Bastrop Impact Fee Advisory Committee Agenda

Bastrop City Hall City Council Chambers
1311 Chestnut Street
Bastrop, TX 78602
(512) 332-8800

June 29, 2023

Agenda - Impact Fee Advisory Committee at 6:00 PM

Bastrop Planning and Zoning Commission meetings are available to all persons regardless of disability. If you require special assistance, please contact the City Secretary at (512) 332-8800 or write 1311 Chestnut Street, 78602, or by calling through a T.D.D. (Telecommunication Device for the Deaf) to Relay Texas at 1-800-735-2989 at least 48 hours in advance of the meeting.

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1. **CALL TO ORDER**

2. **CITIZEN COMMENTS**

At this time, three (3) minute comments will be taken from the audience on any topic. Anyone in attendance wishing to address the Board/Commission must complete a citizen comment form and give the completed form to the Board/Commission Secretary prior to the start of the Board/Commission meeting. In accordance with the Texas Open Meetings Act, if a citizen discusses any item not on the agenda, the Board/Commission cannot discuss issues raised or make any decision at this time. Instead, the Board/Commission is limited to making a statement of specific factual information or a recitation of existing policy in response to the inquiry. Issues may be referred to City Manager for research and possible future action.

It is not the intention of the City of Bastrop to provide a public forum for the embarrassment or demeaning of any individual or group. Neither is it the intention of the Board/Commission to allow a member of the public to slur the performance, honesty and/or integrity of the Board/Commission, as a body, or any member or members of the Board/Commission individually or collectively, or members of the City's staff. Accordingly, profane, insulting or threatening language directed toward the Board/Commission and/or any person in the Board/Commission's presence will not be tolerated.

3. **ITEMS FOR INDIVIDUAL CONSIDERATION**

3A. Presentation and discussion on Transportation Impact Fees, Final Report and Collection Rates with potential action for recommendation to City Council.

4. **ADJOURNMENT**

I, the undersigned authority, do hereby certify that this Notice of Meeting as posted in accordance with the regulations of the Texas Open Meetings Act on the bulletin board located at the entrance to the City of Bastrop City Hall, a place of convenient and readily accessible to the general public, as well as to the City's website, www.cityofbastrop.org and said Notice was posted on the following date and time: Thursday, June 22, 2023 at 3:00 p.m. and remained posted for at least two hours after said meeting was convened.

/s/Nicole Peterson
Nicole Peterson, Project Coordinator

CITY OF BASTROP, TEXAS
2023 TRANSPORTATION IMPACT FEE STUDY
DRAFT REPORT

June 2023

Prepared for the City of Bastrop

Prepared by:

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TBPE Firm Registration Number: F-928

Project Number: 069243307

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1. EXECUTIVE SUMMARY

A. 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 transportation, drainage, water, and wastewater facilities. In 2022, the City of Bastrop began exploring Transportation Impact Fees as a recommendation to be used as a funding tool for infrastructure needs as a result of growth in the City.

In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development towards new infrastructure needs. Impact Fees are a mathematical calculation that determine a maximum fee that would be equivalent to growth paying for growth. This study's purpose is to calculate the maximum Transportation Impact Fee per service unit of new growth.

The Maximum Impact Fee is considered an appropriate measure of the impacts generated by a new unit of development on a City's infrastructure 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 transparent. This report describes in detail how the fee is calculated and how the Impact Fee Advisory Committee (IFAC) monitors the Impact Fee program. An impact fee program is flexible in that funds can be used on priority projects and not just on projects adjacent to a specific development. An impact fee program is both equitable and proportional in that every new development pays an equal fee that is directly related to its systemwide impact.

B. Impact Fee Basics

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 Transportation Impact Fees, the Service Area may not exceed a 6-mile diameter trip length, per Texas Local Government Code (TLGC) Chapter 395.001(9). In Bastrop, this results in the creation of two (2) separate Transportation Service Areas due to the longest trips in the City limits exceeding 6 miles.

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 2023-2033. The 10-year increase in residential units is projected to be 7,903 units within the City Limits. The 2033 projections show an increase of 6,174,000 square feet of non-residential land uses over the 10-year window. These projections set the basis for determining transportation network loadings and demands to serve new growth. The distribution of residential and non-residential growth utilized information from historical growth trends and input from City staff on known future development locations.

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 to quantify the supply and demand for roads and utilities in the City. Service units are attributable to an individual unit of development and utilized to calculate the maximum impact fee of a development.

For transportation purposes, the service unit is defined as a vehicle-mile. A "vehicle-mile" refers to the capacity consumed in a single lane by a vehicle making a trip one mile in length during the PM peak hour. The PM peak hour is the one-hour period during the afternoon/evening when the highest vehicular volumes are observed. In accordance with the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, the PM peak is used as the basis for transportation planning and the estimation of trips caused by new development.

Capital Improvement Plans

The City and project staff have identified the roadway projects needed to accommodate the projected growth over the next ten (10) years within the City of Bastrop. These projects include existing and proposed projects that were determined based on their current or anticipated impact on each defined Service Area and the City as a whole.

Transportation Impact Fee Capital Improvement Plan

The City of Bastrop Transportation Master Plan (TMP) is the ultimate plan for the roadway infrastructure within the City Limits. The projects on the Transportation Impact Fee Capital Improvement Plan were selected from the TMP and cover existing and proposed roadway improvements, as well as intersection improvements with 10-year growth potential. The project team and City staff identified roadway and intersection projects with a projected total project cost (not impact fee eligible cost) of $111,305,560 over two (2) Transportation Service Areas.

Recoverable Project Costs

Impact Fees are a one-time fee meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs within a ten-year window. With this consideration, the maximum assessable impact fee does not specifically cover the entire cost of a roadway project. The calculations that determine the percentage of a project's cost that is impact fee eligible are defined as the project's *recoverable cost*.

Roadway Recoverable Project Costs

The recoverable costs for roadway projects are calculated by first determining the net capacity of vehicle-miles supplied to support future growth within a 10-year window. This net capacity is then multiplied by the percentage of roadway capacity added attributable to this 10-year growth. This growth percentage is obtained through the derivation of a *transportation demand factor* (TDF), which computes the total vehicle-miles associated to a single land use development unit, converting growth to service units. The TDF is applied to roadway project capacities to determine the net vehicle-miles supplied and growth projections for vehicle-miles demand to calculate the growth percentage needed to determine the total recoverable project costs.

Maximum Assessable Impact Fee Calculation

In simplest terms, the maximum impact fee allowable by law is calculated by dividing the recoverable cost of the Capital Improvement Plans by the number of new service units of development. In accordance with state law, both the cost of the Capital Improvement Plan 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 Capital Improvement Plan and 10-year growth projection.

Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of impact fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and the Impact Fee Capital Improvements Plan used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. In Bastrop, the existing Impact Fee Advisory Committee (IFAC) served this role. The IFAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the IFAC is required to have adequate representation of the building and development communities. In Bastrop, the IFAC members include real estate, development, and building industry professionals including an ETJ representative. The City Council then conducts a public hearing on the Land Use Assumptions, Impact Fee Capital Improvements Plan, and Impact Fee Ordinance.

Following policy adoption, the IFAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the Impact Fee Capital Improvements Plan at any time up to a maximum of five years of adoption. Finally, the CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

Chapter 395 of the Texas Local Government Code requires a total of two (2) public hearings before Council to approve an impact fee program. The first public hearing to discuss the land use assumptions and capital improvements plan was held on June 13, 2023. The second public hearing is scheduled to be held on August XX, 2022 with the intent of presenting a proposal for impact fee calculations and the adoption of an impact fee report (this study) and ordinance.

2. INTRODUCTION

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

The City of Bastrop has retained Kimley-Horn to provide professional transportation engineering services for the 2023 Transportation Impact Fee Study. This report includes details of the Transportation Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the TIF CIP, and the Land Use Vehicle-Mile Equivalency Table.

This report introduces and references two of the basic inputs to the Transportation Impact Fee:

1. Land Use Assumptions (Pg. 10)
2. Capital Improvement Plan (Pg. 16)

Information from the Land Use Assumptions and this Capital Improvement Plan are used extensively throughout the remainder of the report.

This report consists of a detailed discussion of the methodology for the computation of impact fees and is broken into three components:

1. Methodology for Transportation Impact Fees (Pg. 21)
2. Transportation Impact Fee Calculation (Pg. 32)
3. Plan for Awarding the Transportation Impact Fee Credit (Pg. 35)

The components of the Methodology for Transportation Impact Fees include development of:

- Service Areas
- Service Units
- Cost Per Service Unit
- Cost of the CIP
- Service Unit Calculation

The components of the Transportation Impact Fee Calculation include:

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

This report also includes a section concerning the Plan for Awarding the Transportation Impact Fee Credit. This involves the calculation of the applicable ad valorem tax credit required by law to help fund the Transportation Impact Fee CIP.

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

3. TRANSPORTATION IMPACT FEE CALCULATION INPUTS

A. LAND USE ASSUMPTIONS

Purpose

Impact Fees are a mechanism for funding the public infrastructure necessitated by growth. In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development growth creating new infrastructure needs. 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 section documents the process used to develop the Land Use Assumptions for the City of Bastrop's Transportation Impact Fee Study. In accordance with Chapter 395 of the Texas Local Government Code, Transportation Impact fees must be calculated based on reasonable expectations of residential and employment growth within the next ten years (2023-2033). The following resources provided the information required to complete the Land Use Assumptions:

- Projected new developments
- Developments currently under construction
- Recently platted developments
- City of Bastrop Comprehensive Plan
- City of Bastrop Transportation Master Plan
- City of Bastrop staff

Components of the Land Use Assumptions Section

The Land Use Assumptions include the following components:

1. Impact Fee Study Service Areas - Explanation of the divisions of Bastrop into service areas for Transportation Impact fees.
2. Land Use Assumptions Methodology - An overview of the general methodology used to generate the land use assumptions.
3. Ten-Year Growth Assumptions - Walk-through of the growth projections for 2023-2033.

Impact Fee Study Service Areas

Service Area Definition

According to Chapter 395 of the Local Government Code, a Service Area refers to the area within the corporate boundaries or extraterritorial jurisdiction of the political subdivision to be served by the capital improvement or facilities specified in the Capital Improvement Plan. Funds collected in the specific service areas must be spent in the service area collected. Chapter 395 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." This resulted in the creation of two (2) service areas in the City of Bastrop.

Transportation Impact Fee Service Areas

The geographic boundaries of the two (2) impact fee service areas for transportation facilities are shown in Exhibit 1. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded from this study.

The Colorado River serves as the primary service area boundary (except for a small area off of Lovers Lane to maintain contiguity), dividing the City into Service Area A to the west and Service Area B to the east. At locations where service area boundaries follow a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits area are included in the service area.


Legend
Service Areas
A
B
N
Exhibit 1.1
Transportation Service Areas
Bastrop Impact Fees
June 2023
Kimley»Horn
BASTROPTX
Heart of the Lost Pines
0 0.2 0.4 0.8 1.2 1.6
Miles
Lake Bastrop
Colorado River
Shiloh
MESQUITE
CEDAR
CHESTNUT
LOOP 150
SH 71
SH 95
SH 21
OLD AUSTIN
AGNES
EDWARD BURLESON
DUFF
HASLER
SCHAEFER
CHILDERS
LOVERS
JACKSON
MAUNA LOA
BEAR HUNTER
GREENLEAF
FISK
FM 969
FM 20
Highway 21 E
Sam Houston Dr
Woodlands Dr
Shiloh Rd
Riverwood Dr
Hoffman Rd
Baylor University, City of Austin, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Land Use Assumptions Methodology

The following factors were considered in developing the residential and employment projections:

- Character, type, density, location, and quantity of existing development;
- Growth trends and historical data;
- Location of vacant land;
- City of Bastrop Comprehensive Plan;
- City of Bastrop Transportation Master Plan;
- Physical restrictions (i.e. flood plains); and
- Planned development data.

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

Residential Units – Number of residential dwelling units, including *single-family* and *multifamily*

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

Basic - Land use activities that produce goods and services, including those that are exported outside the local economy (i.e. manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses)

Service - Land use activities which provide personal and professional services such as government and other professional offices

Retail - Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector (i.e. grocery stores and restaurants)

As outlined above, the residential and employment land uses are broken down into the five broader categories of single-family, multifamily, basic, service, and retail land uses. These five categories are used in the development of the assumptions for impact fees. In the calculation of the specific Transportation Impact Fee, a more specific and expanded classification based on the Institute of Transportation Engineers (ITE) Trip Generation Manual will be utilized.

Growth projections for the next 10 years (2023-2033) for the City of Bastrop were established using the City's future land use and historical census data.

Residential Development Neighborhoods

The City provided future land use data for known single and multifamily developments that are currently planned for construction within the next ten years. For some developments, the data indicates the total number of undeveloped dwelling units. For those developments that didn't provide an indication of total dwelling units, the projected acreage of each site was used to calculate a unit estimate for each property.

The analysis assumes ratios of 4 dwelling units/acre for each unknown future single-family development and 20 units/acres for each unknown future multifamily development. The projected acreage for each unknown residential site was multiplied by the respective constant unit assumption (4 for single-family, 20 for multifamily) to determine an assumed number of dwelling units associated with the site.

Projections for new single-family and multifamily developments in the next ten years were determined by the City of Bastrop and can be found in Table 1.

Commercial Developments

The City also provided future land use data for known commercial (non-residential) developments that are currently planned for construction within the next ten years. Each of these developments was categorized as a basic, service, or retail land use type, based on its respective projected trip characteristics.

The available existing plat data provides acreages for commercial developments at the parcel level; however, as mentioned previously, commercial developments are measured by square footage of building area. To determine the estimated building area for each development, a

floor area ratio (FAR) was applied to the square footage of each development based on its commercial classification. Each FAR was assigned based on standard planning principles and assumptions and evaluating FAR's for existing developments in Bastrop for each category.

Projections for commercial developments in the next ten years were determined by the City of Bastrop and can be found in Table 1.

10-Year Growth Assumptions

Table 1 summarizes the residential and employment growth projections by service area.

Table 1. Land Use Assumptions Growth Projections (2023-2033)

Service Area	Residential		Commercial		
	Single-Family	Multifamily	Basic	Service	Retail
	Dwelling Units		*Sq. Ft.*		
	4 units/acre	*20 units/acre*	*FAR 0.25*	*FAR 0.20*	
SA A	1,078	3,470	0	491,000	2,347,000
SA B	1,780	1,575	2,170,000	217,000	949,000
Sub-total	2,858	5,045	2,170,000	708,000	3,296,000
Total	7,903		6,174,000		

B. Capital Improvement Plan

The City has identified transportation projects needed to accommodate the projected growth within the City. These transportation projects include those that are fully funded by the City of Bastrop, as well as some roadway facilities maintained by the Texas Department of Transportation (TxDOT). TxDOT-maintained facilities are currently projected to be funded by both the City and TxDOT, with the City assumed to fund roughly 20% of costs (which are included in the TIF study) based on historical cost sharing agreements. All of these City-identified projects come together to form the Capital Improvement Plan (CIP) for Transportation Impact Fees. The CIP includes State Highway, City multimodal, and local roadway facilities, as well as intersection improvements. It should be noted that the "grid streets" required by the B3 Code were not included as projects from the Transportation Master Plan due to them serving site-specific infrastructure needs and not broader system capacity as a local street type connection.

The CIP for Transportation Impact Fees for the 2023 Impact Fee Study are listed in Tables 2-3 and mapped in Exhibits 2-3. The table shows the length of each project as well as the facility's lane configuration and available right-of-way (listed under "Impact Fee Class"). The CIP was developed in conjunction with input from City staff and represents those projects that will be needed to accommodate the growth projected by the 2033 Land Use Assumptions for the Transportation Impact Fee Study.

Table 2. Capital Improvement Plan for Transportation Impact Fees - Service Area A

Service Area	Proj. #	Impact Fee Class	Project	Limits	Length (mi)	% In Service Area
A	*Roadway Improvements*					
	A-1	4D_(80)	Agnes (1)	Bear Hunter Drive to Hunter's Crossing	0.46	100%
	A-2	4D_(80)	Agnes (2)	Hospital Drive to Schaefer Blvd	0.35	100%
	A-3	4D_(80)	Bear Hunter Drive (1)	Bear Hunter Drive (existing) to 1,000' N of Shiloh Rd	0.42	100%
	A-4	2U_(50)	Blakey Ln (1)	Edward Burleson Ln to 1,830' E of Edward Burleson Ln	0.35	100%
	A-5	2U_(50)	Blakey Ln (2)	City Limits to Old Austin Highway	0.43	100%
	A-6	3U_(56)	Greenleaf Fisk Dr	Bass Drive to Schaefer Blvd	0.57	100%
	A-7	4D_(80)	Hasler Blvd (1)	Old Austin Hwy to Colorado River	0.26	100%
	A-8	2U_(50)	Marie St	Schaefer Blvd to Hasler Blvd	0.25	100%
	A-9	3U_(56)	Orchard Pkwy	SH 71 to Hunters Point Drive	0.42	100%
	A-10	4D_(80)	Agnes (3)	Schaefer Blvd to Childers Drive	0.60	100%
	A-11	4D_(80)	Edward Burleson	Blakey to SH 21 EBFR	0.32	100%
	A-12	4D_(110)	FM 969 (1)	City Limits to Blakey Ln	0.46	100%
	A-13	4D_(110)	FM 969 (2)	Blakey Ln to State Highway 21	0.28	100%
	A-14	4D_(80)	Hasler Blvd (2)	Old Austin Hwy to SH 21	0.25	100%
	A-15	4D_(80)	Home Depot Way	Hunter's Crossing to SH 304	0.34	100%
	A-16	4D_(80)	Agnes (4)	SH 304 to Hospital Drive	0.41	100%
	A-17	4D_(80)	Bear Hunter Drive (2)	State Highway 21 to Bear Hunter Drive (existing)	0.63	100%
	A-18	4D_(110)	SH 304	SH 21 EBFR to Hunters Point Dr	0.55	100%
	Intersection Improvements					
	I-1	-	Highway 71 & FM 20	Traffic Signal	-	100%
	I-2	-	FM 969 / Bear Hunter & SH 21	Overpass	-	100%
	I-3	-	Edward Burleson Ln / SH 304 & SH 21	Intersection Improvements	-	100%
	I-4	-	Hasler Blvd & SH 21	Intersection Improvements	-	100%
	I-5	-	Loop 150 / Childers Dr & SH 21	Intersection Improvements	-	100%
	I-6	-	Agnes & Hasler	Roundabout	-	100%
	I-7	-	Old Austin & Loop 150	Roundabout	-	100%

Table 3. Capital Improvement Plan for Transportation Impact Fees - Service Area B

Service Area	Proj. #	Impact Fee Class	Project	Limits	Length (mi)	% In Service Area
B	*Roadway Improvements*					
	B-1	2U_(50)	Carter St	Mesquite St to Magnolia St	0.17	100%
	B-2	2U_(50)	Chambers St	Cedar St to Farm St	0.29	100%
	B-3	2U_(50)	Future Collector A	Pitt St to Future Collector B	0.22	100%
	B-4	2U_(50)	Future Collector B	Lost Pines Ave to SH 71	0.19	100%
	B-5	2U_(50)	Future Collector C	Technology Drive extension to City Limits	0.17	100%
	B-6	2U_(50)	Future Collector D	Jackson St extension to 420' E of Jackson St extension	0.08	100%
	B-7	4D_(80)	Hasler Blvd (3)	Colorado River to Willow St	0.29	100%
	B-8	4D_(80)	Jackson St (1)	Jackson St (existing) to 1,260' S of Jackson St	0.24	100%
	B-9	2U_(50)	Jasper St (1)	Jackson St to 930' E of Jackson St	0.18	100%
	B-10	2U_(50)	Jasper St (2)	930' E of Jackson St to Hidden Hollow Ct	0.51	100%
	B-11	2U_(50)	Majestic Pine Dr	Majestic Pine Dr (existing) to Mauna Loa Ln	0.10	100%
	B-12	2U_(50)	Mauna Loa Ln (1)	Pine Lodge Dr to Briar Forest Dr	0.95	100%
	B-13	3U_(56)	Mesquite St (1)	800' W of Wilson St to Wilson St	0.15	100%
	B-14	3U_(56)	Mesquite St (2)	SH 95 to Piney Ridge Dr	0.41	100%
	B-15	2U_(50)	Pitt St	SH 71 to Jasper St	0.10	100%
	B-16	3U_(56)	South Street (1)	Lovers Lane to South St (existing)	0.33	100%
	B-17	3U_(56)	South Street (2)	1,200' E of Jackson St to Mauna Loa Ln	0.21	100%
	B-18	2U_(50)	Technology Drive (1)	Mill St to Business Park Dr	0.14	100%
	B-19	2U_(50)	Technology Drive (2)	Technology Drive (existing) to City Limits	0.46	100%
	B-20	2U_(50)	Walnut Street	Martin Luther King Dr to SH 21	0.22	100%
	B-21	4D_(80)	Jackson St (2)	SH 21 to South St	0.25	100%
	B-22	3U_(56)	Lovers Ln	City Limits to College St	0.29	100%
	B-23	2U_(50)	Mauna Loa Ln (2)	Briar Forest Dr to Tahitian Dr	0.23	100%
	B-24	3U_(56)	Mesquite St (3)	Wilson St to SH 95	0.52	100%
	B-25	4D_(110)	SH 95 (1)	Mesquite St to 700' S of Mesquite St	0.13	100%
	B-26	4D_(110)	SH 95 (2)	700' S of Mesquite St to Hawthorne St	0.51	100%
	B-27	4D_(110)	SH 95 (3)	Hawthorne St to Cedar St	0.30	100%
	B-28	4D_(110)	SH 95 (4)	Cedar St to Spring St	0.36	100%
	B-29	4D_(110)	SH 95 (5)	Farm St to Chestnut St/SH 21	0.16	100%
	B-30	3U_(56)	South Street (3)	650' W of Jackson St to 1,200' E of Jackson St	0.32	100%
	B-31	4D_(110)	SH 21 (1)	Chestnut St to Walnut St	0.30	100%
	B-32	4D_(110)	SH 21 (2)	Walnut St to SH 21 WBFR	0.43	100%
	B-33	4D_(110)	SH 95 (6)	SH 21 WBFR to SH 21 EBFR	0.11	100%
	Intersection Improvements					
	I-8	-	Mesquite St & SH 95	Traffic Signal	-	100%
	I-9	-	SH 95 & Cedar St	Traffic Signal	-	100%

Exhibit 1.2
Impact Fee CIP - Service Area A
Bastrop Impact Fees
June 2023

Kimley»Horn

N

0 0.13 0.25 0.5 0.75 1 Miles

Legend

CIP Project Type
- New
- Widening
- Widening 1/2
- Access Management

Non-TIP Roadway Network

Intersections

Service Areas
- A
- B

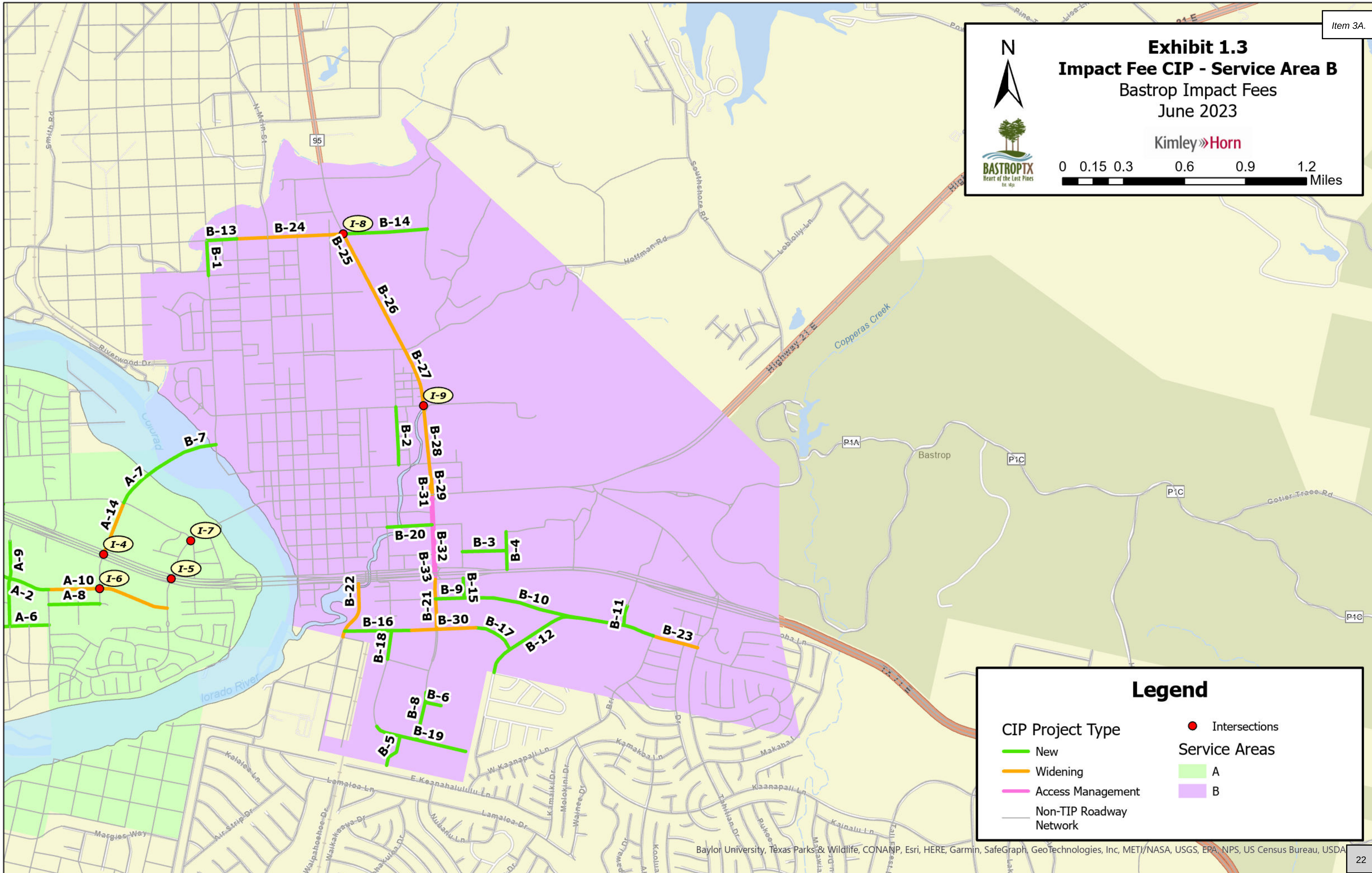
Exhibit 1.3
Impact Fee CIP - Service Area B
Bastrop Impact Fees
June 2023
N
BASTROPTX
Heart of the Lost Pines
Kimley»Horn
0 0.15 0.3 0.6 0.9 1.2 Miles
Legend
CIP Project Type
New
Widening
Access Management
Non-TIP Roadway Network
Intersections
Service Areas
A
B
B-1
B-2
B-3
B-4
B-5
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A-8
A-9
A-10
A-14
I-4
I-5
I-6
I-7
I-8
I-9
95
Highway 21 E
Copperas Creek
Bastrop
Hoffman Rd
Riverwood Dr
Colorado River
Cotter Trace Rd
E Kaanapali Ln
Lamaloa Ln
Margies Way
Baylor University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

4. METHODOLOGY FOR TRANSPORTATION IMPACT FEES

A. SERVICE AREAS

The service areas used in the 2023 Transportation Impact Fee Study are shown in the previously referenced Exhibit 1. These service areas cover the entire corporate boundary of the City of Bastrop. 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." This resulted in the creation of two (2) service areas in the City of Bastrop.

B. SERVICE UNITS

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

Another aspect of the service unit is the service volume that is provided (supplied) by a lane-mile of roadway facility. This number, also referred to as capacity, is a function of the facility type, facility configuration, number of lanes, and level of service. Below is the definition for vehicle-mile.

Vehicle-Mile: The capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length.

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

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

The hourly service volumes used in the Transportation Impact Fee Study are based upon Thoroughfare Capacity Criteria published by the Capital Area Metropolitan Planning Organization (CAMPO) and daily volume ranges per functional classification presented in the City of Bastrop's Thoroughfare Plan. Table 4 shows the service volumes as a function of the proposed facility type, and Table 5 shows the service volumes as a function of the existing facility type.

TxDOT-maintained roadways generally operate higher speeds than City facilities. With this increase in speed comes a potential increase in capacity, as drivers are more likely to travel along higher-speed roads when available. With this understanding, a 20% increase in roadway capacity was applied to all TxDOT-maintained roads that are not already identified under the State Highway System on the City's Thoroughfare Plan.

Table 4. Service Volumes for Proposed Facilities

(used in Appendix A – CIP Units of Supply)

Thoroughfare Plan Classification	Impact Fee Classification[1]	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
State Highway System	4D_(110)	Divided	900
Primary Multimodal Street A	3U_(56)	Undivided	525
			630 (TxDOT)
Primary Multimodal Street B	4D_(80)	Divided	725
			870 (TxDOT)
Local Connector Street	2U_(50)	Undivided	425
			510 (TxDOT)

[1]Represents "Number of Lanes", whether "Divided" or "Undivided", and with approximate Right-of-Way.

Table 5. Service Volumes for Existing Facilities

(used in Appendix B – Existing Facilities Inventory)

Roadway Type[1]	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
1U	One-lane undivided	325
2U *(TxDOT)*	Two-lane undivided (with curb & gutter)	425 *(510)*
2U-R	Two-lane undivided (Rural Cross-Section)	350
3U *(TxDOT)*	Three-lane undivided	525 *(630)*
4U	Four-lane undivided	550
4D *(TxDOT)*	Four-lane divided	725 *(870)*
5U	Five-lane undivided	750
4D – State Highway System	Four-lane divided (Highway Facility)	900

[1]Represents "Number of Lanes", whether "Divided" or "Undivided" and if State Maintained/Owned.

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 Transportation Impact Fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel at a level of service corresponding to the City's standards. The cost per service unit is calculated for each service area based on a specific list of projects within that service area.

The second component of the cost per service unit is the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period. Chapter 395 requires that impact fees be assessed only to pay for growth projected to occur in the City limits within the next ten years (see Section 4.D). As noted earlier, the units of demand are vehicle-miles of travel.

D. Cost of the CIP

All of the project costs for a facility which serves the overall transportation system are eligible to be included in the Transportation Impact Fee 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 Improvement Plan who is not an employee of the political subdivision."

Tables 6-7 present the CIP project list for the City of Bastrop with conceptual level project cost projections, which have been provided by the City (see Appendix C). It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual costs of construction are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted at this time. TxDOT projects are included with a projected City contribution of 20% of the total project cost.

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Table 6. 10-Year Capital Improvement Plan for Transportation Impact Fees with Conceptual Level Project Cost Projections – Service Area A

Service Area	Proj. #	Impact Fee Class	Project	Limits	Length (mi)	% In Service Area	Project Cost in Service Area
A	*Roadway Improvements*						
	A-1	4D_(80)	Agnes (1)	Bear Hunter Drive to Hunter's Crossing	0.46	100%	$ 4,370,000
	A-2	4D_(80)	Agnes (2)	Hospital Drive to Schaefer Blvd	0.35	100%	$ 3,325,000
	A-3	4D_(80)	Bear Hunter Drive (1)	Bear Hunter Drive (existing) to 1,000' N of Shiloh Rd	0.42	100%	$ 4,069,000
	A-4	2U_(50)	Blakey Ln (1)	Edward Burleson Ln to 1,830' E of Edward Burleson Ln	0.35	100%	$ 1,423,000
	A-5	2U_(50)	Blakey Ln (2)	City Limits to Old Austin Highway	0.43	100%	$ 1,773,000
	A-6	3U_(56)	Greenleaf Fisk Dr	Bass Drive to Schaefer Blvd	0.57	100%	$ 2,664,000
	A-7	4D_(80)	Hasler Blvd (1)	Old Austin Hwy to Colorado River	0.26	100%	$ 2,518,000
	A-8	2U_(50)	Marie St	Schaefer Blvd to Hasler Blvd	0.25	100%	$ 1,032,000
	A-9	3U_(56)	Orchard Pkwy	SH 71 to Hunters Point Drive	0.42	100%	$ 1,976,000
	A-10	4D_(80)	Agnes (3)	Schaefer Blvd to Childers Drive	0.60	100%	$ 5,959,000
	A-11	4D_(80)	Edward Burleson	Blakey to SH 21 EBFR	0.32	100%	$ 2,862,000
	A-12	4D_(110)	FM 969 (1)	City Limits to Blakey Ln	0.46	100%	$ 768,800
	A-13	4D_(110)	FM 969 (2)	Blakey Ln to State Highway 21	0.28	100%	$ 479,600
	A-14	4D_(80)	Hasler Blvd (2)	Old Austin Hwy to SH 21	0.25	100%	$ 2,516,000
	A-15	4D_(80)	Home Depot Way	Hunter's Crossing to SH 304	0.34	100%	$ 3,388,000
	A-16	4D_(80)	Agnes (4)	SH 304 to Hospital Drive	0.41	100%	$ 3,614,000
	A-17	4D_(80)	Bear Hunter Drive (2)	State Highway 21 to Bear Hunter Drive (existing)	0.63	100%	$ 5,582,000
	A-18	4D_(110)	SH 304	SH 21 EBFR to Hunters Point Dr	0.55	100%	$ 935,200
	Intersection Improvements						
	I-1	-	Highway 71 & FM 20	Traffic Signal	-	100%	$ 500,000
	I-2	-	FM 969 / Bear Hunter & SH 21	Overpass	-	100%	$ 10,000,000
	I-3	-	Edward Burleson Ln / SH 304 & SH 21	Intersection Improvements	-	100%	$ 300,000
	I-4	-	Hasler Blvd & SH 21	Intersection Improvements	-	100%	$ 300,000
	I-5	-	Loop 150 / Childers Dr & SH 21	Intersection Improvements	-	100%	$ 300,000
	I-6	-	Agnes & Hasler	Roundabout	-	100%	$ 2,000,000
	I-7	-	Old Austin & Loop 150	Roundabout	-	100%	$ 2,000,000
				Service Area Roadway Project Cost Subtotal			**$ 49,254,600**
				Service Area Intersection Project Cost Subtotal			**$ 15,400,000**
				2023 Transportation Impact Fee Study Cost Per Service Area			**$ 39,980**
				Total Cost in SERVICE AREA A			**$ 64,694,580**

Notes:

a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Bastrop.
b. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.
c. The project cost total within Service Area may differ from the total shown in the Summary sheets contained within Appendix C due to some projects that are split between City limits and ETJ.

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Table 7. 10-Year Capital Improvement Plan for Transportation Impact Fees with Conceptual Level Project Cost Projections – Service Area B

Service Area	Proj. #	Impact Fee Class	Project	Limits	Length (mi)	% In Service Area	Project Cost in Service Area
B	*Roadway Improvements*						
	B-1	2U_(50)	Carter St	Mesquite St to Magnolia St	0.17	100%	$ 707,000
	B-2	2U_(50)	Chambers St	Cedar St to Farm St	0.29	100%	$ 1,172,000
	B-3	2U_(50)	Future Collector A	Pitt St to Future Collector B	0.22	100%	$ 893,000
	B-4	2U_(50)	Future Collector B	Lost Pines Ave to SH 71	0.19	100%	$ 764,000
	B-5	2U_(50)	Future Collector C	Technology Drive extension to City Limits	0.17	100%	$ 695,000
	B-6	2U_(50)	Future Collector D	Jackson St extension to 420' E of Jackson St extension	0.08	100%	$ 326,000
	B-7	4D_(80)	Hasler Blvd (3)	Colorado River to Willow St	0.29	100%	$ 2,817,000
	B-8	4D_(80)	Jackson St (1)	Jackson St (existing) to 1,260' S of Jackson St	0.24	100%	$ 2,299,000
	B-9	2U_(50)	Jasper St (1)	Jackson St to 930' E of Jackson St	0.18	100%	$ 722,000
	B-10	2U_(50)	Jasper St (2)	930' E of Jackson St to Hidden Hollow Ct	0.51	100%	$ 2,087,000
	B-11	2U_(50)	Majestic Pine Dr	Majestic Pine Dr (existing) to Mauna Loa Ln	0.10	100%	$ 404,000
	B-12	2U_(50)	Mauna Loa Ln (1)	Pine Lodge Dr to Briar Forest Dr	0.95	100%	$ 3,890,000
	B-13	3U_(56)	Mesquite St (1)	800' W of Wilson St to Wilson St	0.15	100%	$ 701,000
	B-14	3U_(56)	Mesquite St (2)	SH 95 to Piney Ridge Dr	0.41	100%	$ 1,954,000
	B-15	2U_(50)	Pitt St	SH 71 to Jasper St	0.10	100%	$ 401,000
	B-16	3U_(56)	South Street (1)	Lovers Lane to South St (existing)	0.33	100%	$ 1,553,000
	B-17	3U_(56)	South Street (2)	1,200' E of Jackson St to Mauna Loa Ln	0.21	100%	$ 996,000
	B-18	2U_(50)	Technology Drive (1)	Mill St to Business Park Dr	0.14	100%	$ 586,000
	B-19	2U_(50)	Technology Drive (2)	Technology Drive (existing) to City Limits	0.46	100%	$ 1,885,000
	B-20	2U_(50)	Walnut Street	Martin Luther King Dr to SH 21	0.22	100%	$ 907,000
	B-21	4D_(80)	Jackson St (2)	SH 21 to South St	0.25	100%	$ 500,000
	B-22	3U_(56)	Lovers Ln	City Limits to College St	0.29	100%	$ 10,000,000
	B-23	2U_(50)	Mauna Loa Ln (2)	Briar Forest Dr to Tahitian Dr	0.23	100%	$ 300,000
	B-24	3U_(56)	Mesquite St (3)	Wilson St to SH 95	0.52	100%	$ 300,000
	B-25	4D_(110)	SH 95 (1)	Mesquite St to 700' S of Mesquite St	0.13	100%	$ 300,000
	B-26	4D_(110)	SH 95 (2)	700' S of Mesquite St to Hawthorne St	0.51	100%	$ 2,000,000
	B-27	4D_(110)	SH 95 (3)	Hawthorne St to Cedar St	0.30	100%	$ 2,000,000
	B-28	4D_(110)	SH 95 (4)	Cedar St to Spring St	0.36	100%	$ 754,000
	B-29	4D_(110)	SH 95 (5)	Farm St to Chestnut St/SH 21	0.16	100%	$ 348,000
	B-30	3U_(56)	South Street (3)	650' W of Jackson St to 1,200' E of Jackson St	0.32	100%	$ 1,544,000
	B-31	4D_(110)	SH 21 (1)	Chestnut St to Walnut St	0.30	100%	$ 632,000
	B-32	4D_(110)	SH 21 (2)	Walnut St to SH 21 WBFR	0.43	100%	$ 902,000
	B-33	4D_(110)	SH 95 (6)	SH 21 WBFR to SH 21 EBFR	0.11	100%	$ 232,000
	Intersection Improvements						
	I-8	-	Mesquite St & SH 95	Traffic Signal	-	100%	$ 500,000
	I-9	-	SH 95 & Cedar St	Traffic Signal	-	100%	$ 500,000
						Service Area Roadway Project Cost Subtotal	**$ 45,571,000**
						Service Area Intersection Project Cost Subtotal	**$ 1,000,000**
						2023 Transportation Impact Fee Study Cost Per Service Area	**$ 39,980**
						Total Cost in SERVICE AREA B	**$ 46,610,980**

Notes:

a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Bastrop.
b. The planning level cost projections shall not supersede the City's design standards contained within the Subdivision Ordinance or the determination of the City Engineer for a specific project.
c. The project cost total within Service Area may differ from the total shown in the Summary sheets contained within Appendix C due to some projects that are split between City limits and ETJ.

E. Service Unit Calculation

The basic service unit for the computation of Bastrop's Transportation Impact Fees is the vehicle-mile of travel during the afternoon peak-hour. To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year period.

The growth in vehicle-miles from 2023 to 2033 is based upon projected changes in residential and non-residential growth for the period. In order to determine this growth, baseline estimates of population, basic square feet, service square feet, and retail square feet for 2023 were made by the City, along with projections for each of these demographic statistics through 2033. The Land Use Assumptions section of this report details the growth estimates used for the impact fee determination.

The residential and non-residential statistics in the Land Use Assumptions provide the "independent variables" that are used to calculate the existing (2023) and projected (2033) transportation service units used to establish the Transportation Impact Fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for each service area are the sum of the vehicle-miles "generated" by each category of land use in the service area.

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

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

Building square footage is the most common independent variable for the estimation of non-residential trips in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th 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 or development modification that would require the assessment of an impact fee.

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

The transportation demand factors are aggregate rates derived from two sources – the ITE Trip Generation Manual, 11th Edition and the Replica online platform. ITE's Trip Generation Manual, 11th Edition provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. These trips are called *pass-by trips*, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail rate to avoid double counting trips.

The next component of the transportation demand factor accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics determined through the Replica online platform. This database serves as an activity-based travel demand model from which several travel parameters can be extracted based on a combination of existing data and projected traffic conditions. Trips tied to lodging, recreational, and industrial land uses were assumed by considering traffic both entering Bastrop County. Trips for all remaining land uses were assumed to be exclusively within the City and County limits.

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

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

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

Variables:

- TDF = Transportation Demand Factor
- T = Trip Rate (peak hour trips / unit)
- P_b = Pass-By Discount (% of trips)
- L_{max} = Maximum Trip Length (miles)
- L = Average Trip Length (miles)
- OD = Origin-Destination Reduction (50%)
- SA_L = Max Service Area Trip Length (see Table 8)

For land uses which are characterized by longer average trip lengths (primarily residential uses), the maximum trip length has been limited to a length based on the nature of the roadway network within the service area, along with consideration of the existing City boundaries. Although Chapter 395 of the Texas Local Government Code allows for a service area diameter of six miles, the longest trip length along Bastrop's roadway network is approximately five miles. Therefore, the maximum trip length was assumed to be five miles.

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 Transportation 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 Bastrop to both residential and non-residential land uses. To avoid counting these trips as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use. This methodology is consistent with that used in the National Household Travel Survey.

Table 8 shows the derivation of the Transportation Demand Factor for the two residential land use and the three non-residential land use categories for each service area. The values utilized

for all variables shown in the transportation demand factor equation are also shown in the table.

Table 8. Transportation Demand Factor Calculations

Variable	Single-Family	Multifamily	Basic	Service	Retail
T	0.94	0.39	0.65	1.44	3.40
P_b	0%	0%	0%	0%	29%
L	7.81	7.81	13.20	7.04	5.83
L_{max} *	3.91	3.91	6.00	3.52	2.92
TDF	3.68	1.52	3.90	5.07	7.04

The application of the demographic projections and the transportation demand factors are presented in the 10-Year Growth Projections in Table 9. This table shows the total growth in vehicle-miles by service area for the years 2023 and 2033. These estimates and projections lead to the Vehicle-Miles of Travel for both 2023 and 2033.

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Table 9. 10-Year Growth Projections

2023 - 2033 Growth Projections[1]

SERVICE AREA	RESIDENTIAL VEHICLE-MILES					NON-RESIDENTIAL SQUARE FEET[5]			TRANS. DEMAND FACTOR[6]			NON-RESIDENTIAL VEHICLE-MILES[10]				TOTAL VEHICLE MILES[11]
	Single Family Units	Trip Rate TDF[2]	Multi Family Units	Trip Rate TDF[3]	VEHICLE MILES[4]	BASIC	SERVICE	RETAIL	BASIC[7]	SERVICE[8]	RETAIL[9]	BASIC	SERVICE	RETAIL	TOTAL	
		0.94		*0.39*					*0.65*	*1.44*	*2.41*					
A	1,078	3.68	3,470	1.52	9,241	0	491,000	2,347,000	3.90	5.07	7.04	0	2,489	16,523	19,012	28,253
B	1,780		1,575		8,944	2,170,000	217,000	949,000				8,463	1,100	6,681	16,244	25,188
Totals	**2,858**		**5,045**		**18,186**	**2,170,000**	**708,000**	**3,296,000**				**8,463**	**3,589**	**23,204**	**35,256**	**53,442**

VEHICLE-MILES OF INCREASE (2023 - 2033)

SERVICE AREA	VEH-MILES
A	28,253
B	25,188

Notes:

[1] From *Chapter 1: Land Use Assumptions*

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

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

[4] Calculated by multiplying TDF by the number of dwelling units

[5] From *Chapter 1: Land Use Assumptions*

[6] *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use

[7] 'Basic' corresponds to *General Light Industrial* land use and *trip generation rate*

[8] 'Service' corresponds to *General Office Building* land use and *trip generation rate*

[9] 'Retail' corresponds to *Shopping Center (>150k)* 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

5. TRANSPORTATION 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 Transportation Impact Fee CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the ten-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 10 illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

Table 10. Maximum Assessable Transportation Impact Fee Computation

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

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

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

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

3	*Total Vehicle-Miles of Existing Deficiencies*	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from Appendix B – Existing Roadway Facilities Inventory)

A number of facilities identified in the CIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of excess traffic over capacity on existing facilities to be deducted as recoverable from capacity expansions in the TIF CIP.

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

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

5	*Total Cost of the Roadway CIP within the Service Area*	The total cost of the Roadway projects within each service area (from Tables 6-7: 10-Year RIF CIP with Conceptual Level Cost Opinions)

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

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

Using the ratio of vehicle-miles added by the RIF 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 and deficiencies).

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

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

8	*Total Vehicle-Miles of New Demand over Ten Years*	Based upon the growth projection provided in the *Land Use Assumptions*, an estimate of the number of new vehicle-miles within the service area over the next ten years (from Table 9).

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

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

In order to ensure that the vehicle-miles added by the Roadway 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 CIP exceeds the growth projected to occur in the next ten years, the Roadway CIP cost is reduced accordingly.

11	*Cost of Roadway CIP Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (Line 6) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (Line 10). (Line 6 * Line 10)

This value is the total CIP Roadway 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.

12	*Total Cost of the Intersection CIP within the Service Area*	The total cost of the Intersection projects within each service area (from Tables 6-7: 10-Year Intersection CIP with Conceptual Level Cost Opinions).

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

13	*Percent of Intersection Capacity Added Attributable to New Growth*	The result of dividing Total Vehicle-Miles of New Demand (from Table 9) by the Total Vehicle-Miles of Existing and New Demand in each service area. (see *Land Use Assumptions*)

In order to ensure that the capacity added by the Intersection CIP does not exceed the amount needed to accommodate growth beyond the ten-year window, the anticipated vehicle-mile growth in each service area is calculated as a percentage of the vehicle-miles.

14	*Cost of Intersection RIF CIP Attributable to New Growth*	The result of multiplying the Cost of the Intersection RIF CIP (Line 12) by the Percent of Intersection Capacity Added Attributable to New Growth (Line 13). (Line 12 * Line 13)

This value is the total Intersection CIP project cost (excluding financial costs) that may be recovered through impact fees.

15	*Cost of Total RIF CIP Attributable to New Growth*	The result of adding the Cost of the Roadway CIP Attributable to new growth (Line 11) to the Cost of the Intersection CIP Attributable to new growth (Line 14) less credits for previous contributions. (Line 11 + Line 14)

This value is the Total RIF CIP project cost (including the study cost) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. Plan For Awarding the Transportation Impact Fee Credit

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

(A) "a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or

(B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan…"

The plan is summarized in Appendix D (Summary of Transportation Impact Fee Credit Determination) and Appendix E (Transportation Impact Fee Credit Determination Supporting Exhibits). The following table summarizes the portions of Table 11 that utilize this credit calculation.

Line	Title	Description
16	*Financing Costs*	(from Appendix D – Summary of Transportation Impact Fee Credit Determination)
17	*Interest Earnings*	(from Appendix D – Summary of Transportation Impact Fee Credit Determination)
18	*Cost of the Total Transportation Impact Fee CIP and Financing Attributable to New Growth*	The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, less Interest Earnings. (Line 15 + Line 16 – Line 17)
19	*Pre-Credit Maximum Fee Per Service Unit*	Found by dividing the Cost of the CIP and Financing Attributable to New Growth (Line 18) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 18 / Line 8)
20	*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 E – Transportation Impact Fee Credit Determination Supporting Exhibits)
21	*Recoverable Cost of the Transportation Impact Fee CIP and Financing*	The difference between the Cost of the CIP and Financing Attributable to New Growth (Line 18) and the Credit for Ad Valorem Taxes (Line 20). (Line 18 - Line 20)
22	*Maximum Assessable Fee Per Service Unit*	Found by dividing the Recoverable Cost of the RIF CIP and Financing (Line 21) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 5). (Line 21 / Line 5)

Table 11. Maximum Assessable Impact Fee

	SERVICE AREA:	SA A	SA B
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE IMPACT FEE CIP (FROM CIP UNITS OF SUPPLY, **APPENDIX B**)	19,958	19,511
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM CIP UNITS OF SUPPLY, **APPENDIX B**)	2,124	5,189
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, **APPENDIX C**)	34	490
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	17,800	13,832
5	TOTAL COST OF THE TRANSPORTATION IMPACT FEE CIP AND STUDY WITHIN THE SERVICE AREA (FROM **TABLES 6-7**)	$49,294,580	$45,610,980
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	$43,964,502	$32,335,148
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	$5,330,078	$13,275,832
8	TOTAL VEH-MI OF NEW DEMAND OVER 10 YEARS (FROM **TABLE 9** AND **LAND USE ASSUMPTIONS**)	28,253	25,188
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	158.7%	182.1%
10	CHAPTER 395 CHECK (IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE)	100.0%	100.0%
11	COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 6 * LINE 10)	$43,964,502	$32,335,148
12	TOTAL COST OF THE INTERSECTION IMPACT FEE CIP WITHIN SERVICE AREA (FROM **TABLES 6-7**)	$15,400,000	$1,000,000
13	PERCENT OF INTERSECTION CAPACITY ADDED ATTRIBUTABLE TO GROWTH (FROM **TABLE 9** AND **LAND USE ASSUMPTIONS**)	100.0%	94.7%
14	COST OF INTERSECTION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 12 * LINE 13)	$15,400,000	$947,472
15	COST OF TOTAL RECOVERABLE TRANSPORTATION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 14)	$59,364,502	$33,282,620
16	FINANCING COSTS (FROM SUMMARY OF TRANSPORTATION IMPACT FEE CREDIT DETERMINATION, **APPENDIX D**)	$23,960,997	$13,433,698
17	INTEREST EARNINGS (FROM SUMMARY OF TRANSPORTATION IMPACT FEE CREDIT DETERMINATION, **APPENDIX D**)	$10,391,403	$5,825,510
18	COST OF THE TOTAL TRANSPORTATION IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO GROWTH (LINE 15 + LINE 16 - LINE 17)	$72,934,096	$40,890,808
19	PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 18 / LINE 8)	$2,581	$1,623
20	CREDIT FOR AD VALOREM TAXES (FROM TRANSPORTATION IMPACT FEE CREDIT DETERMINATION SUPPORTING EXHIBITS, **APPENDIX E**)	$6,540,887	$5,253,524
21	RECOVERABLE COST OF THE TRANSPORTATION IMPACT FEE CIP AND FINANCING (LINE 18 - LINE 20)	$66,393,209	$35,637,284
22	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 21 / LINE 8)	$2,349	$1,414

C. Service Unit Demand Per Unit of Development

The Transportation Impact Fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in Table 12. This table lists the predominant land uses that may occur within the City of Bastrop. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

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

The source of the trip generation and pass-by statistics is ITE's Trip Generation Manual, 11th Edition, the latest edition of the definitive source for trip generation data. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The adjusted trip length values are based on the region-wide travel characteristics determined by the Replica online travel demand model. The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above the maximum service area trip length, the maximum trip length used for calculation is reduced. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the Transportation Demand Factor, is used in the impact fee estimate to compute the number of service units 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.

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Table 12. 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 Mength (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
										6.00	
PORT AND TERMINAL											
Truck Terminal	30	1,000 SF GFA	1.87	0%		1.87	13.20	50%	6.60	6.00	11.22
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.65	0%		0.65	13.20	50%	6.60	6.00	3.90
Industrial Park	130	1,000 SF GFA	0.34	0%		0.34	13.20	50%	6.60	6.00	2.04
Warehousing	150	1,000 SF GFA	0.18	0%		0.18	13.20	50%	6.60	6.00	1.08
Mini-Warehouse	151	1,000 SF GFA	0.15	0%		0.15	13.20	50%	6.60	6.00	0.90
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit(s)	0.94	0%		0.94	7.81	50%	3.91	3.91	3.68
Single-Family Attached Housing	215	Dwelling Unit(s)	0.57	0%		0.57	7.81	50%	3.91	3.91	2.23
Multifamily Housing (Low-Rise)	220	Dwelling Unit(s)	0.51	0%		0.51	7.81	50%	3.91	3.91	1.99
Multifamily Housing (Mid-Rise)	221	Dwelling Unit(s)	0.39	0%		0.39	7.81	50%	3.91	3.91	1.52
Multifamily Housing (High-Rise)	222	Dwelling Unit(s)	0.32	0%		0.32	7.81	50%	3.91	3.91	1.25
Senior Adult Housing-Detached	251	Dwelling Unit(s)	0.30	0%		0.30	7.81	50%	3.91	3.91	1.17
Senior Adult Housing-Attached	252	Dwelling Unit(s)	0.25	0%		0.25	7.81	50%	3.91	3.91	0.98
Assisted Living	254	Bed(s)	0.24	0%		0.24	7.81	50%	3.91	3.91	0.94
LODGING											
Hotel	310	Room(s)	0.59	0%		0.59	6.41	50%	3.20	3.20	1.89
Motel	320	Room(s)	0.36	0%		0.36	6.41	50%	3.20	3.20	1.15
RECREATIONAL											
Campground/RV Park	416	Occupied Campsites	0.27	0%		0.27	10.95	50%	5.47	5.47	1.48
Golf Driving Range	432	Driving Position(s)	1.25	0%		1.25	10.95	50%	5.47	5.47	6.84
Golf Course	430	Hole(s)	2.91	0%		2.91	10.95	50%	5.47	5.47	15.92
Recreational Community Center	495	1,000 SF GFA	2.50	0%		2.50	10.95	50%	5.47	5.47	13.68
Ice Skating Rink	465	1,000 SF GFA	1.33	0%		1.33	10.95	50%	5.47	5.47	7.28
Miniature Golf Course	431	Hole(s)	0.33	0%		0.33	10.95	50%	5.47	5.47	1.81
Multiplex Movie Theater	445	Screen(s)	13.96	0%		13.96	10.95	50%	5.47	5.47	76.36
Racquet/Tennis Club	491	Court(s)	3.82	0%		3.82	10.95	50%	5.47	5.47	20.90
INSTITUTIONAL											
Elementary School	520	Student(s)	0.16	0%		0.16	1.67	50%	0.83	0.83	0.13
Middle School/Junior High School	522	Student(s)	0.15	0%		0.15	1.67	50%	0.83	0.83	0.12
High School	525	Student(s)	0.14	0%		0.14	1.67	50%	0.83	0.83	0.12
Church	560	1,000 SF GFA	0.49	0%		0.49	1.51	50%	0.75	0.75	0.37
Day Care Center	565	1,000 SF GFA	11.12	44%	C	6.23	1.67	50%	0.83	0.83	5.17
University/College	550	Student(s)	0.15	0%		0.15	1.67	50%	0.83	0.83	0.12
MEDICAL											
Clinic	630	1,000 SF GFA	3.69	0%		3.69	5.99	50%	3.00	3.00	11.07
Hospital	610	1,000 SF GFA	0.86	0%		0.86	5.99	50%	3.00	3.00	2.58
Nursing Home	620	Bed(s)	0.14	0%		0.14	5.99	50%	3.00	3.00	0.42
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	5.99	50%	3.00	3.00	7.41

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Table 12. Land-Use Vehicle-Mile Equivalency Table (LUVMET) (Continued)

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 Mength (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.30	0%		1.30	7.04	50%	3.52	3.52	4.58
General Office Building	710	1,000 SF GFA	1.44	0%		1.44	7.04	50%	3.52	3.52	5.07
Medical-Dental Office Building	720	1,000 SF GFA	3.93	0%		3.93	7.04	50%	3.52	3.52	13.83
Single Tenant Office Building	715	1,000 SF GFA	1.76	0%		1.76	7.04	50%	3.52	3.52	6.20
Office Park	750	1,000 SF GFA	1.30	0%		1.30	7.04	50%	3.52	3.52	4.58
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	5.83	50%	2.92	2.92	5.46
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	5.83	50%	2.92	2.92	8.15
Gasoline/Service Station	944	Fueling Position(s)	13.91	57%	C	5.98	1.51	50%	0.75	0.75	4.49
Gasoline Station w/ Convenience Market	945	Fueling Position(s)	18.42	56%	B	8.10	1.51	50%	0.75	0.75	6.08
Automobile Sales (New)	840	1,000 SF GFA	2.42	20%	B	1.94	5.83	50%	2.92	2.92	5.66
Quick Lubrication Vehicle Shop	941	Servicing Position(s)	4.85	40%	B	2.91	5.83	50%	2.92	2.92	8.50
Automated Car Wash	948	Car Wash Tunnel(s)	77.50	40%	B	46.50	1.51	50%	0.76	0.76	35.34
Tire Store	848	1,000 SF GFA	2.09	25%	C	1.57	5.83	50%	2.92	2.92	4.58
Dining											
Fast-Food Restaurant w/ D.T.	934	1,000 SF GFA	33.03	50%	A	16.52	1.55	50%	0.78	0.78	12.89
Fast-Food Restaurant w/o D.T.	933	1,000 SF GFA	33.21	50%	B	16.61	1.55	50%	0.78	0.78	12.96
High-Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.05	43%	A	5.16	1.55	50%	0.78	0.78	4.02
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	1.55	50%	0.78	0.78	3.41
Coffee/Donut Shop w/ D.T.	937	1,000 SF GFA	38.99	70%	A	11.70	1.55	50%	0.78	0.78	9.13
Other Retail											
Free Standing Discount Store	813	1,000 SF GFA	4.83	20%	C	3.86	5.83	50%	2.92	2.92	11.27
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.83	50%	2.92	2.92	14.19
Home Improvement Superstore	862	1,000 SF GFA	2.29	42%	A	1.33	5.83	50%	2.92	2.92	3.88
Pharmacy/Drugstore w/o Drive-Through Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.83	50%	2.92	2.92	11.68
Pharmacy/Drugstore w/ Drive-Through Window	881	1,000 SF GFA	10.25	49%	A	5.23	5.83	50%	2.92	2.92	15.27
Shopping Center (>150k SF)	820	1,000 SF GFA	3.40	29%	C	2.41	5.83	50%	2.92	2.92	7.04
Shopping Plaza (40-150k)	821	1,000 SF GFA	5.19	40%	C	3.11	5.83	50%	2.92	2.92	9.08
Strip Retail Plaza (<40k SF)	822	1,000 SF GFA	6.59	40%	B	3.95	5.83	50%	2.92	2.92	11.53
Supermarket	850	1,000 SF GFA	8.95	24%	C	6.80	5.83	50%	2.92	2.92	19.86
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.83	50%	2.92	2.92	10.22
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.83	50%	2.92	2.92	4.00
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	6.11	50%	3.05	3.05	22.20
Drive-In Bank	912	Drive-In Lane(s)	21.01	35%	A	13.66	6.11	50%	3.05	3.05	41.66
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	6.11	50%	3.05	3.05	3.11

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (September 2017)

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

C: 2021 Pass-By Tables for ITETripGen Appendices

6. SAMPLE CALCULATIONS

The following section details two examples of maximum assessable Transportation Impact Fee calculations.

Example 1:
Development Type - One Unit of Single-Family Housing in Service Area B

Transportation Impact Fee Calculation Steps – Example 1	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	From Table 12 [Land Use – Vehicle-Mile Equivalency Table] Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 3.68
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	From Table 11, Line 22 [Maximum Assessable Fee Per Service Unit] Service Area B: $1,414
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 3.68 * $1,414 Maximum Assessable Impact Fee = $5,203.52

Example 2:
Development Type – 125,000 SF Home Improvement Superstore in Service Area B

Transportation Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	From Table 12 [Land Use – Vehicle-Mile Equivalency Table] Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.88
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	From Table 11, Line 22 [Maximum Assessable Fee Per Service Unit] Service Area B: $1,414
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 125 * 3.88 * $1,414 Maximum Assessable Impact Fee = $685,790.00

7. CONCLUSION

The City of Bastrop has established a process to implement the assessment and collection of Transportation 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 Transportation Impact Fee that could be assessed by the City of Bastrop within each service area. The maximum assessable Transportation Impact Fees calculated in this report are as shown below:

Service Area	A	B
2023 Maximum Assessable Fee Per Service Unit ($/Veh-mi)	$2,349	$1,414

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

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

8. APPENDICES

A. CIP Service Units of Supply

City of Bastrop - 2023 Transportation Impact Fee Study

CIP Service Units of Supply

Service Area A

6/20/2023

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST
A-1	Agnes (1)	Bear Hunter Drive to Hunter's Crossing	0.46	4	4D_(80)	0	100%	725	1321	0	1,321	$ 4,370,000
A-2	Agnes (2)	Hospital Drive to Schaefer Blvd	0.35	4	4D_(80)	0	100%	725	1005	0	1005	$ 3,325,000
A-3	Bear Hunter Drive (1)	Bear Hunter Drive (existing) to 1,000' N of Shiloh Rd	0.42	4	4D_(80)	0	100%	725	1230	0	1230	$ 4,069,000
A-4	Blakey Ln (1)	Edward Burleson Ln to 1,830' E of Edward Burleson Ln	0.35	2	2U_(50)	0	100%	425	295	0	295	$ 1,423,000
A-5	Blakey Ln (2)	City Limits to Old Austin Highway	0.43	2	2U_(50)	0	100%	425	368	0	368	$ 1,773,000
A-6	Greenleaf Fisk Dr	Bass Drive to Schaefer Blvd	0.57	3	3U_(56)	0	100%	525	890	0	890	$ 2,664,000
A-7	Hasler Blvd (1)	Old Austin Hwy to Colorado River	0.26	4	4D_(80)	0	100%	725	761	0	761	$ 2,518,000
A-8	Marie St	Schaefer Blvd to Hasler Blvd	0.25	2	2U_(50)	0	100%	425	214	0	214	$ 1,032,000
A-9	Orchard Pkwy	SH 71 to Hunters Point Drive	0.42	3	3U_(56)	0	100%	525	661	0	661	$ 1,976,000
A-10	Agnes (3)	Schaefer Blvd to Childers Drive	0.60	4	4D_(80)	378	100%	725	1744	227	1,517	$ 5,959,000
A-11	Edward Burleson	Blakey to SH 21 EBFR	0.32	4	4D_(80)	774	100%	725	931	248	683	$ 2,862,000
A-12	FM 969 (1)	City Limits to Blakey Ln	0.46	5	4D_(110)	1,035	100%	900	2050	471	1,579	$ 768,800
A-13	FM 969 (2)	Blakey Ln to State Highway 21	0.28	5	4D_(110)	683	100%	900	1278	194	1,084	$ 479,600
A-14	Hasler Blvd (2)	Old Austin Hwy to SH 21	0.25	4	4D_(80)	914	100%	725	736	232	504	$ 2,516,000
A-15	Home Depot Way	Hunter's Crossing to SH 304	0.34	4	4D_(80)	17	100%	725	991	6	985	$ 3,388,000
A-16	Agnes (4)	SH 304 to Hospital Drive	0.41	4	4D_(80)	17	100%	725	1175	7	1,168	$ 3,614,000
A-17	Bear Hunter Drive (2)	State Highway 21 to Bear Hunter Drive (existing)	0.63	4	4D_(80)	63	100%	725	1815	39	1,776	$ 5,582,000
A-18	SH 304	SH 21 EBFR to Hunters Point Dr	0.55	5	4D_(110)	1,264	100%	900	2493	700	1,793	$ 935,200.00
SUBTOTAL									**19,958**	**2,124**	**17,834**	**$ 49,254,600**
I-1	Highway 71 & FM 20	Traffic Signal					100%	-	-	-	-	$ 500,000
I-2	FM 969 / Bear Hunter & SH 21	Overpass					100%	-	-	-	-	$ 10,000,000
I-3	Edward Burleson Ln / SH 304 & SH 21	Intersection Improvements					100%	-	-	-	-	$ 300,000
I-4	Hasler Blvd & SH 21	Intersection Improvements			INTERSECTION IMPROVEMENTS		100%	-	-	-	-	$ 300,000
I-5	Loop 150 / Childers Dr & SH 21	Intersection Improvements					100%	-	-	-	-	$ 300,000
I-6	Agnes & Hasler	Roundabout					100%	-	-	-	-	$ 2,000,000
I-7	Old Austin & Loop 150	Roundabout					100%	-	-	-	-	$ 2,000,000
SUBTOTAL												**$ 15,400,000**

2023 Roadway Impact Fee Study Cost Per Service Area $ 39,980

TOTAL COST IN SERVICE AREA A $ 64,694,580

City of Bastrop - 2023 Transportation Impact Fee Study

CIP Service Units of Supply

Service Area B

6/20/2023

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST
B-1	Carter St	Mesquite St to Magnolia St	0.17	2	2U_(50)	0	100%	425	146	0	146	$ 707,000
B-2	Chambers St	Cedar St to Farm St	0.29	2	2U_(50)	0	100%	425	243	0	243	$ 1,172,000
B-3	Future Collector A	Pitt St to Future Collector B	0.22	2	2U_(50)	0	100%	425	185	0	185	$ 893,000
B-4	Future Collector B	Lost Pines Ave to SH 71	0.19	2	2U_(50)	0	100%	425	159	0	159	$ 764,000
B-5	Future Collector C	Technology Drive extension to City Limits	0.17	2	2U_(50)	0	100%	425	144	0	144	$ 695,000
B-6	Future Collector D	Jackson St extension to 420' E of Jackson St extension	0.08	2	2U_(50)	0	100%	425	68	0	68	$ 326,000
B-7	Hasler Blvd (3)	Colorado River to Willow St	0.29	4	4D_(80)	0	100%	725	851	0	851	$ 2,817,000
B-8	Jackson St (1)	Jackson St (existing) to 1,260' S of Jackson St	0.24	4	4D_(80)	0	100%	725	695	0	695	$ 2,299,000
B-9	Jasper St (1)	Jackson St to 930' E of Jackson St	0.18	2	2U_(50)	0	100%	425	150	0	150	$ 722,000
B-10	Jasper St (2)	930' E of Jackson St to Hidden Hollow Ct	0.51	2	2U_(50)	0	100%	425	433	0	433	$ 2,087,000
B-11	Majestic Pine Dr	Majestic Pine Dr (existing) to Mauna Loa Ln	0.10	2	2U_(50)	0	100%	425	84	0	84	$ 404,000
B-12	Mauna Loa Ln (1)	Pine Lodge Dr to Briar Forest Dr	0.95	2	2U_(50)	0	100%	425	807	0	807	$ 3,890,000
B-13	Mesquite St (1)	800' W of Wilson St to Wilson St	0.15	3	3U_(56)	0	100%	525	234	0	234	$ 701,000
B-14	Mesquite St (2)	SH 95 to Piney Ridge Dr	0.41	3	3U_(56)	0	100%	525	653	0	653	$ 1,954,000
B-15	Pitt St	SH 71 to Jasper St	0.10	2	2U_(50)	0	100%	425	83	0	83	$ 401,000
B-16	South Street (1)	Lovers Lane to South St (existing)	0.33	3	3U_(56)	0	100%	525	519	0	519	$ 1,553,000
B-17	South Street (2)	1,200' E of Jackson St to Mauna Loa Ln	0.21	3	3U_(56)	0	100%	525	333	0	333	$ 996,000
B-18	Technology Drive (1)	Mill St to Business Park Dr	0.14	2	2U_(50)	0	100%	425	122	0	122	$ 586,000
B-19	Technology Drive (2)	Technology Drive (existing) to City Limits	0.46	2	2U_(50)	0	100%	425	391	0	391	$ 1,885,000
B-20	Walnut Street	Martin Luther King Dr to SH 21	0.22	2	2U_(50)	0	100%	425	188	0	188	$ 907,000
B-21	Jackson St (2)	SH 21 to South St	0.25	4	4D_(80)	530	100%	725	717	131	586	$ 500,000
B-22	Lovers Ln	City Limits to College St	0.29	3	3U_(56)	543	100%	525	455	157	298	$ 10,000,000
B-23	Mauna Loa Ln (2)	Briar Forest Dr to Tahitian Dr	0.23	2	2U_(50)	20	100%	425	192	5	187	$ 300,000
B-24	Mesquite St (3)	Wilson St to SH 95	0.52	3	3U_(56)	116	100%	525	825	61	764	$ 300,000
B-25	SH 95 (1)	Mesquite St to 700' S of Mesquite St	0.13	5	4D_(110)	2,096	100%	900	592	276	316	$ 300,000
B-26	SH 95 (2)	700' S of Mesquite St to Hawthorne St	0.51	5	4D_(110)	2,096	100%	900	2301	1,072	1,229	$ 2,000,000
B-27	SH 95 (3)	Hawthorne St to Cedar St	0.30	5	4D_(110)	2,096	100%	900	1330	619	711	$ 2,000,000
B-28	SH 95 (4)	Cedar St to Spring St	0.36	5	4D_(110)	2,096	100%	900	1607	748	859	$ 754,000
B-29	SH 95 (5)	Farm St to Chestnut St/SH 21	0.16	5	4D_(110)	2,096	100%	900	741	345	396	$ 348,000
B-30	South Street (3)	650' W of Jackson St to 1,200' E of Jackson St	0.32	3	3U_(56)	44	100%	525	500	14	486	$ 1,544,000
B-31	SH 21 (1)	Chestnut St to Walnut St	0.30	5	4D_(110)	2,196	100%	900	1347	657	690	$ 632,000
B-32	SH 21 (2)	Walnut St to SH 21 WBFR	0.43	5	4D_(110)	2,200	100%	900	1922	940	982	$ 902,000
B-33	SH 95 (6)	SH 21 WBFR to SH 21 EBFR	0.11	5	4D_(110)	1,490	100%	900	494	164	330	$ 232,000
SUBTOTAL									**19,511**	**5,189**	**14,322**	**$ 45,571,000**
I-8	Mesquite St & SH 95	Traffic Signal	INTERSECTION IMPROVEMENTS				100%	-	-	-	-	$ 500,000
I-9	SH 95 & Cedar St	Traffic Signal					100%	-	-	-	-	$ 500,000
SUBTOTAL												**$ 1,000,000**

2023 Roadway Impact Fee Study Cost Per Service Area $ 39,980

TOTAL COST IN SERVICE AREA B $ 46,610,980

B. Existing Roadway Facilities Inventory

City of Bastrop - 2023 Transportation Impact Fee Study
Existing Roadway Facilities Inventory

Service Area A

6/20/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	TxDOT (Y/N)	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Agnes	SH 304	Hospital Drive	2140	0.41	1	1	2U		6	11	100%	425	425	172	172	2	4	170	168		
Agnes	Schaefer Blvd	Childers Drive	3177	0.60	1	1	2U		179	199	100%	425	425	256	256	108	120	148	136		
Bear Hunter Drive	State Highway 21	Bear Hunter Drive (existing)	3305	0.63	1	1	2U		25	38	100%	425	425	266	266	16	24	250	242		
Blakey Ln	FM 969	Duff Dr	2764	0.52	1	1	3U	N	268	146	100%	525	525	275	275	140	76	135	198		
Blakey Ln	Duff Dr	Edward Burleson Ln	1915	0.36	1	1	3U	Y	268	146	100%	630	630	229	229	97	53	131	176		
Childers Dr	Hasler Blvd	Trailside Ln	2661	0.50	1	1	2U		179	199	100%	425	425	214	214	90	100	124	114		
Childers Dr	Schaefer Blvd	Hasler Blvd	2661	0.50	1	1	2U		179	199	100%	425	425	214	214	90	100	124	114		
Duff Drive	Blakey	SH 71	1485	0.28	1	1	3U		36	36	100%	525	525	148	148	10	10	138	138		
Edward Burleson	Blakey	SH 21 EBFR	1696	0.32	1	1	3U	Y	229	545	100%	630	630	202	202	74	175	129	27		
FM 20	SH 21 EBFR	City Limits	1772	0.34	1	1	3U	Y	386	557	100%	900	900	302	302	130	187	173	115		
FM 20	City Limits	Solomon Ln	4178	0.79	1	1	3U	Y	212	211	50%	900	900	356	356	84	83	272	273		
FM 969	Blakey Ln	State Highway 21	1501	0.28	1	1	2U	Y	305	378	100%	900	900	256	256	87	107	169	148		
FM 969	City Limits	Blakey Ln	2406	0.46	1	1	2U	Y	387	648	100%	900	900	410	410	176	295	234	115		
Hasler Blvd	State Highway 21 W Frontage Rd	Walmart Drive	1187	0.22	1	1	2U	Y	14	13	100%	510	510	115	115	3	3	111	112		
Hasler Blvd	Old Austin Hwy	SH 21	1342	0.25	1	1	3U	Y	467	447	100%	630	630	160	160	119	114	41	47		
Home Depot Way	Hunter's Crossing	SH 304	1804	0.34	1	1	2U		6	11	100%	425	425	145	145	2	4	143	141		
Hunter's Crossing	SH 71	Hunter's Point	2573	0.49	1	1	3U		156	156	100%	525	525	256	256	76	76	180	180		
Hunters Point Dr	Bear Hunter Dr	State Highway 304	3943	0.75	1	1	2U	Y	122	64	100%	510	510	381	381	91	48	290	333		
Loop 150	SH 21	Old Austin Hwy	1161	0.22	1	1	3U	Y	446	376	100%	900	900	198	198	98	83	100	115		
Loop 150	Old Austin Hwy	Colorado River	1580	0.30	1	1	3U	Y	926	835	100%	900	900	269	269	277	250	-8	19	8	
Lovers Ln	Point approx. 700 ft north of intersection with Margies Way	Point along Lovers Ln where the road turn sharply right	2359	0.45	1	1	2U	Y	217	326	100%	510	510	228	228	97	146	131	82		
Old Austin Highway	Point approx 200 ft west of eastern entrance to Silver Pines Nursing and Rehabilitation Center	Texas Loop 150	2318	0.44	1	1	3U	Y	694	643	100%	630	630	277	277	305	282	-28	-6	28	6
Old Austin Highway	Point approx 75 ft west of entrance to Brite & Shiny Car Wash Bastrop	Point approx 200 ft west of eastern entrance to Silver Pines Nursing and Rehabilitation Center	3037	0.58	2	2	4U	Y	171	324	100%	660	660	759	759	98	186	661	573		
Orchard Pkwy	SH 71	Hunters Point Drive	476	0.09	1	1	2U		27	43	100%	425	425	38	38	2	4	36	34		
Schaefer Blvd	Agnes	Childers Dr	1940	0.37	1	1	2U		179	199	100%	425	425	156	156	66	73	90	83		
SH 21/71	1,200' E of Colorado River	Colorado River	1202	0.23	2	2	4U	Y	941	1026	100%	900	900	410	410	214	234	196	176		
SH 21/71	Hasler Blvd	Point approx. 400ft west of bridge where divided lanes merge into undivided	444	0.08	2	2	4D	Y	941	1026	100%	900	900	151	151	79	86	72	65		
SH 304	SH 21 EBFR	Hunters Point Dr	2923	0.55	2	2	4U	Y	473	791	100%	900	900	996	996	262	438	735	559		
SH 304	Hunters Point Dr	City Limits	422	0.08	1	1	3U	Y	329	489	100%	900	900	72	72	26	39	46	33		
SH 71 EBFR	Hasler Blvd	Point approx. 400ft west of bridge where divided lanes merge into undivided	3516	0.67	2	2	4D	Y	792	0	100%	900	900	1,199	1,199	527	0	671	1,199		
SH 71 EBFR	Edward Burleson Ln	Hasler Blvd	5188	0.98	2	2	4D	Y	1054	0	100%	900	900	1,769	1,769	1,036	0	733	1,769		
SH 71 EBFR	Approx. Bastrop City Limit	Navarro Blvd	2189	0.41	2	2	4D	Y	222	0	100%	900	900	746	746	92	0	654	746		
SH 71 EBFR	Navarro Blvd	Point approx. at the beginning of the northern Frontage Rd & and the western driveway to Texas Tractor Country	6585	1.25	2	2	4D	Y	222	0	100%	900	900	2,245	2,245	277	0	1,968	2,245		
SH 71 EBFR	Point approx. at the beginning of the northern Frontage Rd & and the western driveway to Texas Tractor Country	FM 20	3135	0.59	2	2	4D	Y	222	0	100%	900	900	1,069	1,069	132	0	937	1,069		
SH 71 EBFR	FM 20	Edward Burleson Ln	7220	1.37	2	2	4D	Y	448	0	100%	900	900	2,461	2,461	613	0	1,849	2,461		
SH 71 WBFR	Edward Burleson Ln	Hasler Blvd	5219	0.99	2	2	4D	Y	0	2165	100%	900	900	1,779	1,779	0	2,140	1,779	-361		361
SH 71 WBFR	Hasler Blvd	Point approx. 400ft west of bridge where divided lanes merge into undivided	3427	0.65	2	2	4D	Y	0	957	100%	900	900	1,168	1,168	0	621	1,168	547		
SH 71 WBFR	Approx. Bastrop City Limit	Navarro Blvd	2176	0.41	2	2	4D	Y	0	139	100%	900	900	742	742	0	57	742	685		
SH 71 WBFR	Navarro Blvd	Point approx. at the beginning of the northern Frontage Rd & and the western driveway to Texas Tractor Country	6587	1.25	2	2	4D	Y	0	139	100%	900	900	2,246	2,246	0	173	2,246	2,072		
SH 71 WBFR	Point approx. at the beginning of the northern Frontage Rd & and the western driveway to Texas Tractor Country	FM 20	3134	0.59	2	2	4D	Y	0	139	100%	900	900	1,069	1,069	0	83	1,069	986		
SH 71 WBFR	FM 20	Edward Burleson Ln	7219	1.37	2	2	4D	Y	0	539	100%	900	900	2,461	2,461	0	737	2,461	1,724		
Woodlands Dr	North entrance of Lost Pines RV Park	State Highway 71 Frontage Road	444	0.08	1	1	2U		25	25	100%	425	425	36	36	2	2	34	34		
SUBTOTAL			**80,985**	**15.34**										**14,939**	**14,939**	**4,984**	**3,401**	**9,955**	**11,538**	**28**	**6**
														29,877		**8,385**		**21,493**		**34**	

City of Bastrop - 2023 Transportation Impact Fee Study

Existing Roadway Facilities Inventory

Service Area B

6/20/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	TxDOT (Y/N)	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Jackson St	SH 21	South St	1307	0.25	1	1	3U		370	160	100%	525	525	130	130	92	40	38	90		
Loop 150	Main St	Water St	396	0.07	1	1	3U		610	460	100%	525	525	39	39	46	34	-6	5	6	
Loop 150	Water St	Pecan St	388	0.07	1	1	3U		610	460	100%	525	525	39	39	45	34	-6	5	6	
Loop 150	Pecan St	Jefferson St	392	0.07	1	1	3U	N	610	460	100%	525	525	39	39	45	34	-6	5	6	
Loop 150	Jefferson St	Hill St	396	0.08	1	1	3U	Y	610	460	100%	900	900	68	68	46	35	22	33		
Loop 150	Hill St	Haysel St	383	0.07	1	1	3U		610	460	100%	525	525	38	38	44	33	-6	5	6	
Loop 150	Haysel St	Fayette St	411	0.08	1	1	3U		610	460	100%	525	525	41	41	48	36	-7	5	7	
Loop 150	Fayette St	Point Approx. 170ft from driveway to Stem & Stone Craft Beer, Wine & Eats	1139	0.22	1	1	3U		610	460	100%	525	525	113	113	132	99	-18	14	18	
Loop 150	Point Approx. 170ft from driveway to Stem & Stone Craft Beer, Wine & Eats	SH 95	464	0.09	2	2	4U	Y	610	460	100%	900	900	158	158	54	40	105	118		
Loop 150	Point approx. at the northeastern driveway to Circle K	Northern frontage road of SH 71/95	515	0.10	2	2	4U	Y	523	423	100%	900	900	175	175	51	41	124	134		
Loop 150	SH 21	SH 71	4042	0.77	1	1	2U	Y	523	423	100%	900	900	689	689	400	324	289	365		
Loop 150	SH 21	Loop 150	723	0.14	1	0	1U	Y	238	0	100%	900	900	123	123	33	0	91	123		
Loop 150	Colorado River	Main St	960	0.18	1	1	3U	Y	610	460	100%	900	900	164	164	111	84	53	80		
Lovers Ln	City Limits	College St	1525	0.29	1	1	2U	Y	217	326	100%	510	510	147	147	63	94	85	53		
Mauna Loa Ln	Briar Forest Dr	Tahitian Dr	1193	0.23	1	1	2U-R	Y	10	10	100%	420	420	95	95	2	2	93	93		
Mesquite St	Wilson St	SH 95	2767	0.52	1	1	2U		36	80	100%	425	425	223	223	19	42	204	181		
N Main St	City Limits	Mesquite Rd	898	0.17	1	1	2U		37	37	100%	425	425	72	72	6	6	66	66		
SH 21	1,500' E of Loop 150	City Limits	5389	1.02	2	2	4D	Y	896	878	100%	900	900	1,837	1,837	914	896	923	941		
SH 21	Walnut St	SH 21 WBFR	2254	0.43	2	2	5U	Y	1250	950	100%	900	900	768	768	534	405	235	363		
SH 21	Chestnut St	Walnut St	1578	0.30	2	2	5U	Y	1190	1006	100%	900	900	538	538	356	301	182	237		
SH 21	Loop 150	1,500' E of Loop 150	1882	0.36	2	2	5U	Y	896	878	100%	900	900	641	641	319	313	322	329		
SH 21/71	Colorado River	Water St	300	0.06	2	2	4U	Y	941	1026	100%	900	900	102	102	54	58	49	44		
SH 21/71	End of bridge (where undivided lanes become divided)	SH 21	767	0.15	2	2	4D	Y	941	1026	100%	900	900	262	262	137	149	125	112		
SH 21/Loop 150	SH 95	Point at which SH 21 forks into SH 21 and Loop 150	3552	0.67	2	2	4U		830	640	100%	550	550	740	740	558	431	182	309		
SH 71 EBFR	End of bridge (where undivided lanes become divided)	SH 21	3160	0.60	2	2	4D		1090	0	100%	725	725	868	868	652	0	215	868		
SH 71 EBFR	Loop 150	City Limits	1672	0.32	2	2	4D	Y	193	0	100%	900	900	570	570	61	0	509	570		
SH 71 EBFR	SH 21	Arena Dr	3606	0.68	2	2	4D	Y	340	0	100%	900	900	1,229	1,229	232	0	997	1,229		
SH 71 EBFR	ArenaDr	Loop 150	3851	0.73	2	2	4D	Y	624	0	100%	900	900	1,313	1,313	455	0	858	1,313		
SH 71 WBFR	Loop 150	City Limits	1656	0.31	2	2	4D	Y	0	430	100%	900	900	565	565	0	135	565	430		
SH 71 WBFR	End of bridge (where undivided lanes become divided)	SH 21	3166	0.60	2	2	4D	Y	0	1095	100%	900	900	1,079	1,079	0	657	1,079	423		
SH 71 WBFR	SH 21	Arena Dr	3612	0.68	2	2	4D	Y	0	430	100%	900	900	1,231	1,231	0	294	1,231	937		
SH 71 WBFR	ArenaDr	Loop 150	3858	0.73	2	2	4D	Y	0	430	100%	900	900	1,315	1,315	0	314	1,315	1,001		
SH 95	SH 21 WBFR	SH 21 EBFR	580	0.11	2	2	5U	Y	1250	240	100%	900	900	198	198	137	26	60	171		
SH 95	Farm St	Chestnut St/SH 21	870	0.16	2	2	4U	Y	1120	976	100%	900	900	297	297	185	161	112	136		
SH 95	Cedar St	Spring St	1883	0.36	1	1	3U	Y	1120	976	100%	900	900	321	321	399	348	-78	-27	78	27
SH 95	Hawthorne St	Cedar St	1560	0.30	1	1	3U	Y	1120	976	100%	900	900	266	266	331	288	-65	-22	65	22
SH 95	700' S of Mesquite St	Hawthorne St	2698	0.51	1	1	2U	Y	1120	976	100%	900	900	460	460	572	499	-112	-39	112	39
SH 95	City Limits	Mesquite St	1930	0.37	1	1	3U	Y	1120	976	100%	900	900	329	329	409	357	-80	-28	80	28
SH 95	Mesquite St	700' S of Mesquite St	697	0.13	1	1	3U	Y	1120	976	100%	900	900	119	119	148	129	-29	-10	29	10
South Street	650' W of Jackson St	1,200' E of Jackson St	1673	0.32	1	1	2U-R	Y	22	22	100%	420	420	133	133	7	7	126	126		
SUBTOTAL			**70,091**	**13.27**										**17,534**	**17,534**	**7,696**	**6,746**	**9,838**	**10,788**	**364**	**126**
														35,068		**14,442**		**20,626**		**490**	

C. Conceptual Level Project Cost Projections

City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-1**
Name:	Agnes (1)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Bear Hunter Drive to Hunter's Crossing		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	2,405		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	13,361	CY	$ 8.73	$ 116,643
203	Earthwork/Topsoil (6" depth)	9,620	SY	$ 1.83	$ 17,605
303	6" Asphalt (Type C)	705	TON	$ 140.87	$ 99,379
403	Asphalt Prime Coat	7,055	GAL	$ 6.00	$ 42,328
503	Lime Treated Subgrade (12" depth)	13,361	SY	$ 3.46	$ 46,229
603	18" Flexible Base	13,361	SY	$ 56.20	$ 750,894
703	6' Concrete Sidewalk (4" depth)	3,207	SY	$ 62.92	$ 201,763
803	Machine Laid Curb & Gutter	9,620	LF	$ 22.37	$ 215,199
903	Turn Lanes and Median Openings	492	SY	$ 118.58	$ 58,286
				Paving Construction Cost Subtotal:	**$ 1,548,327**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 61,933
√	Roadway Drainage	Standard Internal System	30%	$ 464,498
√	Illumination		6%	$ 92,900
√	Water	Minor Adjustments	3%	$ 46,450
√	Sewer	Minor Adjustments	2%	$ 30,967
√	Landscaping and Irrigation		6%	$ 92,900
			Allowance Subtotal:	**$ 789,647**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 2,337,974**
Construction Contingency:	10%	$ 233,797
Mobilization	11%	$ 257,177
Prep ROW	4%	$ 93,519
Construction Cost TOTAL:		**$ 2,923,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,923,000**
Engineering/Survey/Testing:		16%	$ 467,680
Inspection		3.5%	$ 102,305
ROW/Easement Acquisition:		30%	$ 876,900
	Impact Fee Project Cost TOTAL		**$ 4,370,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-2**
Name:	Agnes (2)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Hospital Drive to Schaefer Blvd		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,830		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	10,167	CY	$ 8.73	$ 88,755
203	Earthwork/Topsoil (6" depth)	7,320	SY	$ 1.83	$ 13,396
303	6" Asphalt (Type C)	537	TON	$ 140.87	$ 75,619
403	Asphalt Prime Coat	5,368	GAL	$ 6.00	$ 32,208
503	Lime Treated Subgrade (12" depth)	10,167	SY	$ 3.46	$ 35,177
603	18" Flexible Base	10,167	SY	$ 56.20	$ 571,367
703	6' Concrete Sidewalk (4" depth)	2,440	SY	$ 62.92	$ 153,525
803	Machine Laid Curb & Gutter	7,320	LF	$ 22.37	$ 163,748
903	Turn Lanes and Median Openings	374	SY	$ 118.58	$ 44,351
				Paving Construction Cost Subtotal:	**$ 1,178,145**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 47,126
√	Roadway Drainage	Standard Internal System	30%	$ 353,443
√	Illumination		6%	$ 70,689
√	Water	Minor Adjustments	3%	$ 35,344
√	Sewer	Minor Adjustments	2%	$ 23,563
√	Landscaping and Irrigation		6%	$ 70,689
			Allowance Subtotal:	**$ 600,854**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,778,999**
Construction Contingency:	10%	$ 177,900
Mobilization	11%	$ 195,690
Prep ROW	4%	$ 71,160
Construction Cost TOTAL:		**$ 2,224,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,224,000**
Engineering/Survey/Testing:		16%	$ 355,840
Inspection		3.5%	$ 77,840
ROW/Easement Acquisition:		30%	$ 667,200
	Impact Fee Project Cost TOTAL		**$ 3,325,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-3**
Name:	Bear Hunter Drive (1)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Bear Hunter Drive (existing) to 1,000' N of Shiloh Rd		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	2,240		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	12,444	CY	$ 8.73	$ 108,640
203	Earthwork/Topsoil (6" depth)	8,960	SY	$ 1.83	$ 16,397
303	6" Asphalt (Type C)	657	TON	$ 140.87	$ 92,561
403	Asphalt Prime Coat	6,571	GAL	$ 6.00	$ 39,424
503	Lime Treated Subgrade (12" depth)	12,444	SY	$ 3.46	$ 43,058
603	18" Flexible Base	12,444	SY	$ 56.20	$ 699,378
703	6' Concrete Sidewalk (4" depth)	2,987	SY	$ 62.92	$ 187,921
803	Machine Laid Curb & Gutter	8,960	LF	$ 22.37	$ 200,435
903	Turn Lanes and Median Openings	458	SY	$ 118.58	$ 54,287
				Paving Construction Cost Subtotal:	**$ 1,442,101**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 57,684
√	Roadway Drainage	Standard Internal System	30%	$ 432,630
√	Illumination		6%	$ 86,526
√	Water	Minor Adjustments	3%	$ 43,263
√	Sewer	Minor Adjustments	2%	$ 28,842
√	Landscaping and Irrigation		6%	$ 86,526
			Allowance Subtotal:	**$ 735,471**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 2,177,572**
Construction Contingency:	10%	$ 217,757
Mobilization	11%	$ 239,533
Prep ROW	4%	$ 87,103
Construction Cost TOTAL:		**$ 2,722,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,722,000**
Engineering/Survey/Testing:		16%	$ 435,520
Inspection		3.5%	$ 95,270
ROW/Easement Acquisition:		30%	$ 816,600
		Impact Fee Project Cost TOTAL	**$ 4,069,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-4**
Name:	Blakey Ln (1)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Edward Burleson Ln to 1,830' E of Edward Burleson Ln		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,835		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	4,893	CY	$ 8.73	$ 42,719
204	Earthwork/Topsoil (6" depth)	4,078	SY	$ 1.83	$ 7,462
304	3" Asphalt (Type C)	367	TON	$ 140.87	$ 51,699
404	Asphalt Prime Coat	3,670	GAL	$ 6.00	$ 22,020
504	Lime Treated Subgrade (12" depth)	7,340	SY	$ 3.46	$ 25,396
604	10" Flexible Base	7,340	SY	$ 19.70	$ 144,598
704	6' Concrete Sidewalk (4" depth)	2,039	SY	$ 62.92	$ 128,287
804	Machine Laid Curb & Gutter	3,670	LF	$ 22.37	$ 82,098
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 504,280**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 20,171
√	Roadway Drainage	Standard Internal System	30%	$ 151,284
√	Illumination		6%	$ 30,257
√	Water	Minor Adjustments	3%	$ 15,128
√	Sewer	Minor Adjustments	2%	$ 10,086
√	Landscaping and Irrigation		6%	$ 30,257
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 257,183**

Paving and Allowance Subtotal:		**$ 761,462**
Construction Contingency:	10%	$ 76,146
Mobilization	11%	$ 83,761
Prep ROW	4%	$ 30,458
Construction Cost TOTAL:		**$ 952,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 952,000**
Engineering/Survey/Testing:		16%	$ 152,320
Inspection		3.5%	$ 33,320
ROW/Easement Acquisition:		30%	$ 285,600
		Impact Fee Project Cost TOTAL	**$ 1,423,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-5**
Name:	Blakey Ln (2)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	City Limits to Old Austin Highway		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	2,285		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	6,093	CY	$ 8.73	$ 53,195
204	Earthwork/Topsoil (6" depth)	5,078	SY	$ 1.83	$ 9,292
304	3" Asphalt (Type C)	457	TON	$ 140.87	$ 64,378
404	Asphalt Prime Coat	4,570	GAL	$ 6.00	$ 27,420
504	Lime Treated Subgrade (12" depth)	9,140	SY	$ 3.46	$ 31,624
604	10" Flexible Base	9,140	SY	$ 19.70	$ 180,058
704	6' Concrete Sidewalk (4" depth)	2,539	SY	$ 62.92	$ 159,747
804	Machine Laid Curb & Gutter	4,570	LF	$ 22.37	$ 102,231
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 627,945**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 25,118
√	Roadway Drainage	Standard Internal System	30%	$ 188,383
√	Illumination		6%	$ 37,677
√	Water	Minor Adjustments	3%	$ 18,838
√	Sewer	Minor Adjustments	2%	$ 12,559
√	Landscaping and Irrigation		6%	$ 37,677
			Allowance Subtotal:	**$ 320,252**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 948,197**
Construction Contingency:	10%	$ 94,820
Mobilization	11%	$ 104,302
Prep ROW	4%	$ 37,928
Construction Cost TOTAL:		**$ 1,186,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,186,000**
Engineering/Survey/Testing:		16%	$ 189,760
Inspection		3.5%	$ 41,510
ROW/Easement Acquisition:		30%	$ 355,800
		Impact Fee Project Cost TOTAL	**$ 1,773,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-6**
Name:	Greenleaf Fisk Dr	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Bass Drive to Schaefer Blvd		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	2,985		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	9,287	CY	$ 8.73	$ 81,073
202	Earthwork/Topsoil (6" depth)	6,633	SY	$ 1.83	$ 12,139
302	3" Asphalt (Type C)	716	TON	$ 140.87	$ 100,919
402	Asphalt Prime Coat	7,164	GAL	$ 6.00	$ 42,984
502	Lime Treated Subgrade (12" depth)	13,930	SY	$ 3.46	$ 48,198
602	10" Flexible Base	13,930	SY	$ 19.70	$ 274,421
702	6' Concrete Sidewalk (4" depth)	3,980	SY	$ 62.92	$ 250,422
802	Machine Laid Curb & Gutter	5,970	LF	$ 22.37	$ 133,549
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
			Paving Construction Cost Subtotal:		**$ 943,704**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 37,748
√	Roadway Drainage	Standard Internal System	30%	$ 283,111
√	Illumination		6%	$ 56,622
√	Water	Minor Adjustments	3%	$ 28,311
√	Sewer	Minor Adjustments	2%	$ 18,874
√	Landscaping and Irrigation		6%	$ 56,622
			Allowance Subtotal:	**$ 481,289**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,424,993**
Construction Contingency:	10%	$ 142,499
Mobilization	11%	$ 156,749
Prep ROW	4%	$ 57,000
Construction Cost TOTAL:		**$ 1,782,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,782,000**
Engineering/Survey/Testing:		16%	$ 285,120
Inspection		3.5%	$ 62,370
ROW/Easement Acquisition:		30%	$ 534,600
	Impact Fee Project Cost TOTAL		**$ 2,664,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-7**
Name:	Hasler Blvd (1)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Old Austin Hwy to Colorado River		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,385		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	7,694	CY	$ 8.73	$ 67,173
203	Earthwork/Topsoil (6" depth)	5,540	SY	$ 1.83	$ 10,138
303	6" Asphalt (Type C)	406	TON	$ 140.87	$ 57,231
403	Asphalt Prime Coat	4,063	GAL	$ 6.00	$ 24,376
503	Lime Treated Subgrade (12" depth)	7,694	SY	$ 3.46	$ 26,623
603	18" Flexible Base	7,694	SY	$ 56.20	$ 432,428
703	6' Concrete Sidewalk (4" depth)	1,847	SY	$ 62.92	$ 116,192
803	Machine Laid Curb & Gutter	5,540	LF	$ 22.37	$ 123,930
903	Turn Lanes and Median Openings	283	SY	$ 118.58	$ 33,566
				Paving Construction Cost Subtotal:	**$ 891,656**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 35,666
√	Roadway Drainage	Standard Internal System	30%	$ 267,497
√	Illumination		6%	$ 53,499
√	Water	Minor Adjustments	3%	$ 26,750
√	Sewer	Minor Adjustments	2%	$ 17,833
√	Landscaping and Irrigation		6%	$ 53,499
			Allowance Subtotal:	**$ 454,745**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,346,401**
Construction Contingency:	10%	$ 134,640
Mobilization	11%	$ 148,104
Prep ROW	4%	$ 53,856
Construction Cost TOTAL:		**$ 1,684,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,684,000**
Engineering/Survey/Testing:		16%	$ 269,440
Inspection		3.5%	$ 58,940
ROW/Easement Acquisition:		30%	$ 505,200
	Impact Fee Project Cost TOTAL		**$ 2,518,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-8**
Name:	Marie St	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Schaefer Blvd to Hasler Blvd		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,330		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	3,547	CY	$ 8.73	$ 30,962
204	Earthwork/Topsoil (6" depth)	2,956	SY	$ 1.83	$ 5,409
304	3" Asphalt (Type C)	266	TON	$ 140.87	$ 37,471
404	Asphalt Prime Coat	2,660	GAL	$ 6.00	$ 15,960
504	Lime Treated Subgrade (12" depth)	5,320	SY	$ 3.46	$ 18,407
604	10" Flexible Base	5,320	SY	$ 19.70	$ 104,804
704	6' Concrete Sidewalk (4" depth)	1,478	SY	$ 62.92	$ 92,982
804	Machine Laid Curb & Gutter	2,660	LF	$ 22.37	$ 59,504
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 365,500**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 14,620
√	Roadway Drainage	Standard Internal System	30%	$ 109,650
√	Illumination		6%	$ 21,930
√	Water	Minor Adjustments	3%	$ 10,965
√	Sewer	Minor Adjustments	2%	$ 7,310
√	Landscaping and Irrigation		6%	$ 21,930
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 186,405**

Paving and Allowance Subtotal:		**$ 551,904**
Construction Contingency:	10%	$ 55,190
Mobilization	11%	$ 60,709
Prep ROW	4%	$ 22,076
Construction Cost TOTAL:		**$ 690,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 690,000**
Engineering/Survey/Testing:		16%	$ 110,400
Inspection		3.5%	$ 24,150
ROW/Easement Acquisition:		30%	$ 207,000
		Impact Fee Project Cost TOTAL	**$ 1,032,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**A-9**
Name:	Orchard Pkwy	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 71 to Hunters Point Drive		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	2,215		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	6,891	CY	$ 8.73	$ 60,159
202	Earthwork/Topsoil (6" depth)	4,922	SY	$ 1.83	$ 9,008
302	3" Asphalt (Type C)	532	TON	$ 140.87	$ 74,886
402	Asphalt Prime Coat	5,316	GAL	$ 6.00	$ 31,896
502	Lime Treated Subgrade (12" depth)	10,337	SY	$ 3.46	$ 35,765
602	10" Flexible Base	10,337	SY	$ 19.70	$ 203,632
702	6' Concrete Sidewalk (4" depth)	2,953	SY	$ 62.92	$ 185,824
802	Machine Laid Curb & Gutter	4,430	LF	$ 22.37	$ 99,099
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 700,270**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 28,011
√	Roadway Drainage	Standard Internal System	30%	$ 210,081
√	Illumination		6%	$ 42,016
√	Water	Minor Adjustments	3%	$ 21,008
√	Sewer	Minor Adjustments	2%	$ 14,005
√	Landscaping and Irrigation		6%	$ 42,016
			Allowance Subtotal:	**$ 357,137**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,057,407**
Construction Contingency:	10%	$ 105,741
Mobilization	11%	$ 116,315
Prep ROW	4%	$ 42,296
Construction Cost TOTAL:		**$ 1,322,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,322,000**
Engineering/Survey/Testing:		16%	$ 211,520
Inspection		3.5%	$ 46,270
ROW/Easement Acquisition:		30%	$ 396,600
		Impact Fee Project Cost TOTAL	**$ 1,976,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-10**
Name:	Agnes (3)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Schaefer Blvd to Childers Drive		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	3,175		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	17,639	CY	$ 8.73	$ 153,988
203	Earthwork/Topsoil (6" depth)	12,700	SY	$ 1.83	$ 23,241
303	6" Asphalt (Type C)	931	TON	$ 140.87	$ 131,197
403	Asphalt Prime Coat	9,313	GAL	$ 6.00	$ 55,880
503	Lime Treated Subgrade (12" depth)	17,639	SY	$ 3.46	$ 61,031
603	18" Flexible Base	17,639	SY	$ 56.20	$ 991,306
703	6' Concrete Sidewalk (4" depth)	4,233	SY	$ 62.92	$ 266,361
803	Machine Laid Curb & Gutter	12,700	LF	$ 22.37	$ 284,099
903	Turn Lanes and Median Openings	649	SY	$ 118.58	$ 76,947
				Paving Construction Cost Subtotal:	**$ 2,044,049**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 102,202
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 81,762
√	Roadway Drainage	Standard Internal System	30%	$ 613,215
√	Illumination		6%	$ 122,643
√	Water	Minor Adjustments	3%	$ 61,321
√	Sewer	Minor Adjustments	2%	$ 40,881
√	Landscaping and Irrigation		6%	$ 122,643
			Allowance Subtotal:	**$ 1,144,668**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 3,188,717**
Construction Contingency:	10%	$ 318,872
Mobilization	11%	$ 350,759
Prep ROW	4%	$ 127,549
Construction Cost TOTAL:		**$ 3,986,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,986,000**
Engineering/Survey/Testing:		16%	$ 637,760
Inspection		3.5%	$ 139,510
ROW/Easement Acquisition:		30%	$ 1,195,800
	Impact Fee Project Cost TOTAL		**$ 5,959,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-11**
Name:	Edward Burleson	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Blakey to SH 21 EBFR		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,695		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	9,417	CY	$ 8.73	$ 82,208
203	Earthwork/Topsoil (6" depth)	6,780	SY	$ 1.83	$ 12,407
303	6" Asphalt (Type C)	497	TON	$ 140.87	$ 70,041
403	Asphalt Prime Coat	4,972	GAL	$ 6.00	$ 29,832
503	Lime Treated Subgrade (12" depth)	9,417	SY	$ 3.46	$ 32,582
603	18" Flexible Base	9,417	SY	$ 56.20	$ 529,217
703	6' Concrete Sidewalk (4" depth)	2,260	SY	$ 62.92	$ 142,199
803	Machine Laid Curb & Gutter	6,780	LF	$ 22.37	$ 151,669
903	Turn Lanes and Median Openings	346	SY	$ 118.58	$ 41,079
				Paving Construction Cost Subtotal:	**$ 1,091,233**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 54,562
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 43,649
√	Roadway Drainage	Standard Internal System	30%	$ 327,370
√	Illumination		6%	$ 65,474
√	Water	Minor Adjustments	3%	$ 32,737
√	Sewer	Minor Adjustments	2%	$ 21,825
√	Landscaping and Irrigation		6%	$ 65,474
			Allowance Subtotal:	**$ 611,090**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,702,323**
Construction Contingency:	10%	$ 170,232
Mobilization	11%	$ 187,256
Prep ROW	4%	$ 68,093
Construction Cost TOTAL:		**$ 2,128,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,128,000**
Engineering/Survey/Testing:		16%	$ 340,480
Inspection		3.5%	$ 74,480
ROW/Easement Acquisition:		15%	$ 319,200
		Impact Fee Project Cost TOTAL	**$ 2,862,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-12**
Name:	FM 969 (1)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	City Limits to Blakey Ln		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	2,405		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	14,430	CY	$ 8.73	$ 125,974
201	Earthwork/Topsoil (6" depth)	16,568	SY	$ 1.83	$ 30,319
301	6" Asphalt (Type C)	770	TON	$ 140.87	$ 108,414
401	Asphalt Prime Coat	7,696	GAL	$ 6.00	$ 46,176
501	Lime Treated Subgrade (12" depth)	14,430	SY	$ 3.46	$ 49,928
601	18" Flexible Base	14,430	SY	$ 56.20	$ 810,966
701	6' Concrete Sidewalk (4" depth)	3,207	SY	$ 62.92	$ 201,763
801	Machine Laid Curb & Gutter	9,620	LF	$ 22.37	$ 215,199
901	Turn Lanes and Median Openings	492	SY	$ 123.94	$ 60,919
				Paving Construction Cost Subtotal:	**$ 1,649,658**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 82,483
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 65,986
√	Roadway Drainage	Standard Internal System	30%	$ 494,897
√	Illumination		6%	$ 98,979
√	Water	Minor Adjustments	3%	$ 49,490
√	Sewer	Minor Adjustments	2%	$ 32,993
√	Landscaping and Irrigation		6%	$ 98,979
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 923,809**

Paving and Allowance Subtotal:		**$ 2,573,467**
Construction Contingency:	10%	$ 257,347
Mobilization	11%	$ 283,081
Prep ROW	4%	$ 102,939
Construction Cost TOTAL:		**$ 3,217,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,217,000**
Engineering/Survey/Testing:		16%	$ 514,720
Inspection		3.5%	$ 112,595
ROW/Easement Acquisition:		0%	$ -
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 768,800**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-13**
Name:	FM 969 (2)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Blakey Ln to State Highway 21		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	1,500		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	9,000	CY	$ 8.73	$ 78,570
201	Earthwork/Topsoil (6" depth)	10,333	SY	$ 1.83	$ 18,910
301	6" Asphalt (Type C)	480	TON	$ 140.87	$ 67,618
401	Asphalt Prime Coat	4,800	GAL	$ 6.00	$ 28,800
501	Lime Treated Subgrade (12" depth)	9,000	SY	$ 3.46	$ 31,140
601	18" Flexible Base	9,000	SY	$ 56.20	$ 505,800
701	6' Concrete Sidewalk (4" depth)	2,000	SY	$ 62.92	$ 125,840
801	Machine Laid Curb & Gutter	6,000	LF	$ 22.37	$ 134,220
901	Turn Lanes and Median Openings	307	SY	$ 123.94	$ 37,995
				Paving Construction Cost Subtotal:	**$ 1,028,893**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 51,445
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 41,156
√	Roadway Drainage	Standard Internal System	30%	$ 308,668
√	Illumination		6%	$ 61,734
√	Water	Minor Adjustments	3%	$ 30,867
√	Sewer	Minor Adjustments	2%	$ 20,578
√	Landscaping and Irrigation		6%	$ 61,734
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 576,180**

Paving and Allowance Subtotal:		**$ 1,605,073**
Construction Contingency:	10%	$ 160,507
Mobilization	11%	$ 176,558
Prep ROW	4%	$ 64,203
Construction Cost TOTAL:		**$ 2,007,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,007,000**
Engineering/Survey/Testing:		16%	$ 321,120
Inspection		3.5%	$ 70,245
ROW/Easement Acquisition:		0%	$ -
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 479,600**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-14**
Name:	Hasler Blvd (2)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Old Austin Hwy to SH 21		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,340		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	7,444	CY	$ 8.73	$ 64,990
203	Earthwork/Topsoil (6" depth)	5,360	SY	$ 1.83	$ 9,809
303	6" Asphalt (Type C)	393	TON	$ 140.87	$ 55,371
403	Asphalt Prime Coat	3,931	GAL	$ 6.00	$ 23,584
503	Lime Treated Subgrade (12" depth)	7,444	SY	$ 3.46	$ 25,758
603	18" Flexible Base	7,444	SY	$ 56.20	$ 418,378
703	6' Concrete Sidewalk (4" depth)	1,787	SY	$ 62.92	$ 112,417
803	Machine Laid Curb & Gutter	5,360	LF	$ 22.37	$ 119,903
903	Turn Lanes and Median Openings	274	SY	$ 118.58	$ 32,475
				Paving Construction Cost Subtotal:	**$ 862,685**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 43,134
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 34,507
√	Roadway Drainage	Standard Internal System	30%	$ 258,806
√	Illumination		6%	$ 51,761
√	Water	Minor Adjustments	3%	$ 25,881
√	Sewer	Minor Adjustments	2%	$ 17,254
√	Landscaping and Irrigation		6%	$ 51,761
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 483,104**

Paving and Allowance Subtotal:		**$ 1,345,789**
Construction Contingency:	10%	$ 134,579
Mobilization	11%	$ 148,037
Prep ROW	4%	$ 53,832
Construction Cost TOTAL:		**$ 1,683,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,683,000**
Engineering/Survey/Testing:		16%	$ 269,280
Inspection		3.5%	$ 58,905
ROW/Easement Acquisition:		30%	$ 504,900
	Impact Fee Project Cost TOTAL		**$ 2,516,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**A-15**
Name:	Home Depot Way	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Hunter's Crossing to SH 304		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,805		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	10,028	CY	$ 8.73	$ 87,543
203	Earthwork/Topsoil (6" depth)	7,220	SY	$ 1.83	$ 13,213
303	6" Asphalt (Type C)	529	TON	$ 140.87	$ 74,586
403	Asphalt Prime Coat	5,295	GAL	$ 6.00	$ 31,768
503	Lime Treated Subgrade (12" depth)	10,028	SY	$ 3.46	$ 34,696
603	18" Flexible Base	10,028	SY	$ 56.20	$ 563,561
703	6' Concrete Sidewalk (4" depth)	2,407	SY	$ 62.92	$ 151,427
803	Machine Laid Curb & Gutter	7,220	LF	$ 22.37	$ 161,511
903	Turn Lanes and Median Openings	369	SY	$ 118.58	$ 43,745
				Paving Construction Cost Subtotal:	**$ 1,162,050**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 58,103
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 46,482
√	Roadway Drainage	Standard Internal System	30%	$ 348,615
√	Illumination		6%	$ 69,723
√	Water	Minor Adjustments	3%	$ 34,862
√	Sewer	Minor Adjustments	2%	$ 23,241
√	Landscaping and Irrigation		6%	$ 69,723
			Allowance Subtotal:	**$ 650,748**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,812,798**
Construction Contingency:	10%	$ 181,280
Mobilization	11%	$ 199,408
Prep ROW	4%	$ 72,512
Construction Cost TOTAL:		**$ 2,266,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,266,000**
Engineering/Survey/Testing:		16%	$ 362,560
Inspection		3.5%	$ 79,310
ROW/Easement Acquisition:		30%	$ 679,800
		Impact Fee Project Cost TOTAL	**$ 3,388,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening 1/2	**Project No.**	**A-16**
Name:	Agnes (4)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 304 to Hospital Drive		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	2,140		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	11,889	CY	$ 8.73	$ 103,790
203	Earthwork/Topsoil (6" depth)	8,560	SY	$ 1.83	$ 15,665
303	6" Asphalt (Type C)	628	TON	$ 140.87	$ 88,429
403	Asphalt Prime Coat	6,277	GAL	$ 6.00	$ 37,664
503	Lime Treated Subgrade (12" depth)	11,889	SY	$ 3.46	$ 41,136
603	18" Flexible Base	11,889	SY	$ 56.20	$ 668,156
703	6' Concrete Sidewalk (4" depth)	2,853	SY	$ 62.92	$ 179,532
803	Machine Laid Curb & Gutter	8,560	LF	$ 22.37	$ 191,487
903	Turn Lanes and Median Openings	437	SY	$ 118.58	$ 51,864
				Paving Construction Cost Subtotal:	**$ 1,377,721**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 68,886
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 55,109
√	Roadway Drainage	Standard Internal System	30%	$ 413,316
√	Illumination		6%	$ 82,663
√	Water	Minor Adjustments	3%	$ 41,332
√	Sewer	Minor Adjustments	2%	$ 27,554
√	Landscaping and Irrigation		6%	$ 82,663
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 771,524**

Paving and Allowance Subtotal:		**$ 2,149,245**
Construction Contingency:	10%	$ 214,925
Mobilization	11%	$ 236,417
Prep ROW	4%	$ 85,970
Construction Cost TOTAL:		**$ 2,687,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,687,000**
Engineering/Survey/Testing:		16%	$ 429,920
Inspection		3.5%	$ 94,045
ROW/Easement Acquisition:		15%	$ 403,050
	Impact Fee Project Cost TOTAL		**$ 3,614,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening 1/2	**Project No.**	**A-17**
Name:	Bear Hunter Drive (2)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	State Highway 21 to Bear Hunter Drive ((		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	3,305		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	18,361	CY	$ 8.73	$ 160,293
203	Earthwork/Topsoil (6" depth)	13,220	SY	$ 1.83	$ 24,193
303	6" Asphalt (Type C)	969	TON	$ 140.87	$ 136,569
403	Asphalt Prime Coat	9,695	GAL	$ 6.00	$ 58,168
503	Lime Treated Subgrade (12" depth)	18,361	SY	$ 3.46	$ 63,529
603	18" Flexible Base	18,361	SY	$ 56.20	$ 1,031,894
703	6' Concrete Sidewalk (4" depth)	4,407	SY	$ 62.92	$ 277,267
803	Machine Laid Curb & Gutter	13,220	LF	$ 22.37	$ 295,731
903	Turn Lanes and Median Openings	675	SY	$ 118.58	$ 80,098
				Paving Construction Cost Subtotal:	**$ 2,127,743**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 106,387
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 85,110
√	Roadway Drainage	Standard Internal System	30%	$ 638,323
√	Illumination		6%	$ 127,665
√	Water	Minor Adjustments	3%	$ 63,832
√	Sewer	Minor Adjustments	2%	$ 42,555
√	Landscaping and Irrigation		6%	$ 127,665
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,191,536**

Paving and Allowance Subtotal:		**$ 3,319,279**
Construction Contingency:	10%	$ 331,928
Mobilization	11%	$ 365,121
Prep ROW	4%	$ 132,771
Construction Cost TOTAL:		**$ 4,150,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,150,000**
Engineering/Survey/Testing:		16%	$ 664,000
Inspection		3.5%	$ 145,250
ROW/Easement Acquisition:		15%	$ 622,500
		Impact Fee Project Cost TOTAL	**$ 5,582,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Access Management	**Project No.**	**A-18**
Name:	SH 304	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 21 EBFR to Hunters Point Dr		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	2,925		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	17,550	CY	$ 8.73	$ 153,212
201	Earthwork/Topsoil (6" depth)	20,150	SY	$ 1.83	$ 36,875
301	6" Asphalt (Type C)	936	TON	$ 140.87	$ 131,854
401	Asphalt Prime Coat	9,360	GAL	$ 6.00	$ 56,160
501	Lime Treated Subgrade (12" depth)	17,550	SY	$ 3.46	$ 60,723
601	18" Flexible Base	17,550	SY	$ 56.20	$ 986,310
701	6' Concrete Sidewalk (4" depth)	3,900	SY	$ 62.92	$ 245,388
801	Machine Laid Curb & Gutter	11,700	LF	$ 22.37	$ 261,729
901	Turn Lanes and Median Openings	598	SY	$ 123.94	$ 74,091
				Paving Construction Cost Subtotal:	**$ 2,006,341**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 100,317
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 80,254
√	Roadway Drainage	Standard Internal System	30%	$ 601,902
√	Illumination		6%	$ 120,380
√	Water	Minor Adjustments	3%	$ 60,190
√	Sewer	Minor Adjustments	2%	$ 40,127
√	Landscaping and Irrigation		6%	$ 120,380
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,123,551**

Paving and Allowance Subtotal:		**$ 3,129,892**
Construction Contingency:	10%	$ 312,989
Mobilization	11%	$ 344,288
Prep ROW	4%	$ 125,196
Construction Cost TOTAL:		**$ 3,913,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,913,000**
Engineering/Survey/Testing:		16%	$ 626,080
Inspection		3.5%	$ 136,955
ROW/Easement Acquisition:		0%	$ -
	Impact Fee Project Cost TOTAL (TxDOT 20%)		**$ 935,200**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-1**
Name:	Carter St	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Mesquite St to Magnolia St		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	910		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	2,427	CY	$ 8.73	$ 21,185
204	Earthwork/Topsoil (6" depth)	2,022	SY	$ 1.83	$ 3,701
304	3" Asphalt (Type C)	182	TON	$ 140.87	$ 25,638
404	Asphalt Prime Coat	1,820	GAL	$ 6.00	$ 10,920
504	Lime Treated Subgrade (12" depth)	3,640	SY	$ 3.46	$ 12,594
604	10" Flexible Base	3,640	SY	$ 19.70	$ 71,708
704	6' Concrete Sidewalk (4" depth)	1,011	SY	$ 62.92	$ 63,619
804	Machine Laid Curb & Gutter	1,820	LF	$ 22.37	$ 40,713
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 250,079**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 10,003
√	Roadway Drainage	Standard Internal System	30%	$ 75,024
√	Illumination		6%	$ 15,005
√	Water	Minor Adjustments	3%	$ 7,502
√	Sewer	Minor Adjustments	2%	$ 5,002
√	Landscaping and Irrigation		6%	$ 15,005
			Allowance Subtotal:	**$ 127,540**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 377,619**
Construction Contingency:	10%	$ 37,762
Mobilization	11%	$ 41,538
Prep ROW	4%	$ 15,105
Construction Cost TOTAL:		**$ 473,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 473,000**
Engineering/Survey/Testing:		16%	$ 75,680
Inspection		3.5%	$ 16,555
ROW/Easement Acquisition:		30%	$ 141,900
	Impact Fee Project Cost TOTAL		**$ 707,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-2**
Name:	Chambers St	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Cedar St to Farm St		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,510		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	4,027	CY	$ 8.73	$ 35,153
204	Earthwork/Topsoil (6" depth)	3,356	SY	$ 1.83	$ 6,141
304	3" Asphalt (Type C)	302	TON	$ 140.87	$ 42,543
404	Asphalt Prime Coat	3,020	GAL	$ 6.00	$ 18,120
504	Lime Treated Subgrade (12" depth)	6,040	SY	$ 3.46	$ 20,898
604	10" Flexible Base	6,040	SY	$ 19.70	$ 118,988
704	6' Concrete Sidewalk (4" depth)	1,678	SY	$ 62.92	$ 105,566
804	Machine Laid Curb & Gutter	3,020	LF	$ 22.37	$ 67,557
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 414,966**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 16,599
√	Roadway Drainage	Standard Internal System	30%	$ 124,490
√	Illumination		6%	$ 24,898
√	Water	Minor Adjustments	3%	$ 12,449
√	Sewer	Minor Adjustments	2%	$ 8,299
√	Landscaping and Irrigation		6%	$ 24,898
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 211,633**

Paving and Allowance Subtotal:		**$ 626,598**
Construction Contingency:	10%	$ 62,660
Mobilization	11%	$ 68,926
Prep ROW	4%	$ 25,064
Construction Cost TOTAL:		**$ 784,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 784,000**
Engineering/Survey/Testing:		16%	$ 125,440
Inspection		3.5%	$ 27,440
ROW/Easement Acquisition:		30%	$ 235,200
		Impact Fee Project Cost TOTAL	**$ 1,172,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-3**
Name:	Future Collector A	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Pitt St to Future Collector B		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,150		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	3,067	CY	$ 8.73	$ 26,772
204	Earthwork/Topsoil (6" depth)	2,556	SY	$ 1.83	$ 4,677
304	3" Asphalt (Type C)	230	TON	$ 140.87	$ 32,400
404	Asphalt Prime Coat	2,300	GAL	$ 6.00	$ 13,800
504	Lime Treated Subgrade (12" depth)	4,600	SY	$ 3.46	$ 15,916
604	10" Flexible Base	4,600	SY	$ 19.70	$ 90,620
704	6' Concrete Sidewalk (4" depth)	1,278	SY	$ 62.92	$ 80,398
804	Machine Laid Curb & Gutter	2,300	LF	$ 22.37	$ 51,451
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 316,034**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 12,641
√	Roadway Drainage	Standard Internal System	30%	$ 94,810
√	Illumination		6%	$ 18,962
√	Water	Minor Adjustments	3%	$ 9,481
√	Sewer	Minor Adjustments	2%	$ 6,321
√	Landscaping and Irrigation		6%	$ 18,962
			Allowance Subtotal:	**$ 161,177**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 477,211**
Construction Contingency:	10%	$ 47,721
Mobilization	11%	$ 52,493
Prep ROW	4%	$ 19,088
Construction Cost TOTAL:		**$ 597,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 597,000**
Engineering/Survey/Testing:		16%	$ 95,520
Inspection		3.5%	$ 20,895
ROW/Easement Acquisition:		30%	$ 179,100
		Impact Fee Project Cost TOTAL	**$ 893,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-4**
Name:	Future Collector B	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Lost Pines Ave to SH 71		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	985		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	2,627	CY	$ 8.73	$ 22,931
204	Earthwork/Topsoil (6" depth)	2,189	SY	$ 1.83	$ 4,006
304	3" Asphalt (Type C)	197	TON	$ 140.87	$ 27,751
404	Asphalt Prime Coat	1,970	GAL	$ 6.00	$ 11,820
504	Lime Treated Subgrade (12" depth)	3,940	SY	$ 3.46	$ 13,632
604	10" Flexible Base	3,940	SY	$ 19.70	$ 77,618
704	6' Concrete Sidewalk (4" depth)	1,094	SY	$ 62.92	$ 68,862
804	Machine Laid Curb & Gutter	1,970	LF	$ 22.37	$ 44,069
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 270,690**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 10,828
√	Roadway Drainage	Standard Internal System	30%	$ 81,207
√	Illumination		6%	$ 16,241
√	Water	Minor Adjustments	3%	$ 8,121
√	Sewer	Minor Adjustments	2%	$ 5,414
√	Landscaping and Irrigation		6%	$ 16,241
			Allowance Subtotal:	**$ 138,052**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 408,741**
Construction Contingency:	10%	$ 40,874
Mobilization	11%	$ 44,962
Prep ROW	4%	$ 16,350
Construction Cost TOTAL:		**$ 511,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 511,000**
Engineering/Survey/Testing:		16%	$ 81,760
Inspection		3.5%	$ 17,885
ROW/Easement Acquisition:		30%	$ 153,300
		Impact Fee Project Cost TOTAL	**$ 764,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-5**
Name:	Future Collector C	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Technology Drive extension to City Limits		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	895		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	2,387	CY	$ 8.73	$ 20,836
204	Earthwork/Topsoil (6" depth)	1,989	SY	$ 1.83	$ 3,640
304	3" Asphalt (Type C)	179	TON	$ 140.87	$ 25,216
404	Asphalt Prime Coat	1,790	GAL	$ 6.00	$ 10,740
504	Lime Treated Subgrade (12" depth)	3,580	SY	$ 3.46	$ 12,387
604	10" Flexible Base	3,580	SY	$ 19.70	$ 70,526
704	6' Concrete Sidewalk (4" depth)	994	SY	$ 62.92	$ 62,570
804	Machine Laid Curb & Gutter	1,790	LF	$ 22.37	$ 40,042
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 245,957**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 9,838
√	Roadway Drainage	Standard Internal System	30%	$ 73,787
√	Illumination		6%	$ 14,757
√	Water	Minor Adjustments	3%	$ 7,379
√	Sewer	Minor Adjustments	2%	$ 4,919
√	Landscaping and Irrigation		6%	$ 14,757
			Allowance Subtotal:	**$ 125,438**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 371,394**
Construction Contingency:	10%	$ 37,139
Mobilization	11%	$ 40,853
Prep ROW	4%	$ 14,856
Construction Cost TOTAL:		**$ 465,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 465,000**
Engineering/Survey/Testing:		16%	$ 74,400
Inspection		3.5%	$ 16,275
ROW/Easement Acquisition:		30%	$ 139,500
		Impact Fee Project Cost TOTAL	**$ 695,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-6**
Name:	Future Collector D	**Construction of a 2 lane collector, underground drainage,**	
Limits:	Jackson St extension to 420' E of Jacksc	**and 5' sidewalks on both sides of the street.**	
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	420		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	1,120	CY	$ 8.73	$ 9,778
204	Earthwork/Topsoil (6" depth)	933	SY	$ 1.83	$ 1,708
304	3" Asphalt (Type C)	84	TON	$ 140.87	$ 11,833
404	Asphalt Prime Coat	840	GAL	$ 6.00	$ 5,040
504	Lime Treated Subgrade (12" depth)	1,680	SY	$ 3.46	$ 5,813
604	10" Flexible Base	1,680	SY	$ 19.70	$ 33,096
704	6' Concrete Sidewalk (4" depth)	467	SY	$ 62.92	$ 29,363
804	Machine Laid Curb & Gutter	840	LF	$ 22.37	$ 18,791
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 115,421**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 4,617
√	Roadway Drainage	Standard Internal System	30%	$ 34,626
√	Illumination		6%	$ 6,925
√	Water	Minor Adjustments	3%	$ 3,463
√	Sewer	Minor Adjustments	2%	$ 2,308
√	Landscaping and Irrigation		6%	$ 6,925
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 58,865**

Paving and Allowance Subtotal:		**$ 174,286**
Construction Contingency:	10%	$ 17,429
Mobilization	11%	$ 19,171
Prep ROW	4%	$ 6,971
Construction Cost TOTAL:		**$ 218,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 218,000**
Engineering/Survey/Testing:		16%	$ 34,880
Inspection		3.5%	$ 7,630
ROW/Easement Acquisition:		30%	$ 65,400
	Impact Fee Project Cost TOTAL		**$ 326,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-7**
Name:	Hasler Blvd (3)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Colorado River to Willow St		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,550		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	8,611	CY	$ 8.73	$ 75,175
203	Earthwork/Topsoil (6" depth)	6,200	SY	$ 1.83	$ 11,346
303	6" Asphalt (Type C)	455	TON	$ 140.87	$ 64,049
403	Asphalt Prime Coat	4,547	GAL	$ 6.00	$ 27,280
503	Lime Treated Subgrade (12" depth)	8,611	SY	$ 3.46	$ 29,794
603	18" Flexible Base	8,611	SY	$ 56.20	$ 483,944
703	6' Concrete Sidewalk (4" depth)	2,067	SY	$ 62.92	$ 130,035
803	Machine Laid Curb & Gutter	6,200	LF	$ 22.37	$ 138,694
903	Turn Lanes and Median Openings	317	SY	$ 118.58	$ 37,565
				Paving Construction Cost Subtotal:	**$ 997,882**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 39,915
√	Roadway Drainage	Standard Internal System	30%	$ 299,365
√	Illumination		6%	$ 59,873
√	Water	Minor Adjustments	3%	$ 29,936
√	Sewer	Minor Adjustments	2%	$ 19,958
√	Landscaping and Irrigation		6%	$ 59,873
			Allowance Subtotal:	**$ 508,920**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,506,802**
Construction Contingency:	10%	$ 150,680
Mobilization	11%	$ 165,748
Prep ROW	4%	$ 60,272
Construction Cost TOTAL:		**$ 1,884,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,884,000**
Engineering/Survey/Testing:		16%	$ 301,440
Inspection		3.5%	$ 65,940
ROW/Easement Acquisition:		30%	$ 565,200
	Impact Fee Project Cost TOTAL		**$ 2,817,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-8**
Name:	Jackson St (1)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Jackson St (existing) to 1,260' S of Jackson St		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,265		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	7,028	CY	$ 8.73	$ 61,353
203	Earthwork/Topsoil (6" depth)	5,060	SY	$ 1.83	$ 9,260
303	6" Asphalt (Type C)	371	TON	$ 140.87	$ 52,272
403	Asphalt Prime Coat	3,711	GAL	$ 6.00	$ 22,264
503	Lime Treated Subgrade (12" depth)	7,028	SY	$ 3.46	$ 24,316
603	18" Flexible Base	7,028	SY	$ 56.20	$ 394,961
703	6' Concrete Sidewalk (4" depth)	1,687	SY	$ 62.92	$ 106,125
803	Machine Laid Curb & Gutter	5,060	LF	$ 22.37	$ 113,192
903	Turn Lanes and Median Openings	259	SY	$ 118.58	$ 30,658
				Paving Construction Cost Subtotal:	**$ 814,401**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 32,576
√	Roadway Drainage	Standard Internal System	30%	$ 244,320
√	Illumination		6%	$ 48,864
√	Water	Minor Adjustments	3%	$ 24,432
√	Sewer	Minor Adjustments	2%	$ 16,288
√	Landscaping and Irrigation		6%	$ 48,864
			Allowance Subtotal:	**$ 415,344**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,229,745**
Construction Contingency:	10%	$ 122,975
Mobilization	11%	$ 135,272
Prep ROW	4%	$ 49,190
Construction Cost TOTAL:		**$ 1,538,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,538,000**
Engineering/Survey/Testing:		16%	$ 246,080
Inspection		3.5%	$ 53,830
ROW/Easement Acquisition:		30%	$ 461,400
		Impact Fee Project Cost TOTAL	**$ 2,299,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-9**
Name:	Jasper St (1)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Jackson St to 930' E of Jackson St		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	930		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	2,480	CY	$ 8.73	$ 21,650
204	Earthwork/Topsoil (6" depth)	2,067	SY	$ 1.83	$ 3,782
304	3" Asphalt (Type C)	186	TON	$ 140.87	$ 26,202
404	Asphalt Prime Coat	1,860	GAL	$ 6.00	$ 11,160
504	Lime Treated Subgrade (12" depth)	3,720	SY	$ 3.46	$ 12,871
604	10" Flexible Base	3,720	SY	$ 19.70	$ 73,284
704	6' Concrete Sidewalk (4" depth)	1,033	SY	$ 62.92	$ 65,017
804	Machine Laid Curb & Gutter	1,860	LF	$ 22.37	$ 41,608
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 255,575**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 10,223
√	Roadway Drainage	Standard Internal System	30%	$ 76,672
√	Illumination		6%	$ 15,334
√	Water	Minor Adjustments	3%	$ 7,667
√	Sewer	Minor Adjustments	2%	$ 5,111
√	Landscaping and Irrigation		6%	$ 15,334
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 130,343**

Paving and Allowance Subtotal:		**$ 385,918**
Construction Contingency:	10%	$ 38,592
Mobilization	11%	$ 42,451
Prep ROW	4%	$ 15,437
Construction Cost TOTAL:		**$ 483,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 483,000**
Engineering/Survey/Testing:		16%	$ 77,280
Inspection		3.5%	$ 16,905
ROW/Easement Acquisition:		30%	$ 144,900
		Impact Fee Project Cost TOTAL	**$ 722,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-10**
Name:	Jasper St (2)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	930' E of Jackson St to Hidden Hollow Ct		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	2,690		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	7,173	CY	$ 8.73	$ 62,623
204	Earthwork/Topsoil (6" depth)	5,978	SY	$ 1.83	$ 10,939
304	3" Asphalt (Type C)	538	TON	$ 140.87	$ 75,788
404	Asphalt Prime Coat	5,380	GAL	$ 6.00	$ 32,280
504	Lime Treated Subgrade (12" depth)	10,760	SY	$ 3.46	$ 37,230
604	10" Flexible Base	10,760	SY	$ 19.70	$ 211,972
704	6' Concrete Sidewalk (4" depth)	2,989	SY	$ 62.92	$ 188,061
804	Machine Laid Curb & Gutter	5,380	LF	$ 22.37	$ 120,351
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 739,244**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 29,570
√	Roadway Drainage	Standard Internal System	30%	$ 221,773
√	Illumination		6%	$ 44,355
√	Water	Minor Adjustments	3%	$ 22,177
√	Sewer	Minor Adjustments	2%	$ 14,785
√	Landscaping and Irrigation		6%	$ 44,355
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 377,014**

Paving and Allowance Subtotal:		**$ 1,116,258**
Construction Contingency:	10%	$ 111,626
Mobilization	11%	$ 122,788
Prep ROW	4%	$ 44,650
Construction Cost TOTAL:		**$ 1,396,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,396,000**
Engineering/Survey/Testing:		16%	$ 223,360
Inspection		3.5%	$ 48,860
ROW/Easement Acquisition:		30%	$ 418,800
		Impact Fee Project Cost TOTAL	**$ 2,087,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-11**
Name:	Majestic Pine Dr	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Majestic Pine Dr (existing) to Mauna Loa Ln		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	520		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	1,387	CY	$ 8.73	$ 12,106
204	Earthwork/Topsoil (6" depth)	1,156	SY	$ 1.83	$ 2,115
304	3" Asphalt (Type C)	104	TON	$ 140.87	$ 14,650
404	Asphalt Prime Coat	1,040	GAL	$ 6.00	$ 6,240
504	Lime Treated Subgrade (12" depth)	2,080	SY	$ 3.46	$ 7,197
604	10" Flexible Base	2,080	SY	$ 19.70	$ 40,976
704	6' Concrete Sidewalk (4" depth)	578	SY	$ 62.92	$ 36,354
804	Machine Laid Curb & Gutter	1,040	LF	$ 22.37	$ 23,265
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 142,902**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 5,716
√	Roadway Drainage	Standard Internal System	30%	$ 42,871
√	Illumination		6%	$ 8,574
√	Water	Minor Adjustments	3%	$ 4,287
√	Sewer	Minor Adjustments	2%	$ 2,858
√	Landscaping and Irrigation		6%	$ 8,574
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 72,880**

Paving and Allowance Subtotal:		**$ 215,782**
Construction Contingency:	10%	$ 21,578
Mobilization	11%	$ 23,736
Prep ROW	4%	$ 8,631
Construction Cost TOTAL:		**$ 270,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 270,000**
Engineering/Survey/Testing:		16%	$ 43,200
Inspection		3.5%	$ 9,450
ROW/Easement Acquisition:		30%	$ 81,000
	Impact Fee Project Cost TOTAL		**$ 404,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-12**
Name:	Mauna Loa Ln (1)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Pine Lodge Dr to Briar Forest Dr		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	5,015		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	13,373	CY	$ 8.73	$ 116,749
204	Earthwork/Topsoil (6" depth)	11,144	SY	$ 1.83	$ 20,394
304	3" Asphalt (Type C)	1,003	TON	$ 140.87	$ 141,293
404	Asphalt Prime Coat	10,030	GAL	$ 6.00	$ 60,180
504	Lime Treated Subgrade (12" depth)	20,060	SY	$ 3.46	$ 69,408
604	10" Flexible Base	20,060	SY	$ 19.70	$ 395,182
704	6' Concrete Sidewalk (4" depth)	5,572	SY	$ 62.92	$ 350,604
804	Machine Laid Curb & Gutter	10,030	LF	$ 22.37	$ 224,371
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 1,378,181**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 55,127
√	Roadway Drainage	Standard Internal System	30%	$ 413,454
√	Illumination		6%	$ 82,691
√	Water	Minor Adjustments	3%	$ 41,345
√	Sewer	Minor Adjustments	2%	$ 27,564
√	Landscaping and Irrigation		6%	$ 82,691
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 702,872**

Paving and Allowance Subtotal:		**$ 2,081,053**
Construction Contingency:	10%	$ 208,105
Mobilization	11%	$ 228,916
Prep ROW	4%	$ 83,242
Construction Cost TOTAL:		**$ 2,602,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,602,000**
Engineering/Survey/Testing:		16%	$ 416,320
Inspection		3.5%	$ 91,070
ROW/Easement Acquisition:		30%	$ 780,600
		Impact Fee Project Cost TOTAL	**$ 3,890,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-13**
Name:	Mesquite St (1)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	800' W of Wilson St to Wilson St		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	785		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	2,442	CY	$ 8.73	$ 21,321
202	Earthwork/Topsoil (6" depth)	1,744	SY	$ 1.83	$ 3,192
302	3" Asphalt (Type C)	188	TON	$ 140.87	$ 26,540
402	Asphalt Prime Coat	1,884	GAL	$ 6.00	$ 11,304
502	Lime Treated Subgrade (12" depth)	3,663	SY	$ 3.46	$ 12,675
602	10" Flexible Base	3,663	SY	$ 19.70	$ 72,168
702	6' Concrete Sidewalk (4" depth)	1,047	SY	$ 62.92	$ 65,856
802	Machine Laid Curb & Gutter	1,570	LF	$ 22.37	$ 35,121
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 248,177**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 9,927
√	Roadway Drainage	Standard Internal System	30%	$ 74,453
√	Illumination		6%	$ 14,891
√	Water	Minor Adjustments	3%	$ 7,445
√	Sewer	Minor Adjustments	2%	$ 4,964
√	Landscaping and Irrigation		6%	$ 14,891
			Allowance Subtotal:	**$ 126,570**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 374,747**
Construction Contingency:	10%	$ 37,475
Mobilization	11%	$ 41,222
Prep ROW	4%	$ 14,990
Construction Cost TOTAL:		**$ 469,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 469,000**
Engineering/Survey/Testing:		16%	$ 75,040
Inspection		3.5%	$ 16,415
ROW/Easement Acquisition:		30%	$ 140,700
		Impact Fee Project Cost TOTAL	**$ 701,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-14**
Name:	Mesquite St (2)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 95 to Piney Ridge Dr		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	2,190		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	6,813	CY	$ 8.73	$ 59,480
202	Earthwork/Topsoil (6" depth)	4,867	SY	$ 1.83	$ 8,906
302	3" Asphalt (Type C)	526	TON	$ 140.87	$ 74,041
402	Asphalt Prime Coat	5,256	GAL	$ 6.00	$ 31,536
502	Lime Treated Subgrade (12" depth)	10,220	SY	$ 3.46	$ 35,361
602	10" Flexible Base	10,220	SY	$ 19.70	$ 201,334
702	6' Concrete Sidewalk (4" depth)	2,920	SY	$ 62.92	$ 183,726
802	Machine Laid Curb & Gutter	4,380	LF	$ 22.37	$ 97,981
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 692,366**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 27,695
√	Roadway Drainage	Standard Internal System	30%	$ 207,710
√	Illumination		6%	$ 41,542
√	Water	Minor Adjustments	3%	$ 20,771
√	Sewer	Minor Adjustments	2%	$ 13,847
√	Landscaping and Irrigation		6%	$ 41,542
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 353,107**

Paving and Allowance Subtotal:		**$ 1,045,472**
Construction Contingency:	10%	$ 104,547
Mobilization	11%	$ 115,002
Prep ROW	4%	$ 41,819
Construction Cost TOTAL:		**$ 1,307,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,307,000**
Engineering/Survey/Testing:		16%	$ 209,120
Inspection		3.5%	$ 45,745
ROW/Easement Acquisition:		30%	$ 392,100
		Impact Fee Project Cost TOTAL	**$ 1,954,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-15**
Name:	Pitt St	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	SH 71 to Jasper St		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	515		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	1,373	CY	$ 8.73	$ 11,989
204	Earthwork/Topsoil (6" depth)	1,144	SY	$ 1.83	$ 2,094
304	3" Asphalt (Type C)	103	TON	$ 140.87	$ 14,510
404	Asphalt Prime Coat	1,030	GAL	$ 6.00	$ 6,180
504	Lime Treated Subgrade (12" depth)	2,060	SY	$ 3.46	$ 7,128
604	10" Flexible Base	2,060	SY	$ 19.70	$ 40,582
704	6' Concrete Sidewalk (4" depth)	572	SY	$ 62.92	$ 36,004
804	Machine Laid Curb & Gutter	1,030	LF	$ 22.37	$ 23,041
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 141,528**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 5,661
√	Roadway Drainage	Standard Internal System	30%	$ 42,458
√	Illumination		6%	$ 8,492
√	Water	Minor Adjustments	3%	$ 4,246
√	Sewer	Minor Adjustments	2%	$ 2,831
√	Landscaping and Irrigation		6%	$ 8,492
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 72,179**

Paving and Allowance Subtotal:		**$ 213,707**
Construction Contingency:	10%	$ 21,371
Mobilization	11%	$ 23,508
Prep ROW	4%	$ 8,548
Construction Cost TOTAL:		**$ 268,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 268,000**
Engineering/Survey/Testing:		16%	$ 42,880
Inspection		3.5%	$ 9,380
ROW/Easement Acquisition:		30%	$ 80,400
		Impact Fee Project Cost TOTAL	**$ 401,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-16**
Name:	South Street (1)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Lovers Lane to South St (existing)		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	1,740		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	5,413	CY	$ 8.73	$ 47,258
202	Earthwork/Topsoil (6" depth)	3,867	SY	$ 1.83	$ 7,076
302	3" Asphalt (Type C)	418	TON	$ 140.87	$ 58,827
402	Asphalt Prime Coat	4,176	GAL	$ 6.00	$ 25,056
502	Lime Treated Subgrade (12" depth)	8,120	SY	$ 3.46	$ 28,095
602	10" Flexible Base	8,120	SY	$ 19.70	$ 159,964
702	6' Concrete Sidewalk (4" depth)	2,320	SY	$ 62.92	$ 145,974
802	Machine Laid Curb & Gutter	3,480	LF	$ 22.37	$ 77,848
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 550,099**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 22,004
√	Roadway Drainage	Standard Internal System	30%	$ 165,030
√	Illumination		6%	$ 33,006
√	Water	Minor Adjustments	3%	$ 16,503
√	Sewer	Minor Adjustments	2%	$ 11,002
√	Landscaping and Irrigation		6%	$ 33,006
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 280,550**

Paving and Allowance Subtotal:		**$ 830,649**
Construction Contingency:	10%	$ 83,065
Mobilization	11%	$ 91,371
Prep ROW	4%	$ 33,226
Construction Cost TOTAL:		**$ 1,039,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,039,000**
Engineering/Survey/Testing:		16%	$ 166,240
Inspection		3.5%	$ 36,365
ROW/Easement Acquisition:		30%	$ 311,700
		Impact Fee Project Cost TOTAL	**$ 1,553,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-17**
Name:	South Street (2)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	1,200' E of Jackson St to Mauna Loa Ln		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	1,115		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	3,469	CY	$ 8.73	$ 30,283
202	Earthwork/Topsoil (6" depth)	2,478	SY	$ 1.83	$ 4,534
302	3" Asphalt (Type C)	268	TON	$ 140.87	$ 37,697
402	Asphalt Prime Coat	2,676	GAL	$ 6.00	$ 16,056
502	Lime Treated Subgrade (12" depth)	5,203	SY	$ 3.46	$ 18,004
602	10" Flexible Base	5,203	SY	$ 19.70	$ 102,506
702	6' Concrete Sidewalk (4" depth)	1,487	SY	$ 62.92	$ 93,541
802	Machine Laid Curb & Gutter	2,230	LF	$ 22.37	$ 49,885
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 352,506**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 14,100
√	Roadway Drainage	Standard Internal System	30%	$ 105,752
√	Illumination		6%	$ 21,150
√	Water	Minor Adjustments	3%	$ 10,575
√	Sewer	Minor Adjustments	2%	$ 7,050
√	Landscaping and Irrigation		6%	$ 21,150
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 179,778**

Paving and Allowance Subtotal:		**$ 532,284**
Construction Contingency:	10%	$ 53,228
Mobilization	11%	$ 58,551
Prep ROW	4%	$ 21,291
Construction Cost TOTAL:		**$ 666,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 666,000**
Engineering/Survey/Testing:		16%	$ 106,560
Inspection		3.5%	$ 23,310
ROW/Easement Acquisition:		30%	$ 199,800
		Impact Fee Project Cost TOTAL	**$ 996,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-18**
Name:	Technology Drive (1)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Mill St to Business Park Dr		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	755		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	2,013	CY	$ 8.73	$ 17,576
204	Earthwork/Topsoil (6" depth)	1,678	SY	$ 1.83	$ 3,070
304	3" Asphalt (Type C)	151	TON	$ 140.87	$ 21,271
404	Asphalt Prime Coat	1,510	GAL	$ 6.00	$ 9,060
504	Lime Treated Subgrade (12" depth)	3,020	SY	$ 3.46	$ 10,449
604	10" Flexible Base	3,020	SY	$ 19.70	$ 59,494
704	6' Concrete Sidewalk (4" depth)	839	SY	$ 62.92	$ 52,783
804	Machine Laid Curb & Gutter	1,510	LF	$ 22.37	$ 33,779
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 207,483**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 8,299
√	Roadway Drainage	Standard Internal System	30%	$ 62,245
√	Illumination		6%	$ 12,449
√	Water	Minor Adjustments	3%	$ 6,224
√	Sewer	Minor Adjustments	2%	$ 4,150
√	Landscaping and Irrigation		6%	$ 12,449
			Allowance Subtotal:	**$ 105,816**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 313,299**
Construction Contingency:	10%	$ 31,330
Mobilization	11%	$ 34,463
Prep ROW	4%	$ 12,532
Construction Cost TOTAL:		**$ 392,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 392,000**
Engineering/Survey/Testing:		16%	$ 62,720
Inspection		3.5%	$ 13,720
ROW/Easement Acquisition:		30%	$ 117,600
		Impact Fee Project Cost TOTAL	**$ 586,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-19**
Name:	Technology Drive (2)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Technology Drive (existing) to City Limits		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	2,430		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	6,480	CY	$ 8.73	$ 56,570
204	Earthwork/Topsoil (6" depth)	5,400	SY	$ 1.83	$ 9,882
304	3" Asphalt (Type C)	486	TON	$ 140.87	$ 68,463
404	Asphalt Prime Coat	4,860	GAL	$ 6.00	$ 29,160
504	Lime Treated Subgrade (12" depth)	9,720	SY	$ 3.46	$ 33,631
604	10" Flexible Base	9,720	SY	$ 19.70	$ 191,484
704	6' Concrete Sidewalk (4" depth)	2,700	SY	$ 62.92	$ 169,884
804	Machine Laid Curb & Gutter	4,860	LF	$ 22.37	$ 108,718
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 667,793**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 26,712
√	Roadway Drainage	Standard Internal System	30%	$ 200,338
√	Illumination		6%	$ 40,068
√	Water	Minor Adjustments	3%	$ 20,034
√	Sewer	Minor Adjustments	2%	$ 13,356
√	Landscaping and Irrigation		6%	$ 40,068
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 340,574**

Paving and Allowance Subtotal:		**$ 1,008,367**
Construction Contingency:	10%	$ 100,837
Mobilization	11%	$ 110,920
Prep ROW	4%	$ 40,335
Construction Cost TOTAL:		**$ 1,261,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,261,000**
Engineering/Survey/Testing:		16%	$ 201,760
Inspection		3.5%	$ 44,135
ROW/Easement Acquisition:		30%	$ 378,300
		Impact Fee Project Cost TOTAL	**$ 1,885,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** New	**Project No.**	**B-20**
Name:	Walnut Street	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Martin Luther King Dr to SH 21		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,170		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	3,120	CY	$ 8.73	$ 27,238
204	Earthwork/Topsoil (6" depth)	2,600	SY	$ 1.83	$ 4,758
304	3" Asphalt (Type C)	234	TON	$ 140.87	$ 32,964
404	Asphalt Prime Coat	2,340	GAL	$ 6.00	$ 14,040
504	Lime Treated Subgrade (12" depth)	4,680	SY	$ 3.46	$ 16,193
604	10" Flexible Base	4,680	SY	$ 19.70	$ 92,196
704	6' Concrete Sidewalk (4" depth)	1,300	SY	$ 62.92	$ 81,796
804	Machine Laid Curb & Gutter	2,340	LF	$ 22.37	$ 52,346
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
				Paving Construction Cost Subtotal:	**$ 321,530**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 12,861
√	Roadway Drainage	Standard Internal System	30%	$ 96,459
√	Illumination		6%	$ 19,292
√	Water	Minor Adjustments	3%	$ 9,646
√	Sewer	Minor Adjustments	2%	$ 6,431
√	Landscaping and Irrigation		6%	$ 19,292
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 163,980**

Paving and Allowance Subtotal:		**$ 485,510**
Construction Contingency:	10%	$ 48,551
Mobilization	11%	$ 53,406
Prep ROW	4%	$ 19,420
Construction Cost TOTAL:		**$ 607,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 607,000**
Engineering/Survey/Testing:		16%	$ 97,120
Inspection		3.5%	$ 21,245
ROW/Easement Acquisition:		30%	$ 182,100
	Impact Fee Project Cost TOTAL		**$ 907,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-21**
Name:	Jackson St (2)	**Construction of a 4 lane arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 21 to South St		
Impact Fee Class:	Primary Multimodal Street B		
Ultimate Class:	4D_(80)		
Length (lf):	1,305		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation (3' depth)	7,250	CY	$ 8.73	$ 63,293
203	Earthwork/Topsoil (6" depth)	5,220	SY	$ 1.83	$ 9,553
303	6" Asphalt (Type C)	383	TON	$ 140.87	$ 53,925
403	Asphalt Prime Coat	3,828	GAL	$ 6.00	$ 22,968
503	Lime Treated Subgrade (12" depth)	7,250	SY	$ 3.46	$ 25,085
603	18" Flexible Base	7,250	SY	$ 56.20	$ 407,450
703	6' Concrete Sidewalk (4" depth)	1,740	SY	$ 62.92	$ 109,481
803	Machine Laid Curb & Gutter	5,220	LF	$ 22.37	$ 116,771
903	Turn Lanes and Median Openings	267	SY	$ 118.58	$ 31,627
				Paving Construction Cost Subtotal:	**$ 840,153**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 42,008
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 33,606
√	Roadway Drainage	Standard Internal System	30%	$ 252,046
√	Illumination		6%	$ 50,409
√	Water	Minor Adjustments	3%	$ 25,205
√	Sewer	Minor Adjustments	2%	$ 16,803
√	Landscaping and Irrigation		6%	$ 50,409
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 470,485**

Paving and Allowance Subtotal:		**$ 1,310,638**
Construction Contingency:	10%	$ 131,064
Mobilization	11%	$ 144,170
Prep ROW	4%	$ 52,426
Construction Cost TOTAL:		**$ 1,639,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,639,000**
Engineering/Survey/Testing:		16%	$ 262,240
Inspection		3.5%	$ 57,365
ROW/Easement Acquisition:		30%	$ 491,700
		Impact Fee Project Cost TOTAL	**$ 2,450,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-22**
Name:	Lovers Ln	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	City Limits to College St		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	1,525		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	4,744	CY	$ 8.73	$ 41,419
202	Earthwork/Topsoil (6" depth)	3,389	SY	$ 1.83	$ 6,202
302	3" Asphalt (Type C)	366	TON	$ 140.87	$ 51,558
402	Asphalt Prime Coat	3,660	GAL	$ 6.00	$ 21,960
502	Lime Treated Subgrade (12" depth)	7,117	SY	$ 3.46	$ 24,624
602	10" Flexible Base	7,117	SY	$ 19.70	$ 140,198
702	6' Concrete Sidewalk (4" depth)	2,033	SY	$ 62.92	$ 127,937
802	Machine Laid Curb & Gutter	3,050	LF	$ 22.37	$ 68,229
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 482,127**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 24,106
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 19,285
√	Roadway Drainage	Standard Internal System	30%	$ 144,638
√	Illumination		6%	$ 28,928
√	Water	Minor Adjustments	3%	$ 14,464
√	Sewer	Minor Adjustments	2%	$ 9,643
√	Landscaping and Irrigation		6%	$ 28,928
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 269,991**

Paving and Allowance Subtotal:		**$ 752,118**
Construction Contingency:	10%	$ 75,212
Mobilization	11%	$ 82,733
Prep ROW	4%	$ 30,085
Construction Cost TOTAL:		**$ 941,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 941,000**
Engineering/Survey/Testing:		16%	$ 150,560
Inspection		3.5%	$ 32,935
ROW/Easement Acquisition:		30%	$ 282,300
Impact Fee Project Cost TOTAL			**$ 1,407,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-23**
Name:	Mauna Loa Ln (2)	**Construction of a 2 lane collector, underground drainage, and 5' sidewalks on both sides of the street.**	
Limits:	Briar Forest Dr to Tahitian Dr		
Impact Fee Class:	Local Connector Street		
Ultimate Class:	2U_(50)		
Length (lf):	1,195		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation (2' depth)	3,187	CY	$ 8.73	$ 27,820
204	Earthwork/Topsoil (6" depth)	2,656	SY	$ 1.83	$ 4,860
304	3" Asphalt (Type C)	239	TON	$ 140.87	$ 33,668
404	Asphalt Prime Coat	2,390	GAL	$ 6.00	$ 14,340
504	Lime Treated Subgrade (12" depth)	4,780	SY	$ 3.46	$ 16,539
604	10" Flexible Base	4,780	SY	$ 19.70	$ 94,166
704	6' Concrete Sidewalk (4" depth)	1,328	SY	$ 62.92	$ 83,544
804	Machine Laid Curb & Gutter	2,390	LF	$ 22.37	$ 53,464
904	Turn Lanes and Median Openings	0	SY	$ 63.33	$ -
			Paving Construction Cost Subtotal:		**$ 328,400**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 16,420
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 13,136
√	Roadway Drainage	Standard Internal System	30%	$ 98,520
√	Illumination		6%	$ 19,704
√	Water	Minor Adjustments	3%	$ 9,852
√	Sewer	Minor Adjustments	2%	$ 6,568
√	Landscaping and Irrigation		6%	$ 19,704
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 183,904**

Paving and Allowance Subtotal:		**$ 512,304**
Construction Contingency:	10%	$ 51,230
Mobilization	11%	$ 56,353
Prep ROW	4%	$ 20,492
Construction Cost TOTAL:		**$ 641,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 641,000**
Engineering/Survey/Testing:		16%	$ 102,560
Inspection		3.5%	$ 22,435
ROW/Easement Acquisition:		30%	$ 192,300
	Impact Fee Project Cost TOTAL		**$ 958,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-24**
Name:	Mesquite St (3)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Wilson St to SH 95		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	2,765		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	8,602	CY	$ 8.73	$ 75,097
202	Earthwork/Topsoil (6" depth)	6,144	SY	$ 1.83	$ 11,244
302	3" Asphalt (Type C)	664	TON	$ 140.87	$ 93,481
402	Asphalt Prime Coat	6,636	GAL	$ 6.00	$ 39,816
502	Lime Treated Subgrade (12" depth)	12,903	SY	$ 3.46	$ 44,646
602	10" Flexible Base	12,903	SY	$ 19.70	$ 254,196
702	6' Concrete Sidewalk (4" depth)	3,687	SY	$ 62.92	$ 231,965
802	Machine Laid Curb & Gutter	5,530	LF	$ 22.37	$ 123,706
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 874,151**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 43,708
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 34,966
√	Roadway Drainage	Standard Internal System	30%	$ 262,245
√	Illumination		6%	$ 52,449
√	Water	Minor Adjustments	3%	$ 26,225
√	Sewer	Minor Adjustments	2%	$ 17,483
√	Landscaping and Irrigation		6%	$ 52,449
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 489,525**

Paving and Allowance Subtotal:		**$ 1,363,676**
Construction Contingency:	10%	$ 136,368
Mobilization	11%	$ 150,004
Prep ROW	4%	$ 54,547
Construction Cost TOTAL:		**$ 1,705,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,705,000**
Engineering/Survey/Testing:		16%	$ 272,800
Inspection		3.5%	$ 59,675
ROW/Easement Acquisition:		30%	$ 511,500
		Impact Fee Project Cost TOTAL	**$ 2,549,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-25**
Name:	SH 95 (1)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Mesquite St to 700' S of Mesquite St		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	695		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	4,170	CY	$ 8.73	$ 36,404
201	Earthwork/Topsoil (6" depth)	4,788	SY	$ 1.83	$ 8,762
301	6" Asphalt (Type C)	222	TON	$ 140.87	$ 31,329
401	Asphalt Prime Coat	2,224	GAL	$ 6.00	$ 13,344
501	Lime Treated Subgrade (12" depth)	4,170	SY	$ 3.46	$ 14,428
601	18" Flexible Base	4,170	SY	$ 56.20	$ 234,354
701	6' Concrete Sidewalk (4" depth)	927	SY	$ 62.92	$ 58,306
801	Machine Laid Curb & Gutter	2,780	LF	$ 22.37	$ 62,189
901	Turn Lanes and Median Openings	142	SY	$ 123.94	$ 17,604
				Paving Construction Cost Subtotal:	**$ 476,720**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 23,836
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 19,069
√	Roadway Drainage	Standard Internal System	30%	$ 143,016
√	Illumination		6%	$ 28,603
√	Water	Minor Adjustments	3%	$ 14,302
√	Sewer	Minor Adjustments	2%	$ 9,534
√	Landscaping and Irrigation		6%	$ 28,603
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 266,963**

Paving and Allowance Subtotal:		**$ 743,684**
Construction Contingency:	10%	$ 74,368
Mobilization	11%	$ 81,805
Prep ROW	4%	$ 29,747
Construction Cost TOTAL:		**$ 930,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 930,000**
Engineering/Survey/Testing:		16%	$ 148,800
Inspection		3.5%	$ 32,550
ROW/Easement Acquisition:		30%	$ 279,000
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 278,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-26**
Name:	SH 95 (2)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	700' S of Mesquite St to Hawthorne St		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	2,700		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	16,200	CY	$ 8.73	$ 141,426
201	Earthwork/Topsoil (6" depth)	18,600	SY	$ 1.83	$ 34,038
301	6" Asphalt (Type C)	864	TON	$ 140.87	$ 121,712
401	Asphalt Prime Coat	8,640	GAL	$ 6.00	$ 51,840
501	Lime Treated Subgrade (12" depth)	16,200	SY	$ 3.46	$ 56,052
601	18" Flexible Base	16,200	SY	$ 56.20	$ 910,440
701	6' Concrete Sidewalk (4" depth)	3,600	SY	$ 62.92	$ 226,512
801	Machine Laid Curb & Gutter	10,800	LF	$ 22.37	$ 241,596
901	Turn Lanes and Median Openings	552	SY	$ 123.94	$ 68,391
				Paving Construction Cost Subtotal:	**$ 1,852,007**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 92,600
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 74,080
√	Roadway Drainage	Standard Internal System	30%	$ 555,602
√	Illumination		6%	$ 111,120
√	Water	Minor Adjustments	3%	$ 55,560
√	Sewer	Minor Adjustments	2%	$ 37,040
√	Landscaping and Irrigation		6%	$ 111,120
			Allowance Subtotal:	**$ 1,037,124**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 2,889,131**
Construction Contingency:	10%	$ 288,913
Mobilization	11%	$ 317,804
Prep ROW	4%	$ 115,565
Construction Cost TOTAL:		**$ 3,612,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,612,000**
Engineering/Survey/Testing:		16%	$ 577,920
Inspection		3.5%	$ 126,420
ROW/Easement Acquisition:		30%	$ 1,083,600
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 1,080,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-27**
Name:	SH 95 (3)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Hawthorne St to Cedar St		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	1,560		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	9,360	CY	$ 8.73	$ 81,713
201	Earthwork/Topsoil (6" depth)	10,747	SY	$ 1.83	$ 19,666
301	6" Asphalt (Type C)	499	TON	$ 140.87	$ 70,322
401	Asphalt Prime Coat	4,992	GAL	$ 6.00	$ 29,952
501	Lime Treated Subgrade (12" depth)	9,360	SY	$ 3.46	$ 32,386
601	18" Flexible Base	9,360	SY	$ 56.20	$ 526,032
701	6' Concrete Sidewalk (4" depth)	2,080	SY	$ 62.92	$ 130,874
801	Machine Laid Curb & Gutter	6,240	LF	$ 22.37	$ 139,589
901	Turn Lanes and Median Openings	319	SY	$ 123.94	$ 39,515
				Paving Construction Cost Subtotal:	**$ 1,070,049**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 53,502
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 42,802
√	Roadway Drainage	Standard Internal System	30%	$ 321,015
√	Illumination		6%	$ 64,203
√	Water	Minor Adjustments	3%	$ 32,101
√	Sewer	Minor Adjustments	2%	$ 21,401
√	Landscaping and Irrigation		6%	$ 64,203
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 599,227**

Paving and Allowance Subtotal:		**$ 1,669,276**
Construction Contingency:	10%	$ 166,928
Mobilization	11%	$ 183,620
Prep ROW	4%	$ 66,771
Construction Cost TOTAL:		**$ 2,087,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,087,000**
Engineering/Survey/Testing:		16%	$ 333,920
Inspection		3.5%	$ 73,045
ROW/Easement Acquisition:		30%	$ 626,100
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 624,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-28**
Name:	SH 95 (4)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Cedar St to Spring St		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	1,885		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	11,310	CY	$ 8.73	$ 98,736
201	Earthwork/Topsoil (6" depth)	12,986	SY	$ 1.83	$ 23,764
301	6" Asphalt (Type C)	603	TON	$ 140.87	$ 84,973
401	Asphalt Prime Coat	6,032	GAL	$ 6.00	$ 36,192
501	Lime Treated Subgrade (12" depth)	11,310	SY	$ 3.46	$ 39,133
601	18" Flexible Base	11,310	SY	$ 56.20	$ 635,622
701	6' Concrete Sidewalk (4" depth)	2,513	SY	$ 62.92	$ 158,139
801	Machine Laid Curb & Gutter	7,540	LF	$ 22.37	$ 168,670
901	Turn Lanes and Median Openings	385	SY	$ 123.94	$ 47,747
				Paving Construction Cost Subtotal:	**$ 1,292,975**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 64,649
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 51,719
√	Roadway Drainage	Standard Internal System	30%	$ 387,893
√	Illumination		6%	$ 77,579
√	Water	Minor Adjustments	3%	$ 38,789
√	Sewer	Minor Adjustments	2%	$ 25,860
√	Landscaping and Irrigation		6%	$ 77,579
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 724,066**

Paving and Allowance Subtotal:		**$ 2,017,042**
Construction Contingency:	10%	$ 201,704
Mobilization	11%	$ 221,875
Prep ROW	4%	$ 80,682
Construction Cost TOTAL:		**$ 2,522,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,522,000**
Engineering/Survey/Testing:		16%	$ 403,520
Inspection		3.5%	$ 88,270
ROW/Easement Acquisition:		30%	$ 756,600
	Impact Fee Project Cost TOTAL (TxDOT 20%)		**$ 754,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-29**
Name:	SH 95 (5)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Farm St to Chestnut St/SH 21		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	870		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	5,220	CY	$ 8.73	$ 45,571
201	Earthwork/Topsoil (6" depth)	5,993	SY	$ 1.83	$ 10,968
301	6" Asphalt (Type C)	278	TON	$ 140.87	$ 39,218
401	Asphalt Prime Coat	2,784	GAL	$ 6.00	$ 16,704
501	Lime Treated Subgrade (12" depth)	5,220	SY	$ 3.46	$ 18,061
601	18" Flexible Base	5,220	SY	$ 56.20	$ 293,364
701	6' Concrete Sidewalk (4" depth)	1,160	SY	$ 62.92	$ 72,987
801	Machine Laid Curb & Gutter	3,480	LF	$ 22.37	$ 77,848
901	Turn Lanes and Median Openings	178	SY	$ 123.94	$ 22,037
				Paving Construction Cost Subtotal:	**$ 596,758**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 29,838
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 23,870
√	Roadway Drainage	Standard Internal System	30%	$ 179,027
√	Illumination		6%	$ 35,805
√	Water	Minor Adjustments	3%	$ 17,903
√	Sewer	Minor Adjustments	2%	$ 11,935
√	Landscaping and Irrigation		6%	$ 35,805
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 334,184**

Paving and Allowance Subtotal:		**$ 930,942**
Construction Contingency:	10%	$ 93,094
Mobilization	11%	$ 102,404
Prep ROW	4%	$ 37,238
Construction Cost TOTAL:		**$ 1,164,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,164,000**
Engineering/Survey/Testing:		16%	$ 186,240
Inspection		3.5%	$ 40,740
ROW/Easement Acquisition:		30%	$ 349,200
	Impact Fee Project Cost TOTAL (TxDOT 20%)		**$ 348,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Widening	**Project No.**	**B-30**
Name:	South Street (3)	**Construction of a 3 lane collector (2 lanes plus a center turn lane) with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	650' W of Jackson St to 1,200' E of Jack		
Impact Fee Class:	Primary Multimodal Street A		
Ultimate Class:	3U_(56)		
Length (lf):	1,675		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation (2' depth)	5,211	CY	$ 8.73	$ 45,493
202	Earthwork/Topsoil (6" depth)	3,722	SY	$ 1.83	$ 6,812
302	3" Asphalt (Type C)	402	TON	$ 140.87	$ 56,630
402	Asphalt Prime Coat	4,020	GAL	$ 6.00	$ 24,120
502	Lime Treated Subgrade (12" depth)	7,817	SY	$ 3.46	$ 27,046
602	10" Flexible Base	7,817	SY	$ 19.70	$ 153,988
702	6' Concrete Sidewalk (4" depth)	2,233	SY	$ 62.92	$ 140,521
802	Machine Laid Curb & Gutter	3,350	LF	$ 22.37	$ 74,940
902	Turn Lanes and Median Openings	0	SY	$ 71.37	$ -
				Paving Construction Cost Subtotal:	**$ 529,549**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 26,477
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 21,182
√	Roadway Drainage	Standard Internal System	30%	$ 158,865
√	Illumination		6%	$ 31,773
√	Water	Minor Adjustments	3%	$ 15,886
√	Sewer	Minor Adjustments	2%	$ 10,591
√	Landscaping and Irrigation		6%	$ 31,773
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 296,548**

Paving and Allowance Subtotal:		**$ 826,097**
Construction Contingency:	10%	$ 82,610
Mobilization	11%	$ 90,871
Prep ROW	4%	$ 33,044
Construction Cost TOTAL:		**$ 1,033,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,033,000**
Engineering/Survey/Testing:		16%	$ 165,280
Inspection		3.5%	$ 36,155
ROW/Easement Acquisition:		30%	$ 309,900
	Impact Fee Project Cost TOTAL		**$ 1,544,000**

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City of Bastrop

2023 Transportation Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 6/20/2023

Project Information:	**Description:** Access Management	**Project No.**	**B-31**
Name:	SH 21 (1)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Chestnut St to Walnut St		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	1,580		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	9,480	CY	$ 8.73	$ 82,760
201	Earthwork/Topsoil (6" depth)	10,884	SY	$ 1.83	$ 19,919
301	6" Asphalt (Type C)	506	TON	$ 140.87	$ 71,224
401	Asphalt Prime Coat	5,056	GAL	$ 6.00	$ 30,336
501	Lime Treated Subgrade (12" depth)	9,480	SY	$ 3.46	$ 32,801
601	18" Flexible Base	9,480	SY	$ 56.20	$ 532,776
701	6' Concrete Sidewalk (4" depth)	2,107	SY	$ 62.92	$ 132,551
801	Machine Laid Curb & Gutter	6,320	LF	$ 22.37	$ 141,378
901	Turn Lanes and Median Openings	323	SY	$ 123.94	$ 40,022
				Paving Construction Cost Subtotal:	**$ 1,083,767**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 54,188
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 43,351
√	Roadway Drainage	Standard Internal System	30%	$ 325,130
√	Illumination		6%	$ 65,026
√	Water	Minor Adjustments	3%	$ 32,513
√	Sewer	Minor Adjustments	2%	$ 21,675
√	Landscaping and Irrigation		6%	$ 65,026
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 606,910**

Paving and Allowance Subtotal:		**$ 1,690,677**
Construction Contingency:	10%	$ 169,068
Mobilization	11%	$ 185,974
Prep ROW	4%	$ 67,627
Construction Cost TOTAL:		**$ 2,114,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,114,000**
Engineering/Survey/Testing:		16%	$ 338,240
Inspection		3.5%	$ 73,990
ROW/Easement Acquisition:		30%	$ 634,200
Impact Fee Project Cost TOTAL (TxDOT 20%)			**$ 632,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Access Management	**Project No.**	**B-32**
Name:	SH 21 (2)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	Walnut St to SH 21 WBFR		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	2,255		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	13,530	CY	$ 8.73	$ 118,117
201	Earthwork/Topsoil (6" depth)	15,534	SY	$ 1.83	$ 28,428
301	6" Asphalt (Type C)	722	TON	$ 140.87	$ 101,652
401	Asphalt Prime Coat	7,216	GAL	$ 6.00	$ 43,296
501	Lime Treated Subgrade (12" depth)	13,530	SY	$ 3.46	$ 46,814
601	18" Flexible Base	13,530	SY	$ 56.20	$ 760,386
701	6' Concrete Sidewalk (4" depth)	3,007	SY	$ 62.92	$ 189,179
801	Machine Laid Curb & Gutter	9,020	LF	$ 22.37	$ 201,777
901	Turn Lanes and Median Openings	461	SY	$ 123.94	$ 57,120
				Paving Construction Cost Subtotal:	**$ 1,546,769**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 77,338
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 61,871
√	Roadway Drainage	Standard Internal System	30%	$ 464,031
√	Illumination		6%	$ 92,806
√	Water	Minor Adjustments	3%	$ 46,403
√	Sewer	Minor Adjustments	2%	$ 30,935
√	Landscaping and Irrigation		6%	$ 92,806
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 866,191**

Paving and Allowance Subtotal:		**$ 2,412,960**
Construction Contingency:	10%	$ 241,296
Mobilization	11%	$ 265,426
Prep ROW	4%	$ 96,518
Construction Cost TOTAL:		**$ 3,017,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,017,000**
Engineering/Survey/Testing:		16%	$ 482,720
Inspection		3.5%	$ 105,595
ROW/Easement Acquisition:		30%	$ 905,100
	Impact Fee Project Cost TOTAL (TxDOT 20%)		**$ 902,000**

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City of Bastrop

2023 Transportation Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/20/2023

Project Information:	**Description:** Access Management	**Project No.**	**B-33**
Name:	SH 95 (6)	**Construction of a 4 lane highway arterial with a median with curb and gutter, underground drainage, and 6' sidewalks on both sides of the street.**	
Limits:	SH 21 WBFR to SH 21 EBFR		
Impact Fee Class:	State Highway System		
Ultimate Class:	4D_(110)		
Length (lf):	580		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation (3' depth)	3,480	CY	$ 8.73	$ 30,380
201	Earthwork/Topsoil (6" depth)	3,996	SY	$ 1.83	$ 7,312
301	6" Asphalt (Type C)	186	TON	$ 140.87	$ 26,145
401	Asphalt Prime Coat	1,856	GAL	$ 6.00	$ 11,136
501	Lime Treated Subgrade (12" depth)	3,480	SY	$ 3.46	$ 12,041
601	18" Flexible Base	3,480	SY	$ 56.20	$ 195,576
701	6' Concrete Sidewalk (4" depth)	773	SY	$ 62.92	$ 48,658
801	Machine Laid Curb & Gutter	2,320	LF	$ 22.37	$ 51,898
901	Turn Lanes and Median Openings	119	SY	$ 123.94	$ 14,691
				Paving Construction Cost Subtotal:	**$ 397,839**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 19,892
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Bicycle Facilties	4%	$ 15,914
√	Roadway Drainage	Standard Internal System	30%	$ 119,352
√	Illumination		6%	$ 23,870
√	Water	Minor Adjustments	3%	$ 11,935
√	Sewer	Minor Adjustments	2%	$ 7,957
√	Landscaping and Irrigation		6%	$ 23,870
			Allowance Subtotal:	**$ 222,790**

Paving and Allowance Subtotal: $ 620,628

Construction Contingency:	10%	$ 62,063
Mobilization	11%	$ 68,269
Prep ROW	4%	$ 24,825
Construction Cost TOTAL:		**$ 776,000**

**Allowances based on % of Paving Construction Cost Subtotal

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 776,000**
Engineering/Survey/Testing:		16%	$ 124,160
Inspection		3.5%	$ 27,160
ROW/Easement Acquisition:		30%	$ 232,800
	Impact Fee Project Cost TOTAL (TxDOT 20%)		**$ 232,000**

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D. Summary of Transportation Impact Fee Credit Determination

Bond Debt - SA A

Sources
- Par Amount
- +Premium / - Discount
- Equity contreibution

Total Sources

Uses
- Project desposit $ 59,364,502.00
- Cost of Issuance (1%)
- Contingency

Total Uses

	Year	Principal	Coupon	Interest	Debt Service			
		$ 59,364,502.00	$ 1.02	$ 32,531,747.10	$ 91,896,249.10	$ 1.55	$ 32,531,747.10	$ 86,078,527.90
Debt Service Annually	1	$ 2,968,225.10	4.00%	$ 3,020,169.04	$ 5,988,394.14			
	2	$ 2,968,225.10	4.25%	$ 2,901,440.04	$ 5,869,665.14			
	3	$ 2,968,225.10	4.50%	$ 2,775,290.47	$ 5,743,515.57			
	4	$ 2,968,225.10	5.00%	$ 2,641,720.34	$ 5,609,945.44			
	5	$ 2,968,225.10	5.25%	$ 2,493,309.08	$ 5,461,534.18			
	6	$ 2,968,225.10	5.25%	$ 2,337,477.27	$ 5,305,702.37			
	7	$ 2,968,225.10	5.25%	$ 2,181,645.45	$ 5,149,870.55			
	8	$ 2,968,225.10	5.25%	$ 2,025,813.63	$ 4,994,038.73			
	9	$ 2,968,225.10	5.25%	$ 1,869,981.81	$ 4,838,206.91			
	10	$ 2,968,225.10	5.25%	$ 1,714,150.00	$ 4,682,375.10			
	11	$ 2,968,225.10	5.25%	$ 1,558,318.18	$ 4,526,543.28			
	12	$ 2,968,225.10	5.25%	$ 1,402,486.36	$ 4,370,711.46			
	13	$ 2,968,225.10	5.25%	$ 1,246,654.54	$ 4,214,879.64			
	14	$ 2,968,225.10	5.25%	$ 1,090,822.72	$ 4,059,047.82			
	15	$ 2,968,225.10	5.25%	$ 934,990.91	$ 3,903,216.01			
	16	$ 2,968,225.10	5.25%	$ 779,159.09	$ 3,747,384.19			
	17	$ 2,968,225.10	5.25%	$ 623,327.27	$ 3,591,552.37			
	18	$ 2,968,225.10	5.25%	$ 467,495.45	$ 3,435,720.55			
	19	$ 2,968,225.10	5.25%	$ 311,663.64	$ 3,279,888.74			
	20	$ 2,968,225.10	5.25%	$ 155,831.82	$ 3,124,056.92			
							$ 72,934,095.79	1.228580942
					10-Year	$ 23,960,997.12	$ 83,325,499.12	1.403625

Bond Debt - SA B

Sources

Par Amount
+Premium / - Discount
Equity contreibution

Total Sources

Uses

Project desposit $ 33,282,620.47
Cost of Issuance (1%)
Contingency

Total Uses

	Year	Principal	Coupon	Interest	Debt Service			
		$ 33,282,620.47	$ 1.02	$ 18,238,876.02	$ 51,521,496.48	$ 1.55	$ 18,238,876.02	$ 48,259,799.67
Debt Service Annually	1	$ 1,664,131.02	4.00%	1693253.316	$ 3,357,384.34			
	2	$ 1,664,131.02	4.25%	1626688.075	$ 3,290,819.10			
	3	$ 1,664,131.02	4.50%	1555962.507	$ 3,220,093.53			
	4	$ 1,664,131.02	5.00%	1481076.611	$ 3,145,207.63			
	5	$ 1,664,131.02	5.25%	1397870.06	$ 3,062,001.08			
	6	$ 1,664,131.02	5.25%	1310503.181	$ 2,974,634.20			
	7	$ 1,664,131.02	5.25%	1223136.302	$ 2,887,267.33			
	8	$ 1,664,131.02	5.25%	1135769.423	$ 2,799,900.45			
	9	$ 1,664,131.02	5.25%	1048402.545	$ 2,712,533.57			
	10	$ 1,664,131.02	5.25%	961035.6659	$ 2,625,166.69			
	11	$ 1,664,131.02	5.25%	873668.7872	$ 2,537,799.81			
	12	$ 1,664,131.02	5.25%	786301.9085	$ 2,450,432.93			
	13	$ 1,664,131.02	5.25%	698935.0298	$ 2,363,066.05			
	14	$ 1,664,131.02	5.25%	611568.1511	$ 2,275,699.17			
	15	$ 1,664,131.02	5.25%	524201.2723	$ 2,188,332.30			
	16	$ 1,664,131.02	5.25%	436834.3936	$ 2,100,965.42			
	17	$ 1,664,131.02	5.25%	349467.5149	$ 2,013,598.54			
	18	$ 1,664,131.02	5.25%	262100.6362	$ 1,926,231.66			
	19	$ 1,664,131.02	5.25%	174733.7574	$ 1,838,864.78			
	20	$ 1,664,131.02	5.25%	87366.87872	$ 1,751,497.90			
							$ 40,890,807.97	
					10-Year	$ 13,433,697.69	$ 46,716,318.15	1.403625

E. Transportation Impact Fee Credit Determination Supporting Exhibits

AD VALOREM TAXES SUMMARY	A	B
10-YEAR GROWTH PROJECTIONS		
Residential (single family dwelling units)	1,078	1,780
Residential (mulit-family dwelling units)	3,470	1,575
Basic (square Feet)	0	2,170,000
Service (square feet)	491,000	217,000
Retail (square feet)	2,347,000	949,000

AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA		
per Residential Dwelling Unit (single-family)	242,000	242,000
per Residential Dwelling Unit (multi-family)	135,000	135,000
per Square Feet of Industrial (Basic)	60	60
per Square Feet of Office (Service)	110	110
per Square Feet of Retail (Retail)	180	180

TOTAL PROPERTY VALUE BASED ON AD VALOREM TAX DATA				
per Residential Dwelling Unit	$	1,417,001.69	$	2,335,821.95
per Residential Dwelling Unit (multi-family)	$	2,540,198.23	$	1,155,966.55
per Square Feet of Industrial (Basic)	$	-	$	706,017.31
per Square Feet of Office (Service)	$	292,872.47	$	129,436.51
per Square Feet of Retail (Retail)	$	2,290,814.70	$	926,281.70
	$	6,540,887.08	$	5,253,524.02

RESIDENTIAL AD VALOREM TAXES SUMMARY

Service Area A - Ad Valorem

	0	1	2	3	4	5	6	7	8	9
1										
2	108	108	108	108	108	108	108	108	108	108
3		108	108	108	108	108	108	108	108	108
4			108	108	108	108	108	108	108	108
5				108	108	108	108	108	108	108
AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA					108	108	108	108	108	108
7			1			108	108	108	108	108
8							108	108	108	108
9								108	108	108
									108	108
										106
	108	216	325	432	540	648	756	864	972	1078
TOTAL PRO					242,000					
										0.09859
	$ 25,768.01	$ 51,536.01	$ 77,542.61	$ 103,072.02	$ 128,840.03	$ 154,608.03	$ 180,376.04	$ 206,144.04	$ 231,912.05	$ 257,202.87	$ 1,417,001.69

Service Area B - Ad Valorem

	0	1	2	3	4	5	6	7	8	9
1										
2	178	178	178	178	178	178	178	178	178	178
3		178	178	178	178	178	178	178	178	178
4			178	178	178	178	178	178	178	178
5				178	178	178	178	178	178	178
6					178	178	178	178	178	178
7						178	178	178	178	178
8							178	178	178	178
9								178	178	178
									178	178
										178
	178	356	534	712	890	1068	1246	1424	1602	1780
					242,000					
										0.09859
	$ 42,469.49	$ 84,938.98	$ 127,408.47	$ 169,877.96	$ 212,347.45	$ 254,816.94	$ 297,286.43	$ 339,755.92	$ 382,225.41	$ 424,694.90	$ 2,335,821.95

RESIDENTIAL AD VALOREM TAXES SUMMARY

Service Area A - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	347	347	347	347	347	347	347	347	347	347	
3		347	347	347	347	347	347	347	347	347	
4			347	347	347	347	347	347	347	347	
5				347	347	347	347	347	347	347	
AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA					347	347	347	347	347	347	
7						347	347	347	347	347	
8							347	347	347	347	
9								347	347	347	
									347	347	
										347	
	347	694	1041	1388	1735	2082	2429	2776	3123	3470	
TOTAL PRO					135,000						
										0.09859	
	$ 46,185.42	$ 92,370.84	$ 138,556.27	$ 184,741.69	$ 230,927.11	$ 277,112.53	$ 323,297.96	$ 369,483.38	$ 415,668.80	$ 461,854.22	$ 2,540,198.23

Service Area B - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	158	158	158	158	158	158	158	158	158	158	
3		158	158	158	158	158	158	158	158	158	
4			158	158	158	158	158	158	158	158	
5				158	158	158	158	158	158	158	
6					158	158	158	158	158	158	
7						158	158	158	158	158	
8							158	158	158	158	
9								158	158	158	
									158	158	
										153	
	158	316	474	632	790	948	1106	1264	1422	1575	
					135,000						
										0.09859	
	$ 21,029.67	$ 42,059.35	$ 63,089.02	$ 84,118.69	$ 105,148.37	$ 126,178.04	$ 147,207.72	$ 168,237.39	$ 189,267.06	$ 209,631.24	$ 1,155,966.55

INDUSTRIAL AD VALOREM TAXES SUMMARY

Service Area A - Ad Valorem

	0	1	2	3	4	5	6	7	8	9
1										
2	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0
4			0	0	0	0	0	0	0	0
5				0	0	0	0	0	0	0
AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA					0	0	0	0	0	0
7						0	0	0	0	0
8							0	0	0	0
9								0	0	0
									0	0
										0
	0	0	0	0	0	0	0	0	0	0
TOTAL PRO						60				
										0.09859
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Service Area B - Ad Valorem

	0	1	2	3	4	5	6	7	8	9
1										
2	217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000
3		217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000
4			217,000	217,000	217,000	217,000	217,000	217,000	217,000	217,000
5				217,000	217,000	217,000	217,000	217,000	217,000	217,000
6					217,000	217,000	217,000	217,000	217,000	217,000
7						217,000	217,000	217,000	217,000	217,000
8							217,000	217,000	217,000	217,000
9								217,000	217,000	217,000
									217,000	217,000
										217,000
	217,000.00	434,000.00	651,000.00	868,000.00	1,085,000.00	1,302,000.00	1,519,000.00	1,736,000.00	1,953,000.00	2,170,000.00
						60				
										0.09859
	$ 12,836.68	$ 25,673.36	$ 38,510.04	$ 51,346.71	$ 64,183.39	$ 77,020.07	$ 89,856.75	$ 102,693.43	$ 115,530.11	$ 128,366.78	$ 706,017.31

SERVICE AD VALOREM TAXES SUMMARY

Service Area A - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	49100	49100	49100	49100	49100	49100	49100	49100	49100	49100	
3		49100	49100	49100	49100	49100	49100	49100	49100	49100	
4			49100	49100	49100	49100	49100	49100	49100	49100	
5				49100	49100	49100	49100	49100	49100	49100	
AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA					49100	49100	49100	49100	49100	49100	
7						49100	49100	49100	49100	49100	
8							49100	49100	49100	49100	
9								49100	49100	49100	
									49100	49100	
										49100	
	49,100.00	98,200.00	147,300.00	196,400.00	245,500.00	294,600.00	343,700.00	392,800.00	441,900.00	491,000.00	
TOTAL PRO						110					
										0.09859	
	$ 5,324.95	$ 10,649.91	$ 15,974.86	$ 21,299.82	$ 26,624.77	$ 31,949.72	$ 37,274.68	$ 42,599.63	$ 47,924.59	$ 53,249.54	$ 292,872.47

Service Area B - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
3		21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
4			21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
5				21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
6					21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
7						21,700.00	21,700.00	21,700.00	21,700.00	21,700.00	
8							21,700.00	21,700.00	21,700.00	21,700.00	
9								21,700.00	21,700.00	21,700.00	
									21,700.00	21,700.00	
										21,700.00	
	21,700.00	43,400.00	65,100.00	86,800.00	108,500.00	130,200.00	151,900.00	173,600.00	195,300.00	217,000.00	
						110					
										0.09859	
	$ 2,353.39	$ 4,706.78	$ 7,060.17	$ 9,413.56	$ 11,766.96	$ 14,120.35	$ 16,473.74	$ 18,827.13	$ 21,180.52	$ 23,533.91	$ 129,436.51

RETAIL AD VALOREM TAXES SUMMARY

Service Area A - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	234700	234700	234700	234700	234700	234700	234700	234700	234700	234700	
3		234700	234700	234700	234700	234700	234700	234700	234700	234700	
4			234700	234700	234700	234700	234700	234700	234700	234700	
5				234700	234700	234700	234700	234700	234700	234700	
AVERAGE PROPERTY VALUE BASED ON AD VALOREM TAX DATA					234700	234700	234700	234700	234700	234700	
7						234700	234700	234700	234700	234700	
8							234700	234700	234700	234700	
9								234700	234700	234700	
									234700	234700	
										234700	
	234,700.00	469,400.00	704,100.00	938,800.00	1,173,500.00	1,408,200.00	1,642,900.00	1,877,600.00	2,112,300.00	2,347,000.00	
TOTAL PRO						180					
										0.09859	
	$ 41,651.18	$ 83,302.35	$ 124,953.53	$ 166,604.71	$ 208,255.88	$ 249,907.06	$ 291,558.23	$ 333,209.41	$ 374,860.59	$ 416,511.76	$ 2,290,814.70

Service Area B - Ad Valorem

	0	1	2	3	4	5	6	7	8	9	
1											
2	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
3		94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
4			94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
5				94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
6					94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
7						94,900.00	94,900.00	94,900.00	94,900.00	94,900.00	
8							94,900.00	94,900.00	94,900.00	94,900.00	
9								94,900.00	94,900.00	94,900.00	
									94,900.00	94,900.00	
										94,900.00	
	94,900.00	189,800.00	284,700.00	379,600.00	474,500.00	569,400.00	664,300.00	759,200.00	854,100.00	949,000.00	
						180					
										0.09859	
	$ 16,841.49	$ 33,682.97	$ 50,524.46	$ 67,365.94	$ 84,207.43	$ 101,048.91	$ 117,890.40	$ 134,731.88	$ 151,573.37	$ 168,414.85	$ 926,281.70

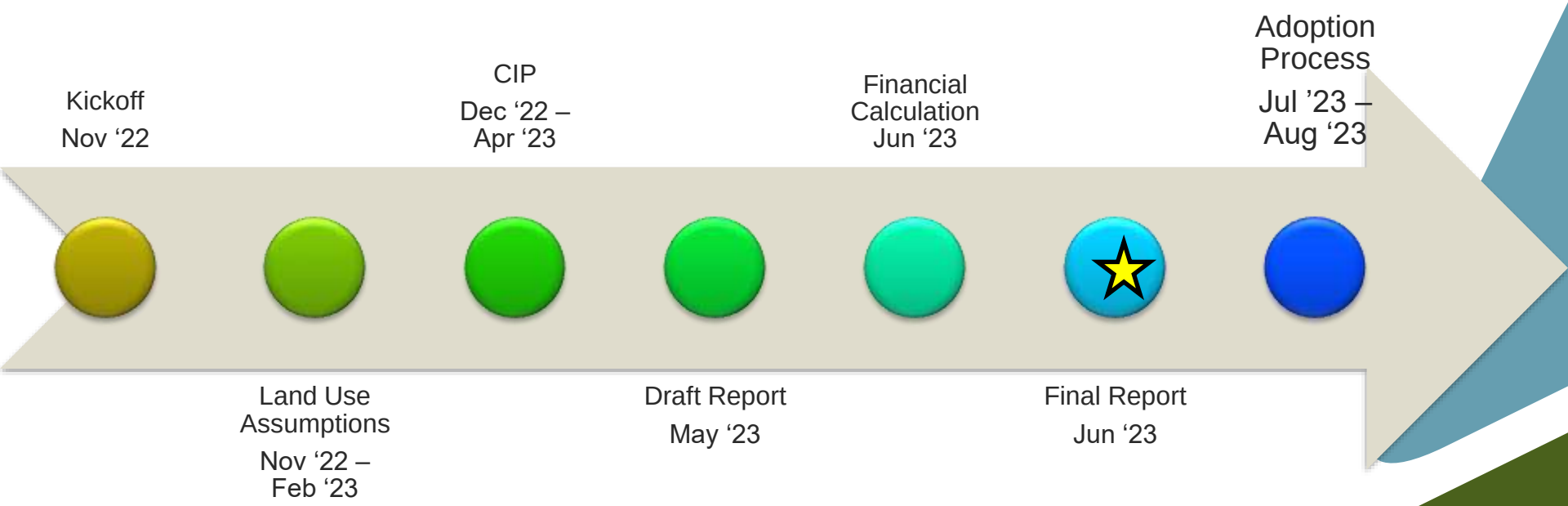
Impact Fee Advisory Committee
Transportation Impact Fees
Final Report & Collection Rates

June 29, 2023

Rough Outline

- Maximum Fee Final Results
- Comparison City Policies
- Policy Discussion with Rates
- **Potential Action:** Study Document with Maximum Fee with any comments on rates and policies

Project Timeline



Draft Final Report

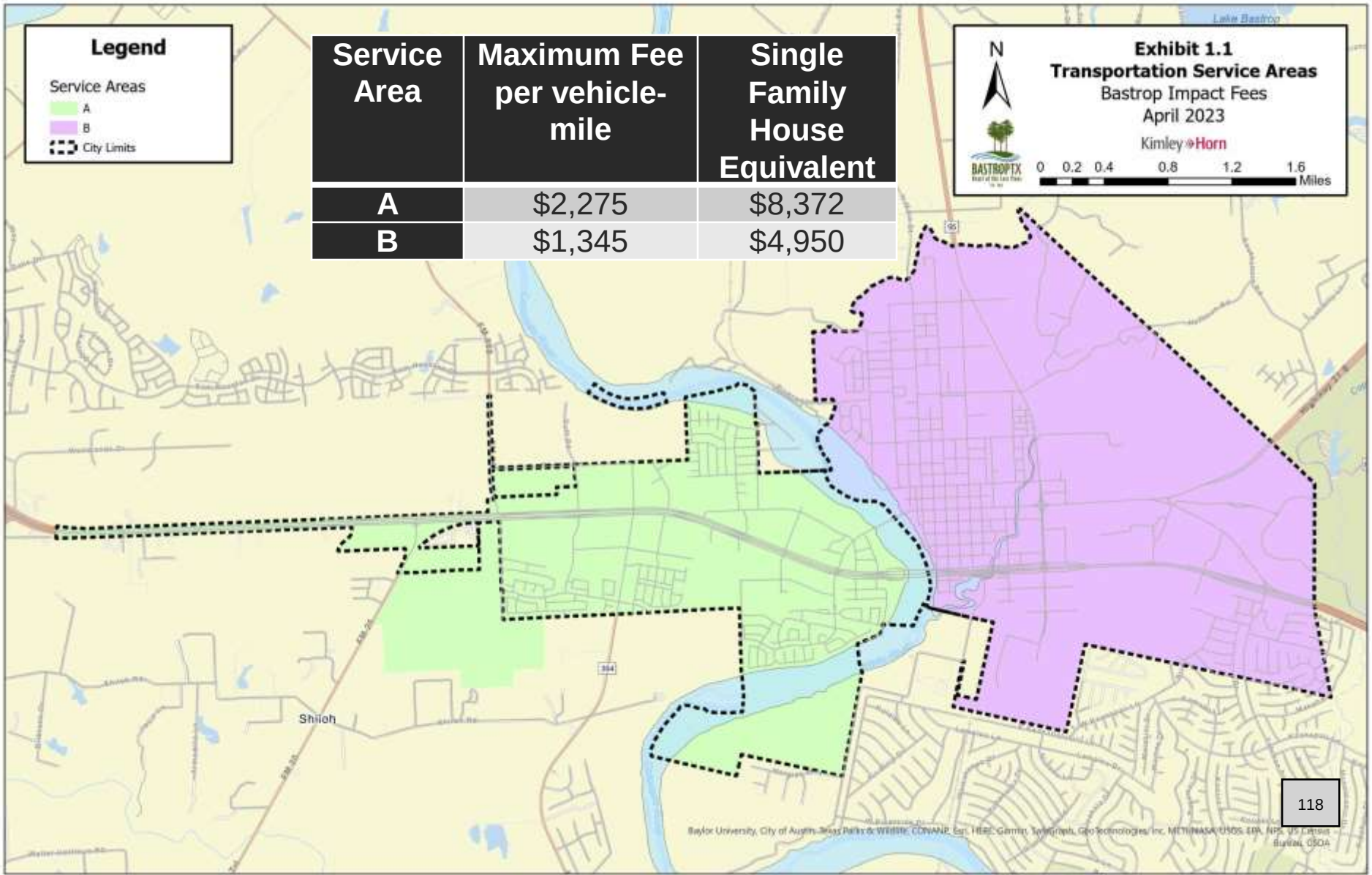
Action on collection rates, report comments, and policies

Kimley»Horn

MAXIMUM FEE (FINAL)

Final Maximum Fees (pre-Credit)

Service Area	Maximum Fee per vehicle-mile	Single Family House Equivalent
A	$2,275	$8,372
B	$1,345	$4,950



Impact Fee Components: Maximum Fee Application

- Example: $1,225/vehicle-mile (Service Area B)

1. Example Multifamily Development (350 Unit Apartment Complex) –
   - $1,225 * 350 units * 2 veh-mi per unit = $857,500
- Rate collected is based on Council decision (Policy).

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Impact Fee Components: Collection Rate Application

- Example: $500/vehicle-mile (TBD Ordinance)

1. Example Multifamily Development (350 Unit Apartment Complex) –
   - $500 * 350 units * 2 veh-mi per unit = $350,000
- Rate collected is based on Council decision (Policy).

POLICY FRAMEWORK

Policy Decisions Outline

- Effective Date
- Collection Rate
- Reductions

General Rule of thumb: simpler is better

Effective Date

- State law requires minimum 1 year grace period from Ordinance effective date for previously platted properties

INITIAL "OPTIONS"

- Set the effective date 12 months after adoption for "clean" rollout (or other length)
- (State Law Minimum) Set the grace period at 12 months or longer, but still collect on plats after adoption at any time

Other Cities' Implementation Schedules

City	Adoption	Effective Date	Grandfathering (if any)
Round Rock	March 2019	January 1, 2021 (Phased Rates)	Grace period for all properties 21 months
Pflugerville	November 2020	March 1, 2021 (Phased Rates)	Grace period for previously platted 3 month
Austin	December 2020	June 20, 2022 (No Phasing)	Grace period for all properties 18 months, if TIA approved prior to Dec '20, 3 years grace period
Georgetown	March 2021	March 1, 2023 (Phased Rates)	Exempt if prelim plat submitted prior to Mar '23, or if existing approved TIA or development agreement also exempt
Leander	July 7, 2022	January 7, 2024	Exempt plats prior to adoption if existing approved TIA or development agreement

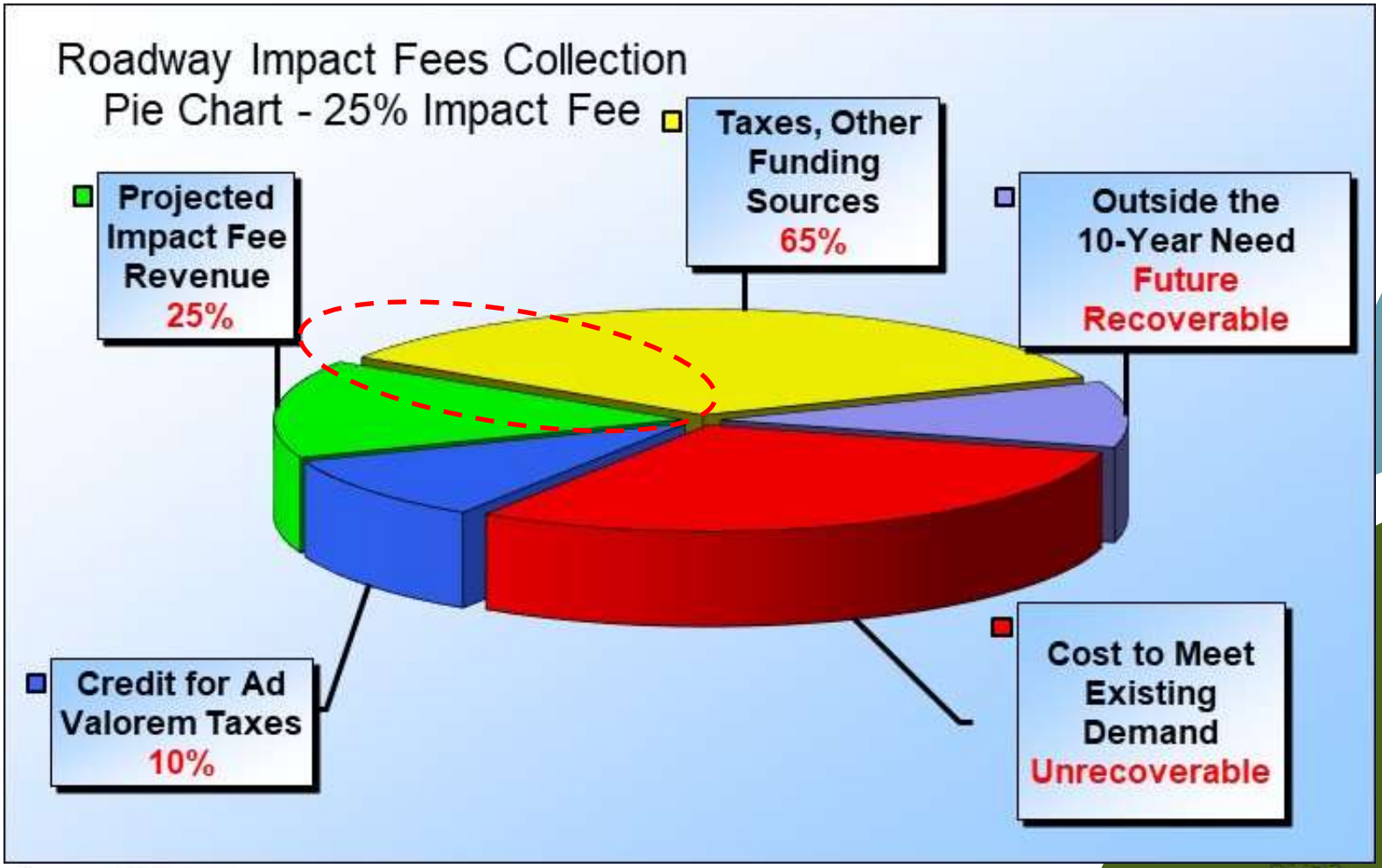
Collection Rate

- Limited by maximum fee in each service area

INITIAL "OPTIONS"

- Flat option – all the same limited by lowest max fee: *lowest max is $1,345 / service unit*
- Percent (%) option – rate varies by area, but can be flat percentage of maximum – *50% sits in line with state law credit "option"*
- Vary by Land Use or Land Use Category (Residential, Non-Residential, or more specific)

Impact Fee Components: Collection Rate



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Rates from Other Cities

Sample Development	Leander[2] (Low-High % of Max)	Georgetown[2] (2023 Rates - % of Max)	Round Rock (2023 Rate)	Round Rock (2024 Rate)	Austin[1] (Low – High)	Pflugerville[2] (Low – High % of Max)
Single Family House (ITE 210)	$580 - $4,402	$2,655 - $4,583	$4,813.80	$6,419.82	$2,439.50 - $3,621	$6,773
Single Family Attached (ITE 215) (Duplex) – each unit	$352 - $ 2,669	N/A	N/A	N/A	$1,377 - $2,048.50	N/A
Multi-family Mid-Rise (ITE 221) each unit	$241 - $1,830	$1,767 - $3,050	$2,135.70	$2,848.23	$1,088 - $1,606.50	$3,005
General Office (per 1,000 s.f.) (ITE 710)	$140 - $1,061	$970 - $1,674	$2,442.92	$2,929.17	$5,188.05 - $4,726.35	$3,092.55 - $6,138.42
General Light Industrial (per 1,000 s.f.) (ITE 130)	$112 - $850	$943 - $1,627	$2,373.84	$2,846.34	$1,494.45 - $2,916	$3,005.10 - $5,694.84
Shopping Center (per 1,000 s.f.) (between 40k-150k s.f. rate or ITE 820)	$313 - $2,377	$1,990 - $3,434	$5,011.44	$6,008.94	$4,434.75 - $4,847.85	$6,344.10 - $12,592.44

1 Note: Low & High differ due to different trip lengths in/out of "loop"
2 Note: Low & High differ due to different rates as a % of maximum in different Service Areas

Reductions (Optional)

- Policy to further other City Objectives
- Truly “endless possibilities”, needs focus
- Examples:
  - Affordable Housing
  - Internal Capture
  - Special Districts / Overlays
  - Desired Land Uses in Areas lacking

Recommend revisiting this later if implemented in 6-month updates to “tweak” policy if things arise

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POTENTIAL ACTION: STUDY, RATES, AND OTHER POLICIES

Potential Action: Study & Max Fee

- Options for IFAC:
  - Comments recorded at today's meeting to share with council
  - Share comments prior to 5 business days before the public hearing date with council
  - Could be to chair in letter format or individually
- Study Action:
  - Recommend to accept / deny study and maximum fee results with / without exceptions XYZ

Potential Action 1 of 2

- Potential Motions on Rates (Edit live):
  - Recommend adopting the maximums established in the study by Service Area (previous slide)
  - Recommend setting the collection rate for the following amounts, :
    - Residential – X% of maximum or $ flat rate
    - Non-Residential – X% of maximum or $ flat rate
    - Other – X% of maximum or $ flat rate
    - Special Districts reductions
    - Special Land Use reductions

Potential Action 2 of 2

- Potential Motions on Implementation (Edit live):
  - Recommend setting effective date of ordinance X months after Ordinance adoption, exempting XYZ at adoption date of Ordinance for Roadway Impact Fees.

Next Steps

- Take comments from IFAC to council for consideration
- Additional Council public hearing on the study with maximum fee rate
- Ordinance based on IFAC feedback for Council consideration