,184	126,184	126,184	126,184	126,184	126,184	-	-	-	-	757,104
7	126,184	126,184	126,184	126,184	126,184	126,184	126,184	-	-	-	883,289
8	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	-	-	1,009,473
9	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	-	1,135,657
10	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
11	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
12	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
13	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
14	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
15	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
16	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
17	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
18	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
19	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
20	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
21	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
22	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
23	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
24	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
25	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
26	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
27	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
28	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
29	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
30	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,261,841
31	-	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,135,657
32	-	-	126,184	126,184	126,184	126,184	126,184	126,184	126,184	126,184	1,009,473
33	-	-	-	126,184	126,184	126,184	126,184	126,184	126,184	126,184	883,289
34	-	-	-	-	126,184	126,184	126,184	126,184	126,184	126,184	757,104
35	-	-	-	-	-	126,184	126,184	126,184	126,184	126,184	630,920
36	-	-	-	-	-	-	126,184	126,184	126,184	126,184	504,736
37	-	-	-	-	-	-	-	126,184	126,184	126,184	378,552
38	-	-	-	-	-	-	-	-	126,184	126,184	252,368
39	-	-	-	-	-	-	-	-	-	126,184	126,184
\$	3,785,522	3,785,522	3,785,522	3,785,522 \$	3,785,522 \$	3,785,522 \$	3,785,522	\$ 3,785,522	\$ 3,785,522	\$ 3,785,522	\$ 37,855,223

Capital Improvement Plan for Impact Fees Debt Service and Expense Summary Roadway Service Area B

II. Summary of Annual Expenses

<u>Year</u>	New Annual Debt <u>Service⁽¹⁾</u>	Annual Capital Expenditures ⁽²⁾	Annual Bond <u>Proceeds⁽²⁾</u>	Existing Annual Debt Service ⁽³⁾	Annual <u>Credit⁽⁴⁾</u>	Total <u>Expense</u>		
1	\$ 126,184	\$ 1,795,689	\$ (2,249,767)	\$ 437,139	\$ (8,462)	\$ 100,783		
2	252,368	2,545,611	(2,249,767)	729,885	(27,785)	1,250,312		
3	378,552	3,295,533	(2,249,767)	728,699	(44,387)	2,108,631		
4	504,736	4,045,455	(2,249,767)	727,595	(62,422)	2,965,598		
5	630,920	4,045,455	(2,249,767)	715,870	(81,035)	3,061,444		
6	757,104	4,045,455	(2,249,767)	733,125	(102,502)	3,183,417		
7	883,289	4,045,455	(2,249,767)	759,525	(125,868)	3,312,634		
8	1,009,473	4,045,455	(2,249,767)	756,493	(147,942)	3,413,713		
9	1,135,657		(2,249,767)	754,991	(170,795)	3,515,541		
10	1,261,841	4,045,455	(2,249,767)	752,539	(194,140)	3,615,927		
11	1,261,841	2,249,767	-	750,592	(193,953)	4,068,246		
12	1,261,841	1,499,845	-	747,766	(193,680)	3,315,771		
13	1,261,841	749,922	-	746,651	(193,573)	2,564,841		
14	1,261,841	-	-	754,870	(194,365)	1,822,345		
15	1,261,841	-	-	745,602	(193,472)	1,813,971		
16	1,261,841	-	-	767,423	(195,575)	1,833,689		
17	1,261,841	-	-	716,537	(190,671)	1,787,707		
18	1,261,841	-	-	715,874	(190,607)	1,787,108		
19	1,261,841	-	-	713,842	(190,411)	1,785,272		
20	1,261,841	-	-	711,898	(190,224)	1,783,515		
21	1,261,841	-	-	710,425	(190,082)	1,782,184		
22	1,261,841	-	-	709,659	(190,008)	1,781,492		
23	1,261,841	-	-	707,206	(189,771)	1,779,275		
24	1,261,841	-	-	706,248	(189,679)	1,778,409		
25	1,261,841	-	-	704,579	(189,518)	1,776,902		
26	1,261,841	-	-	703,395	(189,404)	1,775,832		
27 28	1,261,841	-	-	549,410	(174,563)	1,636,687		
20 29	1,261,841	-	-	533,908	(173,069)	1,622,679		
30	1,261,841 1,261,841	-	-	492,416 492,522	(169,071) (169,081)	1,585,186 1,585,282		
31	1,135,657	-	-	300,725	(138,435)	1,297,947		
32	1,009,473			300,723	(97,290)	912,182		
33	883,289			_	(85,129)	798,160		
34	757,104				(72,968)	684,137		
35	630,920	_	_	_	(60,806)	570,114		
36	504,736	_	_	_	(48,645)	456,091		
37	378,552	-	_	_	(36,484)	342,068		
38	252,368	-	_	_	(24,323)	228,046		
39	126,184	_	_	_	(12,161)	114,023		
	\$ 37,855,223	\$ 40,454,553	\$ (22,497,668)	\$ 21,077,409	\$ (5,292,355)	\$ 71,597,162		

⁽¹⁾ Roadway Appendices - page 2 Section I

⁽²⁾ Roadway Appendices - page 1

⁽³⁾ Eligible outstanding debt funded projects as a percent of total principal times original annual debt service

⁽⁴⁾ Roadway Appendices - page 7

Capital Improvement Plan for Impact Fees Revenue Test Roadway Service Area B

<u>Year</u>	Impact <u>Fee</u>		Vehicle <u>Miles</u>	Impact Fee <u>Revenue</u>		Annual Expenses		Sub-Total		Accumulated Interest		I	Estimated Fund <u>Balance</u>
Initial												\$	-
1	\$ 2	,916	2,177	\$	6,348,003	\$	100,783	\$	6,247,220	\$	39,045		6,286,265
2	2	,916	2,177		6,348,003		1,250,312		5,097,690		110,439		11,494,395
3	2	,916	2,177		6,348,003		2,108,631		4,239,372		170,176		15,903,943
4	2	,916	2,177		6,348,003		2,965,598		3,382,405		219,939		19,506,287
5	2	,916	2,177		6,348,003		3,061,444		3,286,559		264,370		23,057,215
6	2	,916	2,177		6,348,003		3,183,417		3,164,586		307,994		26,529,795
7	2	,916	2,177		6,348,003		3,312,634		3,035,369		350,593		29,915,757
8	2	,916	2,177		6,348,003		3,413,713		2,934,290		392,286		33,242,334
9	2	,916	2,177		6,348,003		3,515,541		2,832,462		433,232		36,508,027
10	2	,916	2,177		6,348,003		3,615,927		2,732,075		473,426		39,713,528
11		-	-		-		4,068,246		(4,068,246)		470,993		36,116,275
12		-	-		-		3,315,771		(3,315,771)		430,730		33,231,234
13		-	-		-		2,564,841		(2,564,841)		399,360		31,065,753
14		-	-		-		1,822,345		(1,822,345)		376,932		29,620,340
15		-	-		-		1,813,971		(1,813,971)		358,917		28,165,285
16		-	-		-		1,833,689		(1,833,689)		340,606		26,672,202
17		-	-		-		1,787,707		(1,787,707)		322,229		25,206,724
18		-	-		-		1,787,108		(1,787,108)		303,915		23,723,531
19		-	-		-		1,785,272		(1,785,272)		285,386		22,223,646
20		-	-		-		1,783,515		(1,783,515)		266,649		20,706,779
21		-	-		-		1,782,184		(1,782,184)		247,696		19,172,291
22		-	-		-		1,781,492		(1,781,492)		228,519		17,619,319
23		-	-		-		1,779,275		(1,779,275)		209,121		16,049,164
24		-	-		-		1,778,409		(1,778,409)		189,499		14,460,254
25		-	-		-		1,776,902		(1,776,902)		169,648		12,853,000
26		-	-		-		1,775,832		(1,775,832)		149,564		11,226,732
27		-	-		-		1,636,687		(1,636,687)		130,105		9,720,150
28		-	-		-		1,622,679		(1,622,679)		111,360		8,208,831
29		-	-		-		1,585,186		(1,585,186)		92,703		6,716,347
30		-	-		-		1,585,282		(1,585,282)		74,046		5,205,111
31		-	-		-		1,297,947		(1,297,947)		56,952		3,964,116
32		-	-		-		912,182		(912,182)		43,850		3,095,784
33		-	-		-		798,160		(798,160)		33,709		2,331,333
34		-	-		-		684,137		(684,137)		24,866		1,672,062
35		-	-		-		570,114		(570,114)		17,338		1,119,286
36		-	-		-		456,091		(456,091)		11,141		674,335
37		-	-		-		342,068		(342,068)		6,291		338,558
38		-	-		-		228,046		(228,046)		2,807		113,319
39		-	-		<u>-</u>		114,023		(114,023)		704		-
				\$	63,480,028	\$	71,597,162		•	\$	8,117,134		

Capital Improvement Plan for Impact Fees Impact Fee Calculation Roadway Service Area B

		Future Value	Escalation						
	Number of	Interest	Recovery						
	Years to	Rate	Fee	Annual Veh	icle Miles		Annual	Ехр	ense
<u>Year</u>	End of Period	<u>Factor</u>	<u>Factor</u>	<u>Actual</u>	Escalated		<u>Actual</u>	ļ	Escalated
1	39	1.6133	1.0000	2,177	3,512	\$	100,783	\$	162,593
2	38	1.5934	1.0000	2,177	3,469	Φ	1,250,312	Φ	1,992,235
3	37	1.5737	1.0000	,	3,426		2,108,631		
4	36	1.5543	1.0000	2,177 2,177	3,383		2,100,031		3,318,391 4,609,399
5	35	1.5351	1.0000	2,177	3,342		3,061,444		4,699,626
6	34	1.5161	1.0000	2,177	3,300		3,183,417		4,826,535
7	33	1.4974	1.0000	2,177	3,260		3,312,634		4,960,442
8	32	1.4789	1.0000	2,177	3,219		3,413,713		5,048,692
9	31	1.4607	1.0000	2,177	3,180		3,515,541		5,135,102
10	30	1.4427	1.0000	2,177	3,140		3,615,927		5,216,528
11	29	1.4248	1.0000	-	-		4,068,246		5,796,609
12	28	1.4073	1.0000	-	-		3,315,771		4,666,124
13	27	1.3899	1.0000	_	_		2,564,841		3,564,817
14	26	1.3727	1.0000	_	_		1,822,345		2,501,568
15	25	1.3558	1.0000	_	_		1,813,971		2,459,331
16	24	1.3390	1.0000	_	_		1,833,689		2,455,372
17	23	1.3225	1.0000	_	_		1,787,707		2,364,247
18	22	1.3062	1.0000	_	_		1,787,108		2,334,277
19	21	1.2900	1.0000	_	-		1,785,272		2,303,090
20	20	1.2741	1.0000	-	-		1,783,515		2,272,418
21	19	1.2584	1.0000	-	-		1,782,184		2,242,689
22	18	1.2429	1.0000	-	-		1,781,492		2,214,141
23	17	1.2275	1.0000	-	-		1,779,275		2,184,085
24	16	1.2124	1.0000	-	-		1,778,409		2,156,071
25	15	1.1974	1.0000	-	-		1,776,902		2,127,648
26	14	1.1826	1.0000	-	-		1,775,832		2,100,115
27	13	1.1680	1.0000	-	-		1,636,687		1,911,666
28	12	1.1536	1.0000	-	-		1,622,679		1,871,906
29	11	1.1393	1.0000	-	-		1,585,186		1,806,078
30	10	1.1253	1.0000	-	-		1,585,282		1,783,889
31	9	1.1114	1.0000	-	-		1,297,947		1,442,524
32	8	1.0977	1.0000	-	-		912,182		1,001,274
33	7	1.0841	1.0000	-	-		798,160		865,298
34	6	1.0707	1.0000	-	-		684,137		732,528
35	5	1.0575	1.0000	-	-		570,114		602,903
36	4	1.0445	1.0000	-	-		456,091		476,368
37	3	1.0316	1.0000	-	-		342,068		352,865
38	2	1.0188	1.0000	-	-		228,046		232,339
39	1	1.0063	1.0000	- <u>-</u>	-		114,023		114,735
					33,231				96,906,519
		Annual Interest Rate	e:				1.25%		
		Present Value of Ini	tial Impact Fee I	Fund Balance		\$	-		
		Total Escalated Exp			•	\$	96,906,519		
		Less Future Value of Sub-Total	n miliai impact F	ee rund balanc	_	\$	96,906,519		
		Sub-Tolai				Φ	30,300,319		

Total Escalated Vehicle Miles

Impact Fee for Roadway Service Area B

33,231

2,916

Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Roadway Service Area B

					Cost In		Impact Fee	Debt Funded ⁽²⁾					Non-Debt	
<u>Class</u>	Impact Fee Project Name(1)		Project Cost		Service Area B ⁽¹⁾	Re	ecoverable Cost ⁽¹⁾		Existing		Proposed		Funded ⁽²⁾	
	5. W 5 ()	•	0.000.000	•	4.050.000	•	4 000 074	•	007.440	•	104.050	•		
MAC 3U	Picadilly Dr (1)	\$	3,300,000	\$		\$	1,069,074	\$	637,416	\$	431,658	\$	-	
MAC 3U	Central Commerce Dr (1)		2,500,000		1,250,000		809,905		498,831		311,074			
MAC 3U	Royston Ln (1)		3,700,000		3,700,000		2,397,319		327,850		1,034,735		1,034,735	
MAC 3U	W Pfennig Ln (1)		2,192,517		2,192,517		1,420,584		1,420,584				-	
MAA 6D	Fm 685 (2)		15,040,000		15,040,000		9,744,776		925,362		4,803,993		4,015,421	
MAC 3U	Old Austin-Hutto Rd Extension (1)		8,300,000		8,300,000		5,377,769		-		2,688,884		2,688,884	
MIA 4D	E Pfennig Ln (1)		11,000,000		11,000,000		7,127,163		-		3,563,582		3,563,582	
URBAN 2-LANE	Main St (1)		6,400,000		6,400,000		4,146,713		559,708		2,031,988		1,555,017	
MAA 6D	Fm 685 (3)		3,840,000		3,840,000		2,488,028		235,017		1,226,643		1,026,367	
MAC 3U	Old Austin-Hutto Rd (1)		3,989,000		3,989,000		2,584,569		2,584,569		-		-	
MAC 3U	Immanuel Rd (1)		6,600,000		6,600,000		4,276,298		2,308,796		1,967,502		-	
MAC 3U	E Pfennig Ln (2)		3,600,000		3,600,000		2,332,526		-		1,166,263		1,166,263	
MAC 3U	Biltmore Ave (1)		1,531,404		1,531,404		992,233		992,233		-		-	
MAC 3U	Helios Way West (1)		659,728		659,728		427,454		427,454		-		-	
MAC 3U	Sun Light Near Way Extension (1)		1,283,771		1,283,771		831,786		831,786		-		-	
MAC 3U	Impact Way Extension (1)		6,460,000		6,460,000		4,185,589		-		2,092,794		2,092,794	
	Pfluger Farm Ln At E Pflugerville Pkwy		411,000		205,500		34,496		-		17,248		17,248	
	Fm 685 At E Pflugerville Pkwy		1,600,000		800,000		134,289		72,503		61,786		-	
	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy		946,560		236,640		39,723		-		19,861		19,861	
	Central Commerce Dr At Picadilly Dr		294,677		294,677		49,465		49,465		-		-	
	Grand Avenue Pkwy At W Black Locus Dr		228,159		228,159		38,299		38,299		-		-	
	Heatherwilde Blvd At W Black Locust Dr		190,941		190,941		32,052		32,052		-		-	
	E Black Locust Dr At W Pfennig Ln		1,500,000		1,500,000		251,792		-		125,896		125,896	
	Old Austin-Hutto Rd At E Pfennig Ln		1,500,000		1,500,000		251,792		-		125,896		125,896	
	Heatherwilde Blvd At W Pfennig Ln		190,941		190,941		32,052		32,052		-		-	
	Old Austin-Hutto Rd Ext At Old Austin-Hutto Rd		1,500,000		1,500,000		251,792		-		125,896		125,896	
	Edgemere Dr At Grand Avenue Pkwy		294,677		294,677		49,465		49,465		-		-	
	Heatherwilde Blvd At W Pecan St		2,017,370		2,017,370		338,638		210,868		127,771		-	
	Fm 685 At E Pecan St		1,145,000		1,145,000		192,201		123,851		68,350		-	
	E Pfennig Ln At E Pecan St		411,000		411,000		68,991		-		34,496		34,496	
	Biltmore Ave At E Pecan St		520,000		520,000		87,288		87,288		-		-	
	Sh 130 Ebfr/Wbfr At E Pecan St		8,000,000		4,000,000		671,445		158,601		324,000		188,844	
	Immanuel Rd At E Wells Branch Pkwy		411,000		411,000		68,991				34,496		34,496	
	E Wells Branch Pkwy At E Pfennig Ln		353,000		353,000		59,255		-		29,628		29,628	
	Update ITS and Traffic Management Infrastructure		2,974,924		991,641		166,458		_		83,229		83,229	
	Impact Fee Study		28,333		28,333		28,333		-				28,333	
	Total	\$	104,914,002	\$	94,315,299	\$	53,058,602	\$	12,604,049	\$	22,497,668	\$	17,956,885	

⁽¹⁾ Table 4

⁽²⁾ Per discussions with City staff and City files

Capital Improvement Plan for Impact Fees Credit Determination Roadway Service Area B

<u>Year</u>		Eligible Debt <u>Service⁽¹⁾</u>	Annual Vehicle <u>Miles</u>	Eligi	ble Debt Service per <u>Vehicle Mile</u>	Annual Growth in Vehicle Miles (Cumulative)	Credit for Annual Roadway <u>Rate Revenues</u>
1	\$	563,323	144,920	\$	3.89	2,177	\$ 8,462
2		982,253	153,914		6.38	4,354	27,785
3		1,107,251	162,909		6.80	6,531	44,387
4		1,232,332	171,903		7.17	8,707	62,422
5		1,346,790	180,898		7.45	10,884	81,035
6		1,490,230	189,892		7.85	13,061	102,502
7		1,642,813	198,887		8.26	15,238	125,868
8		1,765,966	207,881		8.50	17,415	147,942
9		1,890,648	216,876		8.72	19,592	170,795
10		2,014,379	225,870		8.92	21,769	194,140
11		2,012,432	225,870		8.91	21,769	193,953
12		2,009,607	225,870		8.90	21,769	193,680
13		2,008,492	225,870		8.89	21,769	193,573
14		2,016,710	225,870		8.93	21,769	194,365
15		2,007,443	225,870		8.89	21,769	193,472
16		2,029,264	225,870		8.98	21,769	195,575
17		1,978,377	225,870		8.76	21,769	190,671
18		1,977,715	225,870		8.76	21,769	190,607
19		1,975,683	225,870		8.75	21,769	190,411
20		1,973,738	225,870		8.74	21,769	190,224
21		1,972,266	225,870		8.73	21,769	190,082
22		1,971,499	225,870		8.73	21,769	190,008
23		1,969,047	225,870		8.72	21,769	189,771
24		1,968,089	225,870		8.71	21,769	189,679
25		1,966,420	225,870		8.71	21,769	189,518
26		1,965,236	225,870		8.70	21,769	189,404
27		1,811,251	225,870		8.02	21,769	174,563
28		1,795,749	225,870		7.95	21,769	173,069
29		1,754,257	225,870		7.77	21,769	169,071
30		1,754,363	225,870		7.77	21,769	169,081
31		1,436,382	225,870		6.36	21,769	138,435
32		1,009,473	225,870		4.47	21,769	97,290
33		883,289	225,870		3.91	21,769	85,129
34		757,104	225,870		3.35	21,769	72,968
35		630,920	225,870		2.79	21,769	60,806
36		504,736	225,870		2.23	21,769	48,645
37		378,552	225,870		1.68	21,769	36,484
38		252,368	225,870		1.12	21,769	24,323
39		126,184	225,870		0.56	21,769	12,161
Total	\$	58,932,632					\$ 5,292,355
	2020	Vehicle Miles ⁽²⁾			135,925		

Ten Year Growth in Vehicle Miles (3)

21,769

10 years

Annual Growth in Vehicle Miles

7,177

Ten Year Growth in Vehicle Miles in Other Service Areas (3)

Annual Growth in Vehicle Miles

68,176

10 years

Annual Growth in Vehicle Miles

6,818

Credit Amount

\$ 5,292,355

⁽¹⁾ Roadway Appendices - page 3 Section II

⁽²⁾ Derived from Appendix C: Existing Roadway Facilities Inventory

⁽³⁾ Derived from Table 10: 10-Year Growth Projections

Capital Improvement Plan for Impact Fees Impact Fee Calculation Assumptions Roadway Service Area C

I. General Assumptions

Annual Interest Rate on Deposits (1)	1.25%
Annual Vehicle Mile Growth (2)	2,649
Existing Fund Balance (3)	-

Portion of Projects Funded by Existing Debt ⁽⁴⁾

Non-debt Funded Project Cost ⁽⁵⁾

New Project Cost Funded Through New Debt ⁽⁶⁾

Total Recoverable Project Cost ⁽⁷⁾

\$ 27,534,432

21,338,282

22,454,844

7 71,327,557

II. New Debt Issues Assumptions

<u>Year</u>	Principal ⁽⁸⁾	Interest (9)	<u>Term</u>
1	\$ 2,245,484	3.75%	30
2	2,245,484	3.75%	30
3	2,245,484	3.75%	30
4	2,245,484	3.75%	30
5	2,245,484	3.75%	30
6	2,245,484	3.75%	30
7	2,245,484	3.75%	30
8	2,245,484	3.75%	30
9	2,245,484	3.75%	30
10	2,245,484	3.75%	30
Total	\$ 22,454,844		

III. Capital Expenditure Assumptions

	Annual Capital
<u>Year</u>	Expenditures (10)
1	\$ 2,133,828
2	2,882,323
3	3,630,818
4	4,379,313
5	4,379,313
6	4,379,313
7	4,379,313
8	4,379,313
9	4,379,313
10	4,379,313
11	2,245,484
12	1,496,990
13	748,495
Total	43,793,126

- (1) Lone Star Corporate Overnight Investment Pool Average Interest Rate from January 2020 to June 2020
- (2) Derived from Appendix B
- (3) There is no existing fund balance because this is a new impact fee
- (4) Per discussions with City Staff and City files
- (5) This assumes 50% of new project costs funded through sources other than debt, unless specified otherwise
- (6) This assumes 50% of new project costs funded through new debt issues, unless specified otherwise
- (7) Table 4
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest on future debt from City Staff and recent Financial Advisor projections
- (10) Assumes new debt proceeds expended over a 3-year timeframe Non-debt funded capital expenditures allocated per discussions with City Staff

Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Roadway Service Area C

I. New Debt Service Detail

<u>Year</u>	Series	Series	Series <u>3</u>	Series <u>4</u>	Series <u>5</u>	Series <u>6</u>	Series <u>7</u>	Series <u>8</u>	Series <u>9</u>	Series <u>10</u>	Total Annual New Debt <u>Service</u>
1 \$	125,944 \$	\$	· -	\$ - 9	5 - 9	- :	\$ -	\$ -	\$ -	\$ -	\$ 125,944
2	125,944	125,944	-	-	-	-	-	-	-	-	251,888
3	125,944	125,944	125,944	-	-	-	-	-	-	-	377,832
4	125,944	125,944	125,944	125,944	-	-	-	-	-	-	503,776
5	125,944	125,944	125,944	125,944	125,944	-	-	-	-	-	629,719
6	125,944	125,944	125,944	125,944	125,944	125,944	-	-	-	-	755,663
7	125,944	125,944	125,944	125,944	125,944	125,944	125,944	-	-	-	881,607
8	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	-	-	1,007,551
9	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	-	1,133,495
10	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
11	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
12	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
13	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
14	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
15	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
16	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
17	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
18	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
19	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
20	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
21	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
22	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
23	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
24	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
25	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
26	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
27	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
28	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
29	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
30	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,259,439
31	-	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,133,495
32	-	-	125,944	125,944	125,944	125,944	125,944	125,944	125,944	125,944	1,007,551
33	-	-	-	125,944	125,944	125,944	125,944	125,944	125,944	125,944	881,607
34	-	-	-	-	125,944	125,944	125,944	125,944	125,944	125,944	755,663
35	-	-	-	-	-	125,944	125,944	125,944	125,944	125,944	629,719
36	-	-	-	-	-	-	125,944	125,944	125,944	125,944	503,776
37	-	-	-	-	-	-	-	125,944	125,944	125,944	377,832
38	-	-	-	-	-	-	-	-	125,944	125,944	251,888
39	-	-	-	-	-	-	-	-	-	125,944	125,944
\$	3,778,316 \$	3,778,316 \$	3,778,316	\$ 3,778,316 \$	3,778,316	3,778,316	\$ 3,778,316	\$ 3,778,316	\$ 3,778,316	\$ 3,778,316	\$ 37,783,165

Capital Improvement Plan for Impact Fees Debt Service and Expense Summary Roadway Service Area C

II. Summary of Annual Expenses

<u>Year</u>	New Annual Debt <u>Service⁽¹⁾</u>	Annual Capital Expenditures ⁽²⁾	Annual Bond <u>Proceeds⁽²⁾</u>	Existing Annual Debt Service ⁽³⁾	Annual <u>Credit⁽⁴⁾</u>	Total <u>Expense</u>
1	\$ 125,944	\$ 2,133,828	\$ (2,245,484) \$	1,322,553	\$ (26,474)	\$ 1,310,366
2	251,888	2,882,323	(2,245,484)	1,644,406	(65,266)	2,467,866
3	377,832	3,630,818	(2,245,484)	1,682,044	(100,473)	3,344,736
4	503,776	4,379,313	(2,245,484)	1,679,499	(134,560)	4,182,543
5	629,719	4,379,313	(2,245,484)	1,836,554	(180,555)	4,419,547
6	755,663	4,379,313	(2,245,484)	2,037,014	(233,720)	4,692,785
7	881,607	4,379,313	(2,245,484)	1,826,844	(252,490)	4,589,790
8	1,007,551	4,379,313	(2,245,484)	1,829,572	(289,191)	4,681,761
9	1,133,495	4,379,313	(2,245,484)	1,833,612	(326,134)	4,774,801
10	1,259,439	4,379,313	(2,245,484)	1,817,086	(360,772)	4,849,581
11	1,259,439	2,245,484	-	1,827,188	(361,957)	4,970,155
12	1,259,439	1,496,990	-	1,832,098	(362,532)	4,225,994
13	1,259,439	748,495	-	1,844,112	(363,941)	3,488,104
14	1,259,439	-	-	1,985,026	(380,466)	2,863,999
15	1,259,439	-	-	1,946,871	(375,991)	2,830,318
16	1,259,439	-	-	2,340,257	(422,122)	3,177,573
17 18	1,259,439	-	-	996,806	(264,581)	1,991,663
19	1,259,439	-	-	999,450	(264,891) (264,753)	1,993,997
20	1,259,439 1,259,439	-	-	998,270 997,744	(264,753)	1,992,956 1,992,492
21	1,259,439	-	-	998,726	(264,806)	1,993,359
22	1,259,439	-	-	997,538	(264,667)	1,992,310
23	1,259,439	_	_	997,189	(264,626)	1,992,002
24	1,259,439	_	_	998,349	(264,762)	1,993,026
25	1,259,439	_	_	998,752	(264,809)	1,993,382
26	1,259,439	-	-	997,870	(264,706)	1,992,603
27	1,259,439	-	-	925,230	(256,188)	1,928,481
28	1,259,439	-	-	534,713	(210,393)	1,583,759
29	1,259,439	-	-	531,866	(210,059)	1,581,245
30	1,259,439	-	-	534,248	(210,339)	1,583,349
31	1,133,495	-	-	270,081	(164,592)	1,238,984
32	1,007,551	-	-	-	(118,152)	889,399
33	881,607	-	-	-	(103,383)	778,225
34	755,663	-	-	-	(88,614)	667,050
35	629,719	-	-	-	(73,845)	555,875
36	503,776	-	-	-	(59,076)	444,700
37	377,832	-	-	-	(44,307)	333,525
38	251,888	-	-	-	(29,538)	222,350
39	125,944	-		-	(14,769)	111,175
	\$ 37,783,165	\$ 43,793,126	\$ (22,454,844)	42,061,570	\$ (8,467,189)	\$ 92,715,827

⁽¹⁾ Roadway Appendices - page 2 Section I

⁽²⁾ Roadway Appendices - page 1

⁽³⁾ Eligible outstanding debt funded projects as a percent of total principal times original annual debt service

⁽⁴⁾ Roadway Appendices - page 7

Capital Improvement Plan for Impact Fees Revenue Test Roadway Service Area C

<u>Year</u>	lmp <u>Fe</u>	oact ee	Vehicle <u>Miles</u>		Impact Fee <u>Revenue</u>		Annual Expenses		Sub-Total	Accumulated Interest		Estimated I Fund <u>Balance</u>	
Initial												\$	-
1	\$	3,156	2,649	\$	8,360,240	\$	1,310,366	\$	7,049,874	\$	44,062		7,093,935
2		3,156	2,649		8,360,240		2,467,866		5,892,374		125,502		13,111,811
3		3,156	2,649		8,360,240		3,344,736		5,015,504		195,245		18,322,559
4		3,156	2,649		8,360,240		4,182,543		4,177,697		255,143		22,755,399
5		3,156	2,649		8,360,240		4,419,547		3,940,693		309,072		27,005,164
6		3,156	2,649		8,360,240		4,692,785		3,667,455		360,486		31,033,105
7		3,156	2,649		8,360,240		4,589,790		3,770,450		411,479		35,215,034
8		3,156	2,649		8,360,240		4,681,761		3,678,479		463,178		39,356,692
9		3,156	2,649		8,360,240		4,774,801		3,585,439		514,368		43,456,498
10		3,156	2,649		8,360,240		4,849,581		3,510,659		565,148		47,532,305
11		-	-		-		4,970,155		(4,970,155)		563,090		43,125,240
12		-	-		-		4,225,994		(4,225,994)		512,653		39,411,899
13		-	-		-		3,488,104		(3,488,104)		470,848		36,394,643
14		-	-		-		2,863,999		(2,863,999)		437,033		33,967,677
15		-	-		-		2,830,318		(2,830,318)		406,906		31,544,265
16		-	-		-		3,177,573		(3,177,573)		374,443		28,741,136
17		-	-		-		1,991,663		(1,991,663)		346,816		27,096,289
18		-	-		-		1,993,997		(1,993,997)		326,241		25,428,532
19		-	-		-		1,992,956		(1,992,956)		305,401		23,740,977
20		-	-		-		1,992,492		(1,992,492)		284,309		22,032,794
21		-	-		-		1,993,359		(1,993,359)		262,951		20,302,387
22		-	-		-		1,992,310		(1,992,310)		241,328		18,551,405
23		-	-		-		1,992,002		(1,992,002)		219,443		16,778,845
24		-	-		-		1,993,026		(1,993,026)		197,279		14,983,098
25		-	-		-		1,993,382		(1,993,382)		174,830		13,164,546
26		-	-		-		1,992,603		(1,992,603)		152,103		11,324,046
27		-	-		-		1,928,481		(1,928,481)		129,498		9,525,063
28		-	-		-		1,583,759		(1,583,759)		109,165		8,050,468
29		-	-		-		1,581,245		(1,581,245)		90,748		6,559,971
30		-	-		-		1,583,349		(1,583,349)		72,104		5,048,726
31		-	-		-		1,238,984		(1,238,984)		55,365		3,865,107
32		-	-		-		889,399		(889,399)		42,755		3,018,463
33		-	-		-		778,225		(778,225)		32,867		2,273,105
34		-	-		-		667,050		(667,050)		24,245		1,630,300
35		-	-		-		555,875		(555,875)		16,905		1,091,330
36		-	-		-		444,700		(444,700)		10,862		657,493
37		-	-		-		333,525		(333,525)		6,134		330,102
38		-	-		-		222,350		(222,350)		2,737		110,489
39		-	-	\$	92 602 400	Φ	111,175	-	(111,175)	Φ	686		-
				Ф	83,602,400	\$	92,715,827			\$	9,113,427		

Capital Improvement Plan for Impact Fees Impact Fee Calculation Roadway Service Area C

		Future Value	Escalation					
	Number of	Interest	Recovery					
	Years to	Rate	Fee	Annual Ve	hicle Miles	Annual	Ехр	ense
<u>Year</u>	End of Period	<u>Factor</u>	<u>Factor</u>	<u>Actual</u>	Escalated	<u>Actual</u>		Escalated
1	39	1.6133	1.0000	2,649	4,273	\$ 1,310,366	\$	2,114,024
2	38	1.5934	1.0000	2,649	4,220	2,467,866		3,932,273
3	37	1.5737	1.0000	2,649	4,168	3,344,736		5,263,673
4	36	1.5543	1.0000	2,649	4,117	4,182,543		6,500,884
5	35	1.5351	1.0000	2,649	4,066	4,419,547		6,784,451
6	34	1.5161	1.0000	2,649	4,016	4,692,785		7,114,963
7	33	1.4974	1.0000	2,649	3,966	4,589,790		6,872,895
8	32	1.4789	1.0000	2,649	3,917	4,681,761		6,924,065
9	31	1.4607	1.0000	2,649	3,869	4,774,801		6,974,485
10	30	1.4427	1.0000	2,649	3,821	4,849,581		6,996,262
11	29	1.4248	1.0000	-	· -	4,970,155		7,081,686
12	28	1.4073	1.0000	-	-	4,225,994		5,947,037
13	27	1.3899	1.0000	-	-	3,488,104		4,848,040
14	26	1.3727	1.0000	-	-	2,863,999		3,931,466
15	25	1.3558	1.0000	-	-	2,830,318		3,837,266
16	24	1.3390	1.0000	-	-	3,177,573		4,254,879
17	23	1.3225	1.0000	-	-	1,991,663		2,633,980
18	22	1.3062	1.0000	-	-	1,993,997		2,604,511
19	21	1.2900	1.0000	-	-	1,992,956		2,571,013
20	20	1.2741	1.0000	-	-	1,992,492		2,538,681
21	19	1.2584	1.0000	-	-	1,993,359		2,508,430
22	18	1.2429	1.0000	-	-	1,992,310		2,476,158
23	17	1.2275	1.0000	-	-	1,992,002		2,445,210
24	16	1.2124	1.0000	-	-	1,993,026		2,416,264
25	15	1.1974	1.0000	-	-	1,993,382		2,386,859
26	14	1.1826	1.0000	-	-	1,992,603		2,356,471
27	13	1.1680	1.0000	-	-	1,928,481		2,252,483
28	12	1.1536	1.0000	-	-	1,583,759		1,827,008
29	11	1.1393	1.0000	-	-	1,581,245		1,801,588
30	10	1.1253	1.0000	-	-	1,583,349		1,781,713
31	9	1.1114	1.0000	-	-	1,238,984		1,376,994
32	8	1.0977	1.0000	-	-	889,399		976,266
33	7	1.0841	1.0000	-	-	778,225		843,686
34	6	1.0707	1.0000	-	-	667,050		714,232
35	5	1.0575	1.0000	-	-	555,875		587,845
36	4	1.0445	1.0000	-	-	444,700		464,470
37	3	1.0316	1.0000	-	-	333,525		344,052
38	2	1.0188	1.0000	-	-	222,350		226,536
39	1	1.0063	1.0000	-	-	111,175		111,870
				•	40,434	, -		127,624,668
					, •			,,
	Δ	nnual Interest Ra	te·			1.25%		
		iiiiaai iiitoroot ita				1.20/0		

Impact Fee for Roadway Service Area C	\$ 3,156
Total Escalated Vehicle Miles	 40,434
Less Future Value of Initial Impact Fee Fund Balance Sub-Total	\$ 127,624,668
Total Escalated Expense for Entire Period	\$ 127,624,668
Present Value of Initial Impact Fee Fund Balance	\$ -
Annual Interest Rate:	1.25%

Capital Improvement Plan for Impact Fees Impact Fee Project Funding Roadway Service Area C

					Cost In		Impact Fee		Debt Fo		Non-Debt		
Class	Impact Fee Project Name ⁽¹⁾		Project Cost	<u>s</u>	Service Area C ⁽¹⁾	Re	coverable Cost ⁽¹⁾		Existing		Proposed		Funded ⁽²⁾
MIA 4D	Rowe Ln (1)	\$	5,500,000	\$	2,750,000	\$	2,048,195	\$	197,313	\$	925,441 \$		925,441
MIA 4D	Kelly Ln (1)	Ψ	5,164,428	Ψ	5,164,428	Ψ	3,846,457	Ψ	3,419,718	Ψ	-	,	426,739
MIA 4D	Kelly Ln (2)		2,066,572		1,033,286		769,590		769,590		-		.20,.00
MIA 4D	Kelly Ln (3)		7,900,000		3,950,000		2,941,953		1,728,874		1,213,079		-
MAA 4D	Cele Rd (1)		5,700,000		2,850,000		2,122,675		-		1,061,338		1,061,338
MAA 4D	Cele Rd (2)		2,000,000		1,000,000		744,798		-		372,399		372,399
MAA 4D	Cele Rd (3)		2,600,000		2,600,000		1,936,476		-		968,238		968,238
MAA 4D	Cele Rd (4)		2,300,000		1,150,000		856,518		-		428,259		428,259
URBAN 3-LANE	Colorado Sand Dr (1)		3,953,000		3,953,000		2,944,188		1,378,007		-,		1,566,181
MAA 4D	Weiss Ln (1)		708,264		354,132		263,757		233,479		-		30,278
MAA 4D	Weiss Ln (2)		1,616,672		1,616,672		1,204,095		1,065,873		-		138,222
1/2 MIA 4D	Hidden Lake Dr (1)		3,200,000		3,200,000		2,383,355		-		1,191,677		1,191,677
MAA 4D	Weiss Ln (3)		5,304,328		2,652,164		1,975,327		1,748,573				226,754
MAA 4D	E Pflugerville Pkwy (1)		23,100,000		23,100,000		17,204,842		5,625,618		6,389,298		5,189,926
MAA 4D	E Pflugerville Pkwy Extension (1)		4,642,000		2,321,000		1,728,677		1,728,677				
MAA 4D	Weiss Ln (4)		3,787,223		3,787,223		2,820,717		2,496,918		-		323,799
1/2 MAA 4D	Weiss Ln (5)		8,800,000		4,400,000		3,277,113		2,900,922		-		376,190
1/2 MIA 4D	Melber Ln (1)		3,000,000		3,000,000		2,234,395		210,623		1,011,886		1,011,886
1/2 MIA 4D	Melber Ln (2)		1,800,000		900,000		670,319		126,265		272,027		272,027
MAA 4D	E Pecan St (1)		8,700,000		8,700,000		6,479,746		1,204,302		2,637,722		2,637,722
1/2 MIA 4D	Cameron Rd Realignment (1)		2,900,000		2,900,000		2,159,915		1,166,150		993,766		-
	Sh 130 At Cr 138		1,600,000		400,000		205,289		110,837		94,452		-
	Fm 685 Nbfr/Sbfr At Rowe Ln		8,681,000		4,340,500		2,227,640		72,108		1,077,766		1,077,766
	Speidel Dr At Rowe Ln		353,000		353,000		181,167		-		90,584		90,584
	Fm 685 Nbfr/Sbfr At Kelly Ln		3,408,850		1,704,425		874,749		385,173		244,788		244,788
	Jakes Hill Rd At Kelly Ln		411,000		205,500		105,467		-		52,734		52,734
	Hodde Ln At Cele Rd		2,000,000		500,000		256,611		138,546		118,065		-
	Fm 685 Nbfr/Sbfr At Copper Mine Dr		2,116,250		1,058,125		543,053		341,958		201,095		-
	Copper Mine Dr At Colorado Sand Dr		411,000		411,000		210,934		-		105,467		105,467
	Sh 130 Nbfr At S Of Fm 685		4,000,000		4,000,000		2,052,888		-		1,026,444		1,026,444
	Colorado Sand Dr At Lone Star Ranch Blvd		1,500,000		1,500,000		769,833		-		384,917		384,917
	Weiss Ln At Hidden Lake Crossing		480,600		120,150		61,664		-		30,832		30,832
	Sh 130 Nbfr/Sbfr At E Pflugerville Pkwy		946,560		473,280		242,898		-		121,449		121,449
	Hidden Lake Dr At E Pflugerville Pkwy		353,000		353,000		181,167		-		90,584		90,584
	Weiss Ln At Pleasanton Pkwy		411,000		411,000		210,934		-		105,467		105,467
	Sh 130 Ebfr/Wbfr At E Pecan St		8,000,000		4,000,000		2,052,888		484,910		990,604		577,375
	Update ITS and Traffic Management Infrastructure		2,974,924		991,641		508,932		-		254,466		254,466
	Impact Fee Study		28,333		28,333		28,333		-		<u>-</u>		28,333
	Total	\$	142,418,004	\$	102,231,860	\$	71,327,557	\$	27,534,432	\$	22,454,844 \$	6	21,338,282

⁽¹⁾ Table 4

⁽²⁾ Per discussions with City staff and City files

Capital Improvement Plan for Impact Fees Credit Determination Roadway Service Area C

<u>Year</u>		Eligible Debt <u>Service⁽¹⁾</u>	Annual Vehicle <u>Miles</u>	Eligible Debt Service p <u>Vehicle Mile</u>	Annual Growth in Vehicle er Miles (Cumulative)		Credit for Annual Roadway <u>Rate Revenues</u>
1	\$	1,448,497	144,920	\$ 10.	00 2,649	\$	26,474
2		1,896,293	153,914	12.	32 5,297		65,266
3		2,059,876	162,909	12.	64 7,946		100,473
4		2,183,275	171,903	12.	70 10,595		134,560
5		2,466,274	180,898	13.	63 13,243		180,555
6		2,792,677	189,892	14.	71 15,892		233,720
7		2,708,452	198,887	13.	62 18,541		252,490
8		2,837,123	207,881	13.			289,191
9		2,967,107	216,876	13.			326,134
10		3,076,525	225,870	13.	62 26,487		360,772
11		3,086,627	225,870	13.	67 26,487		361,957
12		3,091,537	225,870	13.			362,532
13		3,103,551	225,870	13.			363,941
14		3,244,465	225,870	14.			380,466
15		3,206,309	225,870	14.			375,991
16		3,599,695	225,870	15.			422,122
17		2,256,244	225,870		99 26,487		264,581
18		2,258,888	225,870	10.			264,891
19		2,257,709	225,870	10.			264,753
20		2,257,183	225,870		99 26,487		264,691
21		2,258,165	225,870	10.			264,806
22		2,256,977	225,870		99 26,487		264,667
23		2,256,628	225,870	9.			264,626
24		2,257,788	225,870	10.			264,762
25		2,258,191	225,870	10.			264,809
26		2,257,309	225,870	9.	· · · · · · · · · · · · · · · · · · ·		264,706
27		2,184,668	225,870		67 26,487		256,188
28		1,794,152	225,870		94 26,487		210,393
29		1,791,305	225,870		93 26,487		210,059
30		1,793,687	225,870	7.			210,339
31		1,403,576	225,870	6.	· · · · · · · · · · · · · · · · · · ·		164,592
32		1,007,551	225,870		46 26,487		118,152
33		881,607	225,870		90 26,487		103,383
34		755,663	225,870	3.			88,614
35		629,719	225,870		79 26,487		73,845
36 37		503,776	225,870	2.			59,076
37		377,832	225,870		67 26,487		44,307
38		251,888	225,870		12 26,487		29,538
39 Total	\$	125,944 79,844,734	225,870	0.	56 26,487	\$	14,769 8,467,189
IUIAI	Φ	19,044,134				Φ	0,407,189

Credit Amount	\$ 8,467,189	
Annual Growth in Vehicle Miles	 6,346	
	10	years
Ten Year Growth in Vehicle Miles in Other Service Areas ⁽³⁾	63,458	
Annual Growth in Vehicle Miles	2,649	-
	10	years
Ten Year Growth in Vehicle Miles ⁽³⁾	26,487	
2020 Vehicle Miles ⁽²⁾	135,925	

⁽¹⁾ Roadway Appendices - page 3 Section II

⁽²⁾ Derived from Kimley-Horn Impact Fee Study

⁽³⁾ Derived from Appendix B