

CITY OF ROUND ROCK, TEXAS

2023 ROADWAY IMPACT FEE STUDY

UPDATE

FINAL REPORT



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Prepared for the City of Round Rock

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EXECUTIVE SUMMARY

Introduction

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. Across the country, they are used to fund police and fire facilities, parks, schools, roads and utilities. In Texas, the legislature has allowed their use for water, wastewater, roadway and drainage facilities. Since 1989, they have been used to fund public water and wastewater improvements in the City of Round Rock. In 2023, the City of Round Rock began performing an update to the Roadway Impact Fees last updated in 2021. In 2019, the land use assumptions and capital improvements plan were updated as part of the original study. The report was last updated in 2021 to reflect annexations and one minor project change.

In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs. In the case of Roadway Impact Fees, the infrastructure need is the increased capacity on arterial and collector roadways that serve the overall transportation system, which is based on the City of Round Rock Transportation Master Plan. The purpose of the 2023 Roadway Impact Fee Study Update is to identify the fee per unit of new development necessary to fund these improvements in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code. Per Chapter 395.052, the land use assumptions and capital improvements plan are required to be updated every five years. This report satisfies the first required update to the original 2019 Roadway Impact Fee Study.

Impact Fees are a mathematical calculation that determines a maximum impact fee that would be equivalent for growth paying for growth. The Maximum Roadway Impact Fee per Service Unit for Roadway Facilities is considered an appropriate measure of the impacts generated by a new unit of development on the City's Roadway System. An impact fee program is designed to be **predictable** for both the development community and City. An impact fee program is **equitable** since similar developments pay a similar fee regardless if they are the first or last to develop. An impact fee program is **transparent** because the maximum fee and collection rates are developed through a public process. This report describes in **detail** how the fee is calculated and how the Capital Improvement Advisory Committee (CIAC) monitors the Impact Fee program. An impact fee program



is **flexible** in that funds can be used on priority projects within service areas and not just on project adjacent to a specific development. An impact fee program is **consistent** with other City goals and objectives for growth. For example, the actual collection rate set by Council may be determined to be less than the Maximum Roadway Impact Fee to achieve and be in alignment with other City goals and objectives for growth.

Impact Fee Basics

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

Impact Fee Study

The 2023 Roadway Impact Fee Study Update determines the maximum impact fee per unit of new development chargeable as allowed by the state law. This determination is not a recommendation; the actual fee amount ultimately assessed is at the discretion of the Round Rock City Council, so long as it does not exceed the maximum assessable fee allowed by law. The study looks at a period of 10 years to project new growth and corresponding capacity needs, as required by state law. The study and corresponding maximum fees must be restudied at least every five years, per Chapter 395.052, which is the purpose of the 2023 Roadway Impact Fee Study Update. However, the study can be updated at any time to accommodate significant changes in any of the key variables of the impact fee equation.

Service Areas

A service area is a geographic area within which a unique maximum impact fee is determined. All fees collected within the service area must be spent on eligible improvements within the same service area. For Roadway Impact Fees, the service area may not exceed 6 miles, per Chapter 395.001 (9). In Round Rock, this restriction necessitated the creation of 3 separate service areas in the original 2019 Roadway Impact Fee Study. During the 2023 Roadway Impact Fee Study Update, it was determined that due to additional annexations in the northeast area of the city that an additional service area would need to be created to comply with the 6-mile limit. This impacted Service Area B in the original study which was then split along existing and proposed Kenney Fort Boulevard. North of Palm Valley Boulevard, the area west of Kenney Fort Boulevard from original Service Area B remains as Service Area B in this study. North of Palm Valley Boulevard, the area east of Kenney



Fort Boulevard and new annexations have been reassigned as Service Area D. For the purposes of implementing roadway impact fees, collections on building permits with a plat recorded within the effective date range of the original ordinance shall utilize the 3-service area structure, maximum fees and collection rates. For any ordinances with effective dates after the adoption of this study the new 4 service area structure is anticipated to be used. A map of the 3 service areas can be found on Page 16. A map of the 4 service areas can be found on Page 17.

Kenney Fort was chosen as new Service Area D to minimize the possibility of requiring service areas in the future. This facility was a logical choice to as a major arterial facility and beneficial to be a boundary so that extensions and expansions included in the Roadway Impact Fee Capital Improvements Plan may be funded from collections and both service area B and D. Since each service area has a unique maximum impact fee, the per-unit maximum fee for an identical land use may vary from one service area to the next.

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. Acknowledging that the parameters of the study (the corporate boundaries, Transportation Plan, Comprehensive Plan, zoning maps, platting history, etc.) are changing constantly, this study is based on conditions as they were on July 1, 2023.

One of the key elements in the determination of the impact fee is the amount of new development anticipated over 10 years. The residential and non-residential growth projections were performed using the Capital Area Metropolitan Planning Organization (CAMPO) Model projections from the Transportation Master Plan study finalized in 2023. Compared to the original 2019 Roadway Impact Fee Study, the 2023 Roadway Impact Fee Study Update projects a higher ratio of multifamily to single family residential development and a higher number of overall units, but a lower square footage of commercial growth over a 10-year period.

Roadway Impact Fee Capital Improvements Plan

The Roadway Impact Fee Capital Improvements Plan (RIF CIP) is distinct and separate from the City's traditional Capital Improvements Plan (CIP). The RIF CIP is a list of projects eligible for funding



through impact fees. The City's Transportation Master Plan is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. Only capacity improvements within the city limits from the City's Transportation Master Plan are included in the RIF CIP. Capacity improvements may include the addition of lanes, intersection improvements, ITS capacity enhancements, or the extension of a new road. Resurfacing or other maintenance activities do not qualify as capacity improvements under impact fee law in Texas and cannot be funded with Roadway Impact Fees.

The cost of the RIF CIP is one of the fundamental factors in the calculation of the per-unit maximum impact fee. The RIF CIP's cost was calculated through systematic evaluation of each eligible project. The previous 2019 Roadway Impact Fee Study projects were evaluated to determine if they were already completed, or the scope of projects had changed in this update. The project team drove the City's collector and arterial roadway network to determine the project scope, the presence of any special conditions (such as the need for significant drainage improvements or railroad crossings) and whether various additional construction costs were applicable (such as costing for significant grades). In determining project limits, the team identified roadway segments with uniform need. For Example, New Hope Drive has a portion with half of a 4-lane undivided built from Sam Bass Road to Flowstone Lane, while the remainder east to Flowstone Lane is a new alignment. These were split as separate projects based on uniform need. Developing unit costs from recently City bid projects and TxDOT moving average bid prices, uniform costs were determined for the major items of work, additional construction items, and project delivery costs. Section III provides a listing of the 10-Year RIF CIP by service area in Tables 2.A – 2.D and maps of the RIF CIP by service area in Exhibits 2.A – 2.D. Finally, detailed cost projections by project can be found in Appendix A. It should be noted that these cost projections are based on conceptual level planning and are subject to refinement upon final design.

Only those projects listed in the RIF CIP are eligible to utilize impact fee funds. In some cases, an interim project designation was used due to the ultimate build out not being needed in the 10-year window. An example of this is University Boulevard east of A.W. Grimes Boulevard, which is shown as a 4-lane divided road widening in the RIF CIP, but ultimately will be built out to a 6-lane divided road based on the Transportation Master Plan.



Only the costs associated with providing the additional capacity at an anticipated level of service D necessitated by 10 years of growth can be used to calculate the maximum impact fee. To calculate the maximum impact fee, the total cost of the RIF CIP at build-out was reduced to account for (1) the portion of new capacity that will address existing needs, (2) the portion of new capacity that will not be necessitated until beyond the 10-year growth window, and (3) contributions already made by current developments. A ratio that compares 10 years' demand for capacity to the net supply of capacity (total new capacity in the RIF CIP minus existing needs) can be calculated. That ratio, which may not exceed 100%, is then applied to the cost of the net capacity supplied. The result is a determination of the costs attributable to the next 10 years' growth, which is then used to calculate the maximum impact fee in accordance with state law. The result is known as the recoverable cost of the RIF CIP.

Service Unit

The "service unit" is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2023 Roadway Impact Fee Study Update to quantify the supply and demand for roads in the city. For transportation purposes, the service unit is defined as a vehicle-mile. A vehicle-mile is the capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development. 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.



Impact Fee Calculation

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

In the original 2019 Roadway Impact Fee Study, the maximum fee the city imposed was limited to service area C at \$2,511 per base service unit. Service area C was chosen since it had the lowest maximum fee. This decision was made to ease the burden on development. Additionally, this resulted in the same fee being charged citywide regardless of location which was seen as simpler.

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is calculated in **Table 9**. A detailed discussion of the calculation precedes **Table 8**, found on Page 47.

Collection and Use of Roadway Impact Fees

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



Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and RIF CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. The CIAC also reviews the Roadway Impact Fee ordinance and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities, per Chapter 395.058. The City Council then conducts a public hearing on the Land Use Assumptions, RIF CIP and Impact Fee Ordinance. One public hearing is required for the 2023 Roadway Impact Fee Study Update, per Chapter 395.054.

During adoption of the previous study, it was determined that phasing in the collection fee rate would help ease the burden on development by the then current city council. The adopted fee was determined to be 30 percent of that maximum for residential developments and 20 percent for non-residential developments with plat issued before January 1st, 2022, in Phase 1. The fee increased to 45 percent for residential developments and 25 percent for non-residential developments for final plat dates between January 1st, 2022, and before December 31, 2023, in Phase 2. Additionally, the fee increased to 60 percent for residential developments and 30 percent for non-residential for final plate dates after January 1st, 2024, in Phase 3. The ordinance collection rates established can be found on Page 8.

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



2023 Roadway Impact Fee Study Update Results

Below are the listing of the 2019 Roadway Impact Fee Study and 2023 Roadway Impact Fee Study Update's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile) in comparison:

Service Area	2019 Maximum Fee Per Service Unit (per Vehicle-Mile)	2023 Maximum Fee Per Service Unit (per Vehicle-Mile)
A	\$2,678	\$5,740
B	\$2,933	\$4,765
C	\$2,511	\$3,818
D	-	\$4,156

Below are the ordinance collection rates established by year for residential and non-residential:

Effective Date (Plat Date)	Residential Rates	Non-Residential Rates
Phase 1	\$753 / service unit	\$503 / service unit
Phase 2	\$1,130 / service unit	\$628 / service unit
Phase 3	\$1,507 / service unit	\$753 / service unit



I. INTRODUCTION

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

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

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

- 1) **Land Use Assumptions** (Pg. 11)
- 2) **Roadway Impact Fee Capital Improvements Plan (RIF CIP)** (Pg. 19)

Information from these Land Use Assumptions and RIF CIP is used extensively throughout the remainder of the report.

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

- 1) **Methodology for Roadway Impact Fees** (Pg. 29)
- 2) **Roadway Impact Fee Calculation** (Pg. 47)
- 3) **Plan for Financing and the Ad Valorem Tax Credit** (Pg. 49)
(Reference Section V.B. “Plan for Financing and the Ad Valorem Tax Credit”)



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

- Service Areas (Pg. 29)
- Service Units (Pg. 29)
- Cost Per Service Unit (Pg. 32)
- RIF CIP Costing Methodology (Pg. 34)
- Summary of RIF CIP Costs (Pg. 36)
- Service Unit Calculation (Pg. 41)

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit (Pg. 47)
- Service Unit Demand Per Unit of Development (Pg. 55)

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



II. LAND USE ASSUMPTIONS

A. Purpose and Overview

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for residential and employment growth projections within a municipality. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and development in the service area. The land use assumptions are then used in determining the need and timing of transportation improvements to serve future development.

This report documents the process used to develop the Land Use Assumptions for the City of Round Rock's Roadway Impact Fee (RIF) study. In accordance with Chapter 395 of the Texas Local Government Code, roadway impact fees must be calculated based on reasonable expectations of residential and employment growth within the next ten years (2023 – 2033).

Information from the following sources was compiled to complete the Land Use Assumptions:

- Transportation Master Plan 2023 Update
- CAMPO 2045 Plan
- City of Round Rock Historical Building Permit Data 2013-2017
- City of Round Rock staff
- Current planned development projects
- Parks and Trails System map



This Land Use Assumptions Summary includes the following components:

- **Land Use Assumptions Methodology** – An overview of the general methodology used to generate the land use assumptions.
- **Roadway Impact Fee Service Areas** – Explanation of the division of Round Rock into service areas for roadway and infrastructure facilities.
- **Residential and Employment Growth** – Data on residential and employment growth within the service area over the next ten years (2023 – 2033).
- **Land Use Assumptions Summary Table** – A synopsis of the Land Use Assumptions.

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

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

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

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

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

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

The above categories in the Land Use Assumptions match those used to develop the travel demand model for the City of Round Rock. These broader categories are used in the development of the assumptions for impact fees; however, expanded classifications used in the assessment of impact fees are found in the Land Use / Vehicle-Mile Equivalency Table (Pg. 57).



B. Land Use Assumptions Methodology

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

- Character, type, density, and quantity of existing development;
- Emerging Projects;
- Growth trends;
- Location of vacant land;
- Physical restrictions (i.e. flood plains, railroads); and
- Carrying Capacity (Growth Potential) of the City of Round Rock.

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

- **Step 1: Determine Base Year (2023)**
- **Step 2: Determine 10-Year Growth Projections**

Step 1: Determine Base Year (2023)

Traffic Analysis Zone (TAZ) data obtained from the CAMPO 2045 model was used to determine the 2023 residential units and employment square footage.

Residential units and basic, retail, and service employment data were interpolated to the year 2023 based on the 2010 base year and 2045 future year data in the CAMPO model. A conversion of square footage per employee was utilized to determine the number of units for non-residential land uses based on *ITE Trip Generation Manual*. Residential units were broken out into a split of 60% multifamily units and 40% single family units.



Step 2: Determine 10-Year Growth Projections

The CAMPO 2045 model was also used to determine carrying capacity using the same methodology as the 2023 base year. Growth rates for 2015 to 2045 were applied to the 2023 base year to determine growth for the City of Round Rock over the next 10 years to 2033. Growth rates for employment were converted to square footage using typical figures for employees per 1,000 square feet for each employment type. The growth rates for both residential and non-residential (employment) were then applied to the 2023 base year estimates and projected 10 years into the future to 2033. Finally, the 2033 projections were compared to historical building permit data from 2011 to 2017 to calibrate growth projections from the CAMPO 2045 Model and validate the 10-year growth assumptions.

From 2013 to 2017, 4,618 dwelling units were constructed and approximately 9,700,000 square feet of non-residential space was constructed in the City of Round Rock. The average of the historical trends (assuming growth rate for 5 years from 2013 to 2017 continues from 2023 to 2033) and the CAMPO 2045 Model were used to determine growth projections. Finally, planned large projects were also added to the average of the CAMPO 2045 Model and historical trends to further calibrate the Land Use Assumptions shown in **Table 1.**

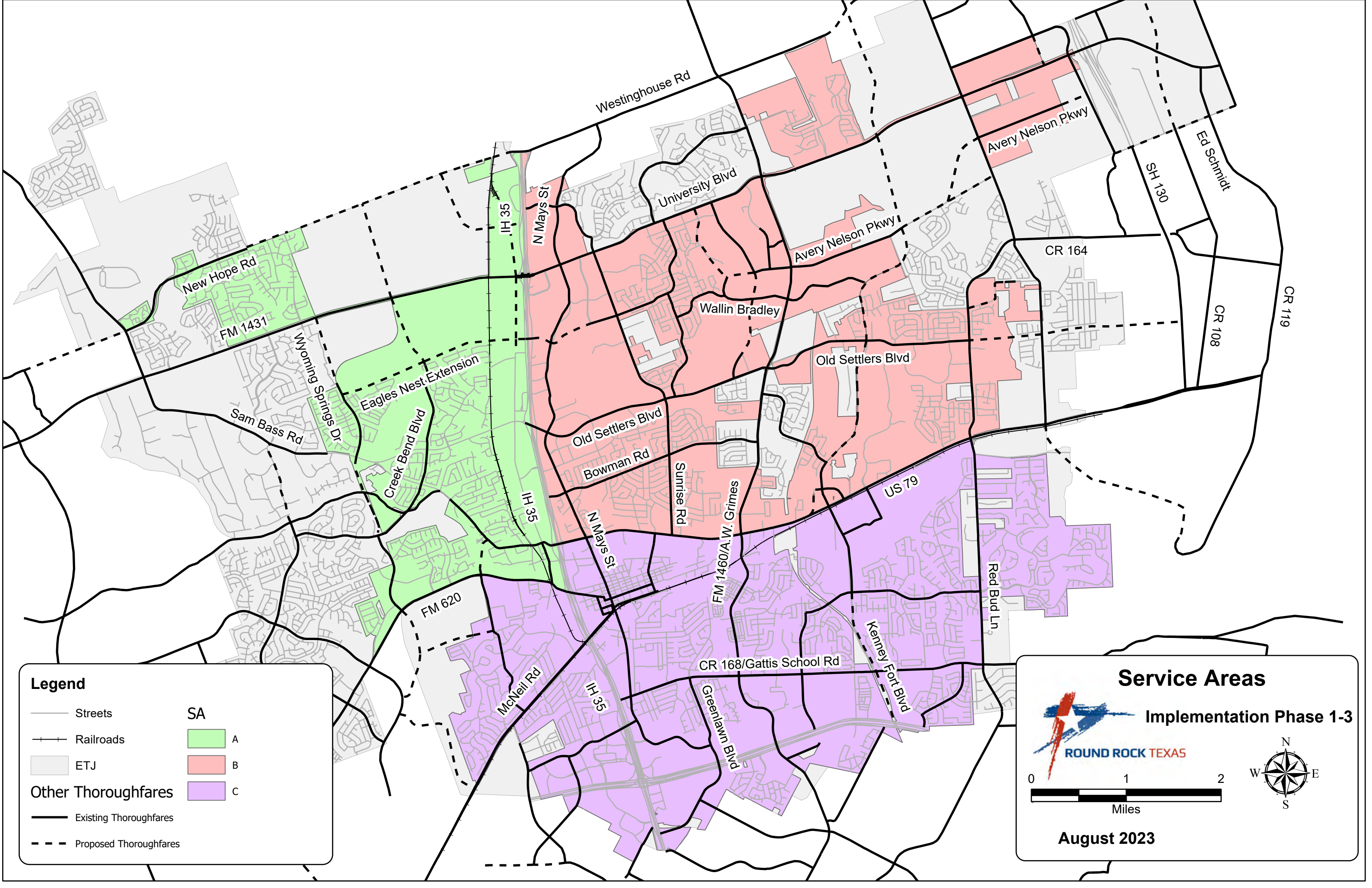


C. Roadway Impact Fee Service Areas

The geographic boundary of the proposed impact fee service areas for transportation facilities is shown in **Exhibit 1** and **Exhibit 2**. For Roadway Impact Fees, the service area may not exceed 6 miles, per Chapter 395.001 (9) of the Texas Local Government Code. In Round Rock, this restriction necessitated the creation of 3 separate service areas in the original 2019 Roadway Impact Fee Study. During the 2023 Roadway Impact Fee Study Update, it was determined that due to annexations in the northeast area of the city that an additional service area would be needed to comply with the 6-mile limit. Service Area B from the 2019 Roadway Impact Fee Study was split along existing and proposed Kenney Fort Boulevard to comply with the 6-mile limit. The area west of Kenney Fort Boulevard from the original Service Area B remains as Service Area B in this study. The area east of Kenney Fort Boulevard has been reassigned as Service Area D. For the purposes of implementing roadway impact fees, collections on building permits with a plat recorded within the effective date range of the original ordinance shall utilize the 3 service area structure, maximum fees and collection rates. For any ordinances with effective dates after the adoption of this study the new 4 service area structure is anticipated to be used.

Kenney Fort was chosen as new Service Area D to minimize the possibility of requiring additional service areas in the future. This facility was a logical choice as a major arterial facility and beneficial to be a boundary so that extensions and expansions included in the Roadway Impact Fee Capital Improvements Plan may be funded from collections from both Service Area B and Service Area D. Since each service area has a unique maximum impact fee, the per-unit maximum fee for an identical land use may vary from one service area to the next.

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



Legend

Streets

Railroads

ETJ

Other Thoroughfares

Existing Thoroughfares


Proposed Thoroughfares

SA

A

B


C



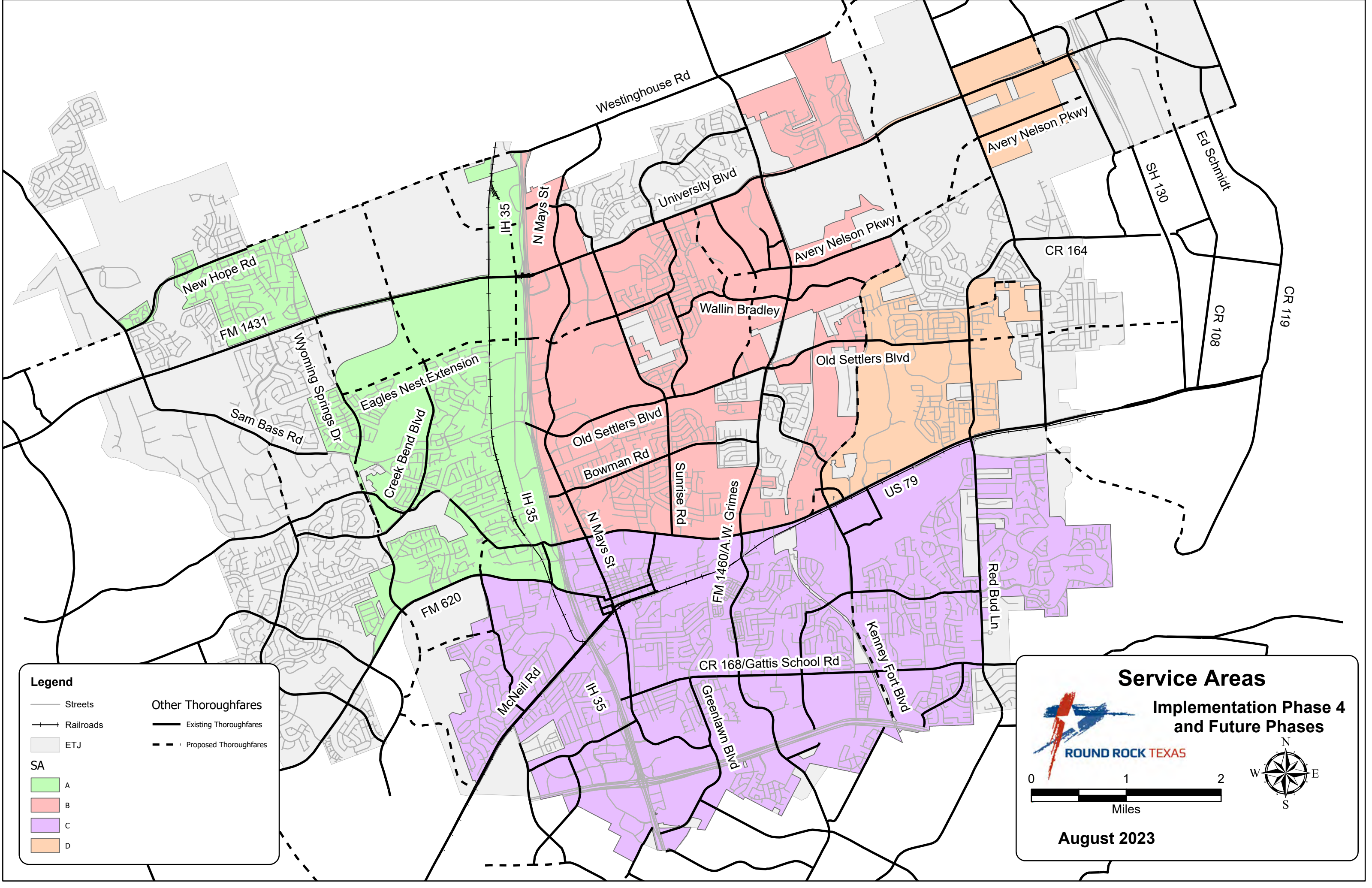
Service Areas
Implementation Phase 1-3

012

Miles



August 2023



Legend

—

Streets

—+—

Railroads

ETJ

SA

A

B

C

D


Other Thoroughfares

—

Existing Thoroughfares

- - -

Proposed Thoroughfares




ROUND ROCK TEXAS

Service Areas
Implementation Phase 4
and Future Phases

012

Miles



August 2023



D. Land Use Assumptions Summary

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

Table 1. Residential and Employment 10-Year Projections

Service Area	Year	Residential (Units)		Employment (Sq. Ft.)			
		Single Family	Multi-Family	Basic	Service	Retail	Total
A	2023-2033	2,127	1,418	500,000	1,100,000	300,000	1,900,000
B		2,259	1,506	700,000	600,000	200,000	1,500,000
C		3,250	717	0	3,925,000	400,000	4,325,000
D		2,750	340	0	220,000	80,000	300,000
Total		10,387	3,981	1,200,000	5,845,000	980,000	8,025,000



III. ROADWAY IMPACT FEE CAPITAL IMPROVEMENTS PLAN

The City has identified the transportation projects needed to accommodate the projected growth within the City. The City's Transportation Master Plan is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. The Roadway Impact Fee Capital Improvements Plan (RIF CIP) consists of 5 categories of projects. They are as follows:

- **Previously Constructed** – Identified corridors that were previously constructed and have access capacity for future development to utilized.
- **Widening** – Existing roadways not currently built to the ultimate class in the Transportation Master Plan and must be completely reconstructed
- **½ Widening** – Existing roadways that have built half of a 4-lane or 6-lane divided roadway previously and only need one side of the roadway to be built
- **Access Management** – Existing 5 lane undivided roadways identified for median construction in the existing center turn lane for access management purposes.
- **New** - All future roadways needed to complete the Transportation Master Plan

The RIF CIP includes arterial class roadway facilities, collector facilities as well as major intersection improvements. All the roadway facilities identified are included in the Transportation Master Plan except for some roadway alignment modifications due to city direction. Through evaluation of the Transportation Master Plan with City staff, some facilities were identified that were upgraded or downgraded from their functional classification to reflect capacity need in a 10-year window.



Major intersection improvements were identified in the Transportation Master Plan. Some improvements were left off because they did not specify capacity improvements, and some were added based on field observed need and confirmation from city staff. Improvements were categorized as follows:

- **Signal** – either a new signal or modification to an existing signal due to construction of a new roadway approach to an existing signalized intersection
- **Intersection Improvement** – construction of an intersection improvement to be determined after complete analysis
- **Turn Lanes** – addition or extension of a turn lane consistent with ASDG, TxDOT, and NCHRP Report 780 turn lane length recommendations.
- **Other** – a catch-all for other improvements, limited to new turn lanes, bond project recommendations not in the other 3 categories, removing split phasing at intersections, and special intersections (Continuous Flow Intersections (CFI), Diverging Diamond Intersections (DDI), or grade separation improvements)
- **Update ITS and Traffic Management Infrastructure** – This item was identified in the Transportation Master Plan and was split evenly between the four (4) service areas for developing the roadway impact fee.

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

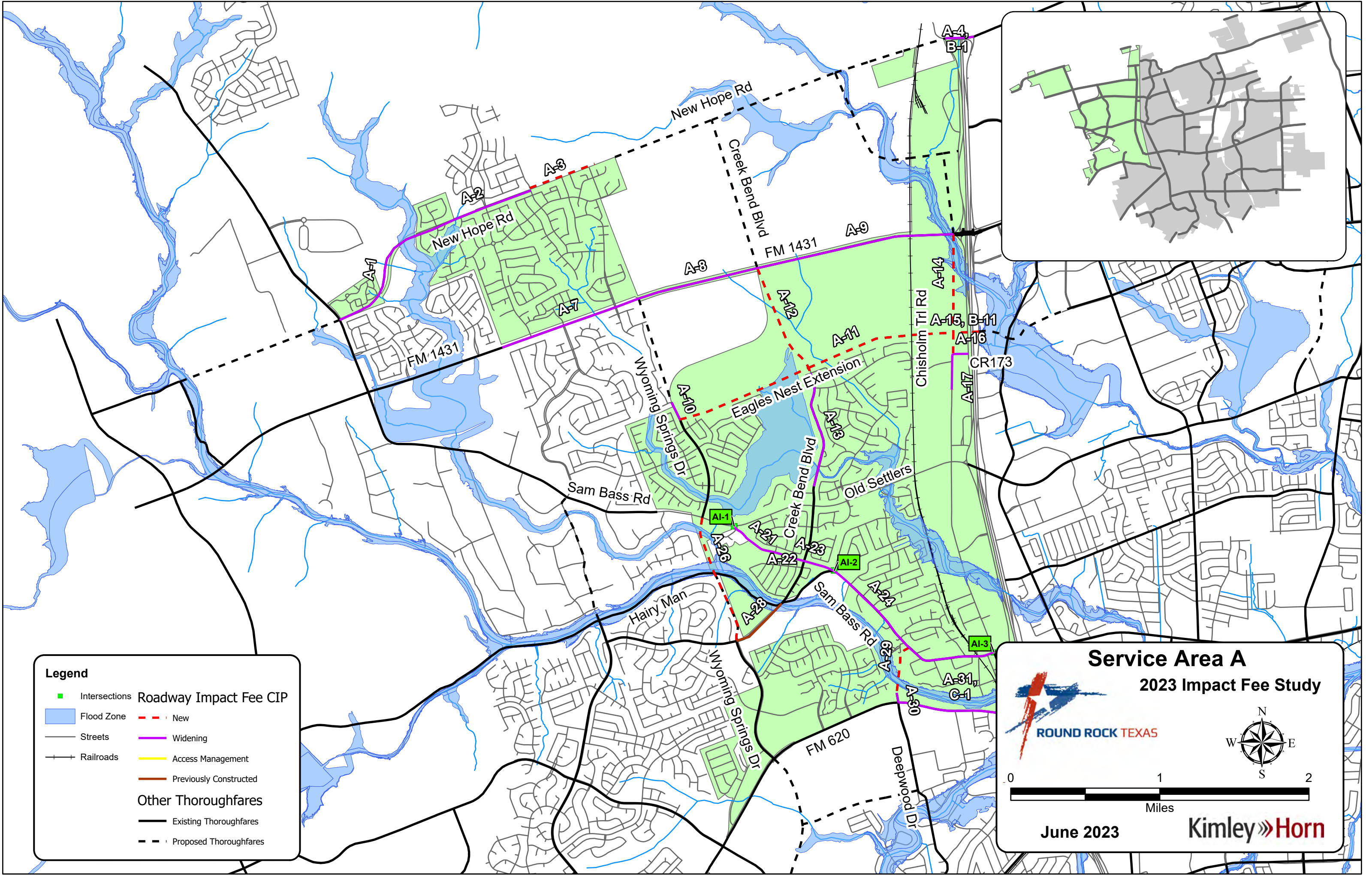
The proposed RIF CIP is listed in **Tables 2.A – 2.D** and mapped in **Exhibits 2.A – 2.D**. The tables show the length of each project as well as the facility's typology. The RIF CIP was developed in conjunction with input from City of Round Rock staff and represents projects that will be needed to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



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

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA A	A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	Sam Bass Rd to CR 175	1.10	100%
	A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	240' W of Lagoona Dr to Flowstone Ln	0.55	50%
	A-3	4 Lane - Proposed	New Hope Rd (3)	Flowstone Ln to 1000' E of Wyoming Springs Dr	0.46	50%
	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	50%
	A-7	6 Lane - Enhanced	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	50%
	A-8	6 Lane - Enhanced	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	100%
	A-9	6 Lane - Enhanced	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	50%
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	390' N of GoldenOak Cir to Alondra Way	0.13	100%
	A-11	4 Lane - Proposed	Eagles Nest Dr (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	1.73	100%
	A-12	4 Lane - Enhanced (1/2)	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.79	100%
	A-13	4 Lane - Proposed	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.14	100%
	A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.76	100%
	A-15, B-11	4 Lane - Proposed	Eagles Nest Dr (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.17	100%
	A-16	5 Lane - Enhanced	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	100%
	A-17	5 Lane - Enhanced	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	100%
	A-21	3 Lane - Enhanced	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	50%
	A-22	3 Lane - Enhanced	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	100%
	A-23	3 Lane - Enhanced	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	0.21	100%
	A-24	3 Lane - Enhanced	Sam Bass Rd (6)	Hairy Man Rd to Chisholm Trl Rd	1.33	50%
	A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	Sam Bass Rd to Creek Bend Blvd	0.88	100%
	A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	100%
	A-29	4 Lane - Proposed	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	100%
	A-30	4 Lane - Enhanced	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	100%
	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%
		Intersection Improvements	Location	Improvement(s)		% In Service Area
	AI-1		Sam Bass Rd and FM 3406	SIGNAL		100%
	AI-2		Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%
	AI-3		Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%
	-		Update ITS and Traffic Managemnet Infrastructure	-		25%

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



Legend

■

Intersections

■

Flood Zone

—

Streets

—+—

Railroads

— · —

New

—

Widening

—

Access Management

—

Previously Constructed

Other Thoroughfares

—

Existing Thoroughfares


— · —

Proposed Thoroughfares


Roadway Impact Fee CIP

Service Area A


2023 Impact Fee Study



ROUND ROCK TEXAS



N
W E
S



0 1 2
Miles

June 2023


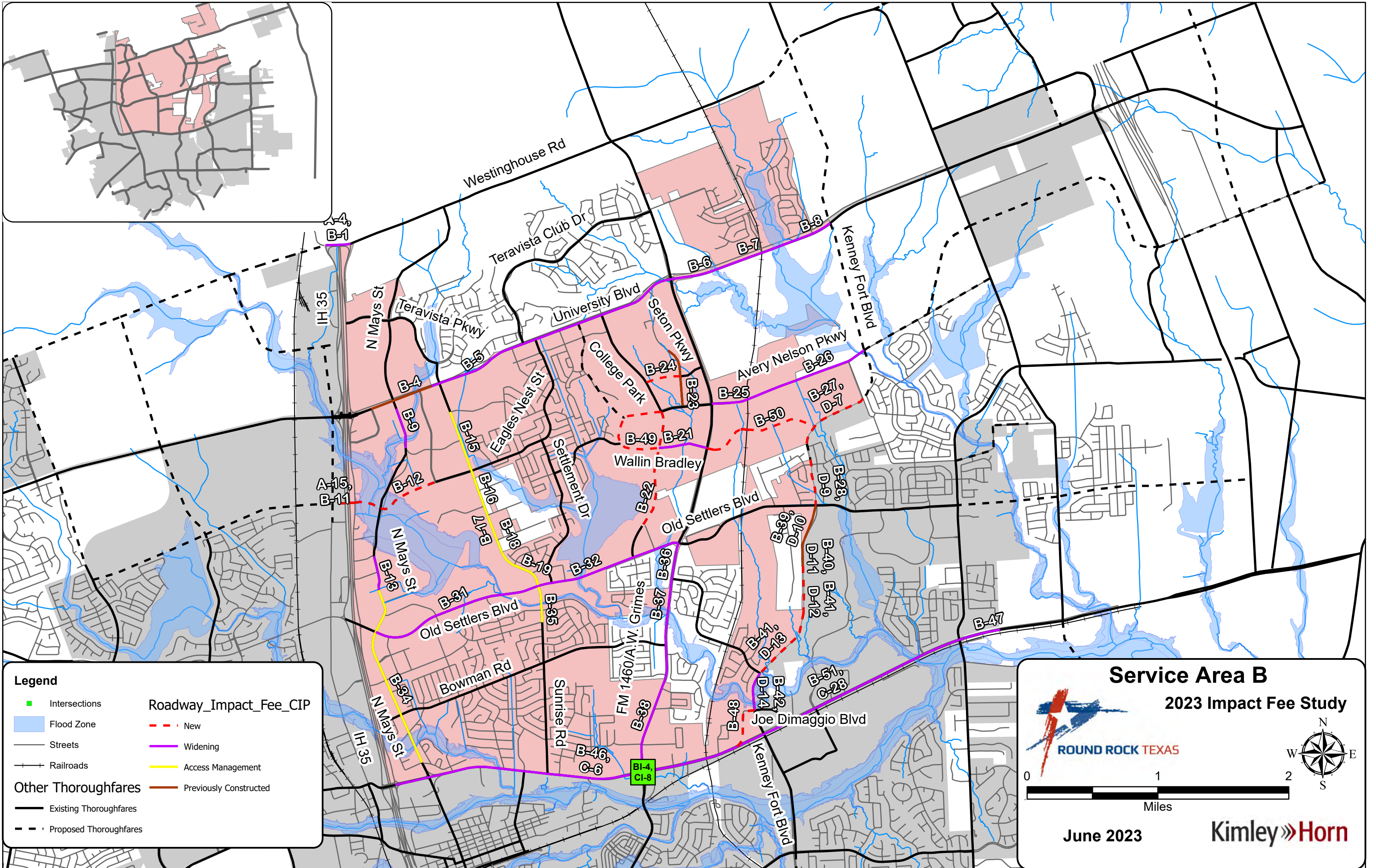




Table 2.B. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area B

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA B	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	50%
	B-4	6 Lane - Enhanced	University Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	100%
	B-5	6 Lane - Enhanced	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	50%
	B-6	4 Lane - Enhanced	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	100%
	B-7	4 Lane - Enhanced	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	50%
	B-8	4 Lane - Enhanced	University Blvd (5)	Lunata Way to Kenney Fort Blvd (Future)	0.16	100%
	B-9	4 Lane - Enhanced	N Mays St (2)	350' S of University Blvd to 2000' S of University Blvd	0.31	100%
	A-15, B-11	4 Lane - Proposed	Eagles Nest (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%
	B-12	4 Lane - Proposed	Eagles Nest (2)	IH 35 NBFR to Cypress Blvd	0.69	100%
	B-13	4 Lane - Enhanced	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	100%
	B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	100%
	B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	50%
	B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	100%
	B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	50%
	B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	100%
	B-21	4 Lane - Proposed	Wallin Bradley (2)	College Park (Future) to A.W. Grimes Blvd	0.37	100%
	B-22	4 Lane - Proposed	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	100%
	B-23	3 Lane - Existing	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	100%
	B-24	4 Lane - Proposed	Medical Center Pkwy	College Park to Seton Pkwy	0.27	100%
	B-25	4 Lane - Enhanced	Avery Nelson Pkwy (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	100%
	B-26	4 Lane - Enhanced	Avery Nelson Pkwy (2)	3580' E of A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.57	50%
	B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to 145' N of Haselwood Ln	0.58	100%
	B-28, D-9	4 Lane - Enhanced	CR 117 (1)	CR 112 to San Felipe St	0.00	50%
	B-31	6 Lane - Enhanced	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	100%
	B-32	6 Lane - Enhanced (1/3)	Old Settlers Blvd (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.00	100%
	B-34	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	100%
	B-35	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	100%
	B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	50%
	B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	100%
	B-38	6 Lane - Proposed (1/2)	Kenney Fort Blvd (4)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	100%
	B-39, D-10	6 Lane - Proposed	Kenney Fort Blvd (5)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	50%
	B-40, D-11	6 Lane - Proposed	Kenney Fort Blvd (6)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.36	100%
	B-41, D-12	6 Lane - Enhanced	Kenney Fort Blvd (7)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%
	B-42, D-14	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.00	100%
	B-46, C-6	6 Lane - Enhanced	US 79 (3)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	50%
	B-47	3 Lane - Proposed	Joe Dimaggio Blvd Extension	Kenney Fort Blvd to US 79	0.39	100%
	B-48	3 Lane - Proposed	Wallin Bradley (1)	College Park Dr to Avery Nelson Blvd	0.81	100%
	B-49	4 Lane - Proposed	Wallin Bradley (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	1.01	100%
	B-50	6 Lane - Enhanced	US 79 (2)	AW Grimes to Red Bud Ln	2.63	50%
	B-51, C-28	4 Lane - Existing	Terra Vista Pkwy	Centerbrook Pl to 350' S of Aosta Ln	0.00	50%
		Intersection Improvements	Location	Improvement(s)		% In Service Area
	BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%
	-		Update ITS and Traffic Management Infrastructure	-		25%

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



Legend


- Intersections
- Flood Zone
- Streets
- Railroads
- Other Thoroughfares
- Existing Thoroughfares
- Proposed Thoroughfares

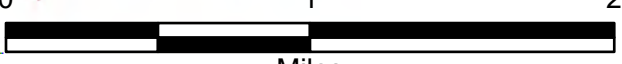
Roadway_Impact_Fee_CIP

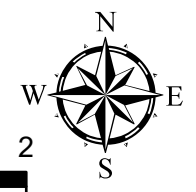
- New
- Widening
- Access Management
- Previously Constructed

Service Area B

2023 Impact Fee Study

 **ROUND ROCK TEXAS**

 0 1 2 Miles



June 2023

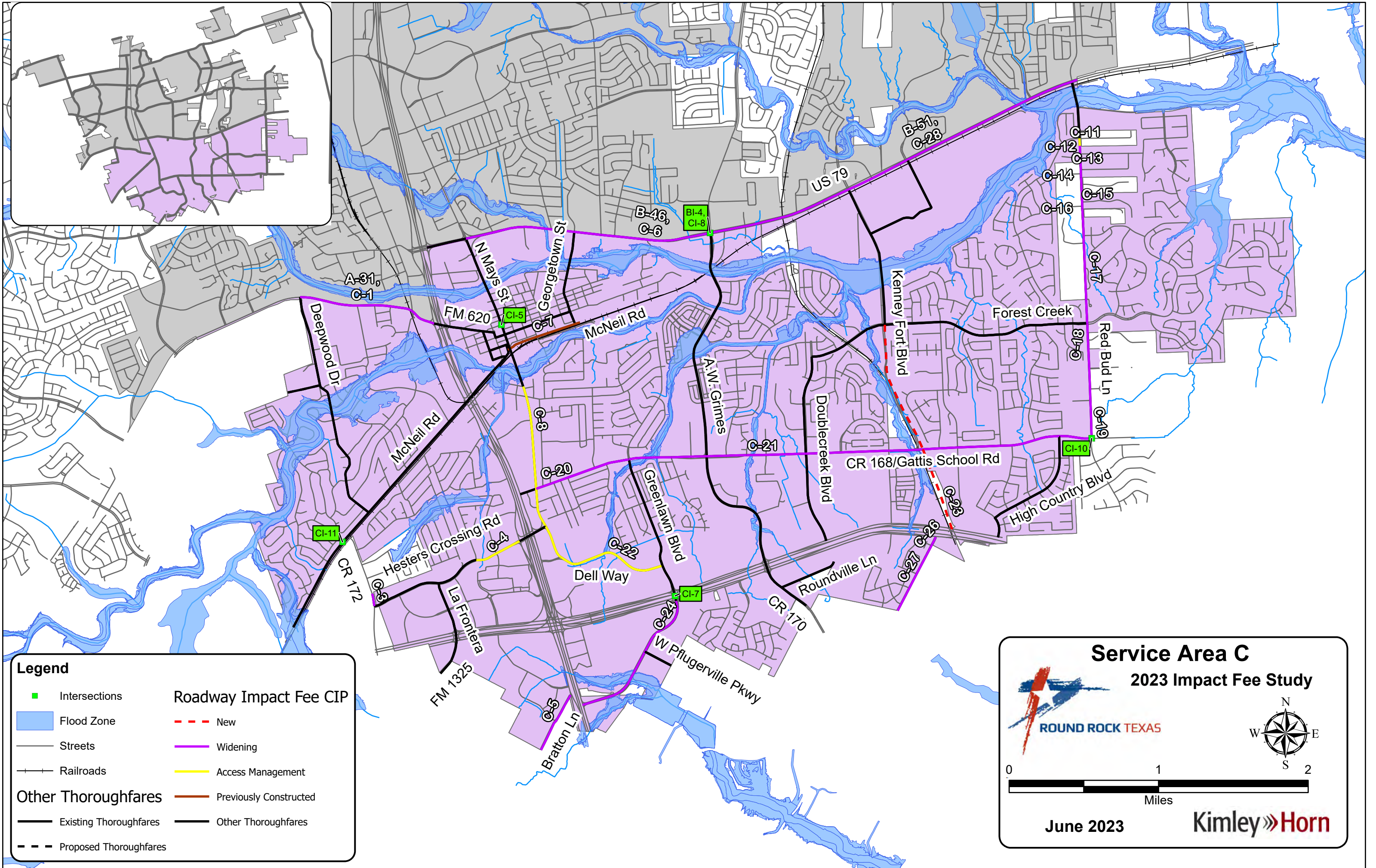
Kimley»Horn



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

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA C	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%
	C-3	4 Lane - Enhanced	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	50%
	C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	100%
	C-5	4 Lane - Enhanced	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	50%
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	IH 35 NBFR to 200' E of Red Bud Ln	1.96	50%
	C-7	3 Lane - Existing	McNeil Extension	S Mays St to Georgetown St	0.52	100%
	C-8	4 Lane - Enhanced (AM)	S Mays St	Nash St to Gattis School Rd	0.69	100%
	C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	100%
	C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	50%
	C-12	4 Lane - Enhanced	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	100%
	C-13	4 Lane - Enhanced	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	50%
	C-14	4 Lane - Enhanced	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	100%
	C-15	4 Lane - Enhanced	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	50%
	C-16	4 Lane - Enhanced	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	100%
	C-17	4 Lane - Enhanced	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	50%
	C-18	4 Lane - Enhanced	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	100%
	C-19	4 Lane - Enhanced	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	50%
	C-20	6 Lane - Enhanced	Gattis School Rd (1)	S Mays St to Windy Park Dr	1.23	100%
	C-21	6 Lane - Enhanced	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	100%
	C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	100%
	C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	100%
	C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	100%
	C-26	4 Lane - Enhanced	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	100%
	C-27	4 Lane - Enhanced	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	50%
	B-51, C-28	6 Lane - Enhanced	US 79 (2)	AW Grimes to Red Bud Ln	2.63	50%
		Intersection Improvements	Location	Improvement(s)		% In Service Area
	CI-5		Mays St and Liberty Ave	SIGNAL		100%
	CI-7		Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%
	BI-4, CI-8		A. W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%
	CI-10		Red Bud Ln and Gattis School Rd	TURN LANES		100%
	CI-11		E McNeil Rd and Oakridge Dr	INTERSECTION IMPROVEMENT		100%
	-		Update ITS and Traffic Management Infrastructure	-		25%

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



Legend

■

 Intersections

■

 Flood Zone

—

 Streets

—+—

 Railroads

Other Thoroughfares

—

 Existing Thoroughfares

 Proposed Thoroughfares

Roadway Impact Fee CIP


 New

 Widening



 Access Management

 Previously Constructed

 Other Thoroughfares



Service Area C
2023 Impact Fee Study



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Miles

June 2023

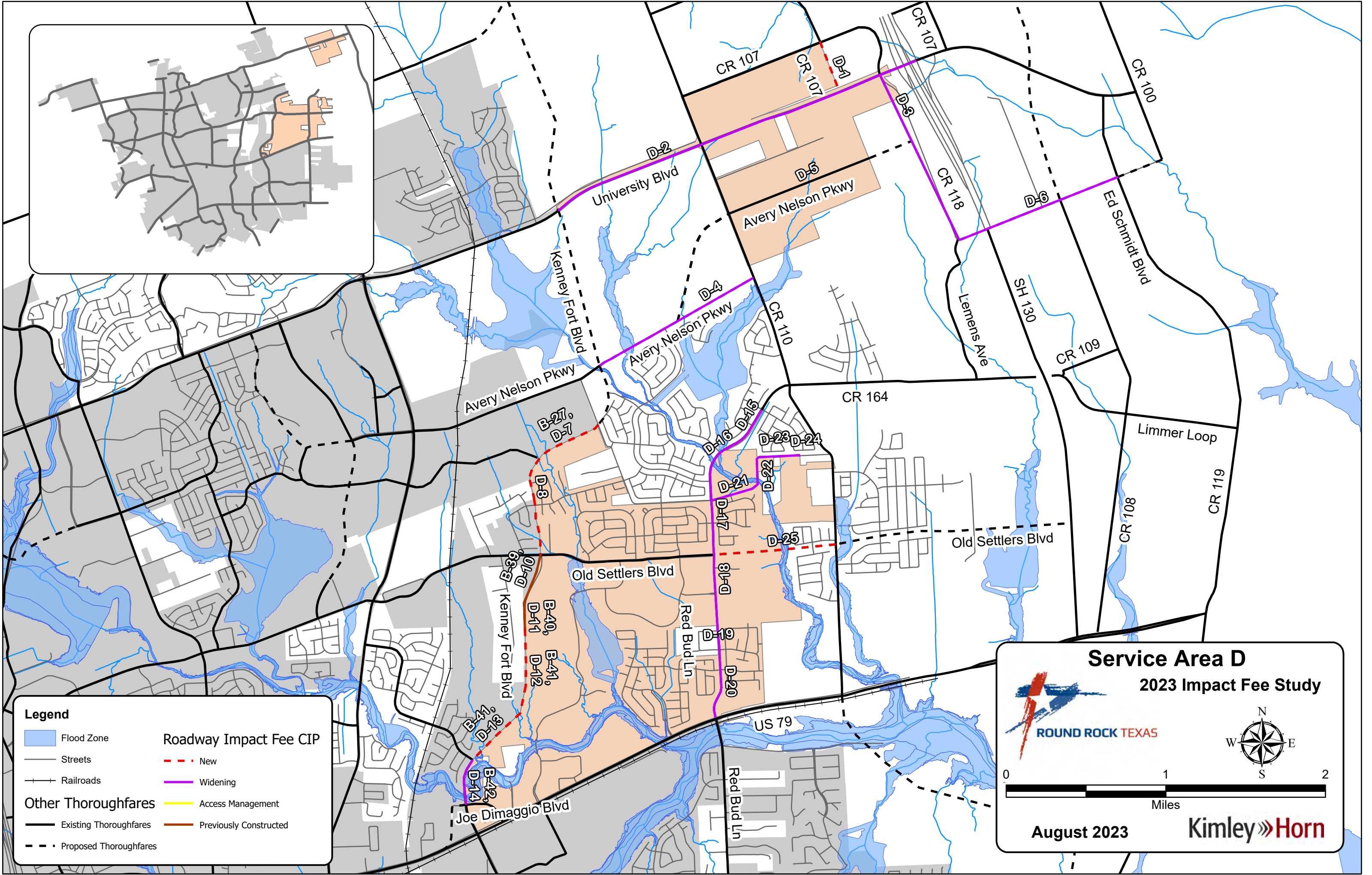
Kimley»Horn



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


Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA D	D-1	4 Lane - Proposed	CR 107	CR 107 to University Blvd	0.34	50%
	D-2	4 Lane - Enhanced	University Blvd (6)	Kenney Fort Blvd to SH 130	2.44	100%
	D-3	4 Lane - Proposed	CR 118	University Blvd to Avery Nelson Pkwy	1.14	100%
	D-4	4 Lane - Enhanced	Avery Nelson Pkwy (3)	Kenney Fort Blvd to CR 110	1.11	100%
	D-5	4 Lane - Existing	Avery Nelson Pkwy (4)	CR 110 to 5015' E of CR 110	0.95	100%
	D-6	4 Lane - Proposed	CR 118	Carmel Creekside Dr to Ed Schmidt Blvd	1.08	100%
	B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to 125' N of Haselwood Ln	0.58	100%
	D-8	4 Lane - Proposed	Kenney Fort Blvd (6)	125' N of Haselwood Ln to 200' N of Bluffstone Dr	0.12	50%
	B-28, D-9	6 Lane - Proposed	Kenney Fort Blvd (7)	200' N of Bluffstone Dr to Old Settlers Blvd	0.36	100%
	B-39, D-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Old Settlers Blvd to 2540' S of Old Settler's Blvd	0.30	100%
	B-40, D-11	6 Lane - Proposed (1/2)	Kenney Fort Blvd (3)	2540' S of Old Settler's Blvd to 4625' N of Chandler Creek Blvd	0.18	50%
	B-41, D-12	6 Lane - Proposed	Kenney Fort Blvd (4)	4625' N of Chandler Creek Blvd to 3115' N of Chandler Creek Blvd	0.36	100%
	B-41, D-13	6 Lane - Proposed	Kenney Fort Blvd (8)	3115' N of Chandler Creek Blvd to Chandler Creek Blvd	0.59	100%
	B-42, D-14	6 Lane - Proposed	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%
	D-15	4 Lane - Proposed	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	100%
	D-16	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	50%
	D-17	4 Lane - Enhanced (1/2)	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	100%
	D-18	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	100%
	D-19	4 Lane - Enhanced	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	50%
	D-20	4 Lane - Enhanced	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	100%
	D-21	4 Lane - Enhanced	CR 122 (1)	Red Bud Ln to 230' SW of Rosalina Loop	0.49	100%
	D-22	3 Lane - Proposed	CR 122 (2)	230' SW of Rosalina Loop to 100' S of Emilia Ln	0.09	50%
	D-23	3 Lane - Proposed	CR 122 (3)	100' S of Emilia Ln to 100' S of Rosalina Loop	0.04	100%
	D-24	3 Lane - Proposed	CR 122 (4)	100' S of Rosalina Loop to 100' S of Penelope Ct	0.13	50%
	D-25	4 Lane - Proposed	Old Settlers Blvd	Red Bud Ln to CR 110	0.77	100%
		Intersection Improvements	Location	Improvement(s)		% In Service Area
	-		Update ITS and Traffic Managemenet Infrastructure	-		25%

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


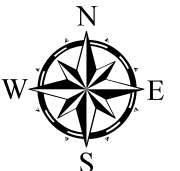


Legend

- | | |
|----------------------------|-------------------------------|
| Flood Zone | Roadway Impact Fee CIP |
| Streets | New |
| Railroads | Widening |
| Other Thoroughfares | Access Management |
| Existing Thoroughfares | Previously Constructed |
| Proposed Thoroughfares | |




Service Area D
2023 Impact Fee Study



Miles

August 2023





IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. Service Areas

The three (3) service areas used in the 2019 Roadway Impact Fee Study are shown in *Exhibit 1*. The four (4) service areas used in the 2023 Roadway Impact Fee Study Update are shown in *Exhibit 2*. These service areas cover the entire corporate area of the City of Round Rock (both limited and full purpose jurisdictions). Chapter 395 of the Texas Local Government Code specifies that “the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles.” In Round Rock, this restriction necessitated the creation of 3 separate service areas from the original 2019 Roadway Impact Fee Study. During the 2023 Roadway Impact Fee Study Update, it was determined that due to additional annexations in the northeast area of the city that an additional service area would need to be created to stay within the 6-mile limit. This impacted Service Area B in the original study which was then split along existing and proposed Kenney Fort Boulevard. The area west of Kenney Fort Boulevard from original Service Area B remains as Service Area B in this study. The area east of Kenney Fort Boulevard and new annexations have been reassigned as Service Area D. For the purposes of implementing roadway impact fees, collections on building permits with a plat recorded within the effective date range of the original ordinance shall utilize the 3 service area structure, maximum fees, and collection rates. For any ordinances with effective dates after the adoption of this study the new 4 service area structure anticipated to be used. The service areas in the 2023 Roadway Impact Fee Study Update are consistent with the specification of Chapter 395 of the Texas Local Government Code.

B. Service Units

The “service unit” is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2023 Roadway Impact Fee Study Update to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile.



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

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

Total Vehicle-Miles of Demand: Based on the 10-year growth projections (Pg. 46). The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2023 Roadway Impact Fee Study Update are based upon Capacity Criteria published by the Capital Area Metropolitan Planning Organization (CAMPO) and modified to accommodate different contexts within the City of Round Rock corporate limits. This capacity represents an approximate level of service D. **Table 3A** and **3B** show the service volumes as a function of the facility classification and type.



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

Facility Classification	Lanes	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
6 Lane	6	Divided	900
4 Lane Proposed	4	Divided	810
3 Lane Proposed	3	Undivided	410
2 Lane Existing	2	Undivided	410

Table 3B. Service Volumes for Existing Facilities

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-G	Rural Cross-Section (i.e., gravel, dirt, etc.)	100
2U-H	Two lane undivided – rural setting, high speed	770
2U	Two lane undivided – built-out	410
2U-OP	Two lane undivided with on-street parking	330
2U-Half	Two lane undivided – half of a 4 lane divided	410
3U	Three lane undivided (two-way, left-turn lane)	510
3U-OP	Three lane undivided with on street parking	410
4U	Four lane undivided	680
4D	Four lane divided	810
5U	Five lane undivided	770
6U	Six lane undivided	770
6D	Six lane divided	900
7U	Seven lane undivided	860



C. Cost Per Service Unit

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the Roadway Impact Fee, this is the cost for each vehicle-mile of travel. Thus, it is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel. The cost per service unit is calculated for each service area based on the roadway projects within that service area.

The second component of the cost per service unit is the determination of the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period.

D. Cost of the RIF CIP

All of the project costs for an arterial or collector facility which serves the overall transportation system are eligible to be included in the Roadway Impact Fee Capital Improvements Plan (RIF CIP). Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "...including and limited to the:

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

The engineer's opinion of the probable costs of the projects in the RIF CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The cost for location specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project, as appropriate. The following is a detailed description of the costing worksheet/methodology for the RIF CIP.



1. Overview of RIF CIP Costing Worksheets

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

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

Project Information

City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 7/7/2023

Project Information:		Description:	Project No.
Name:	N Mays St (2)		B-9
Limits:	350' S of University Blvd to 2000' S of University Blvd	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.	
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	1,855		
Service Area(s):	B		

Construction Pay Items

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
103	Unclassified Street Excavation	12,031	cy	\$ 24.33 \$ 293,000
203	12" Asphalt (Type C)	6,552	ton	\$ 139.92 \$ 917,000
303	16" Base	4,412	cy	\$ 68.92 \$ 295,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	10,862	sy	\$ 7.30 \$ 78,000
503	Surface Treatment (0.2 gal/sy, Prime Cost AE-P)	1,985	gal	\$ 7.30 \$ 14,000
603	10" Concrete Sidewalk	33,050	sf	\$ 10.95 \$ 362,000
703	Machine Laid Curb & Gutter	6,818	lf	\$ 36.50 \$ 242,000
803	Turn Lanes and Median Openings	1,003	sy	\$ 243.06 \$ 244,000
Paving Construction Cost Subtotal:				\$ 2,445,000

Construction Component Allowances

Major Construction Component Allowances**:				
Item Description	Notes	Allowance	Item Cost	
✓ Traffic Control	Construction Phase Traffic Control	5%	\$	122,000
✓ Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	49,000
✓ Roadway Drainage	Standard Internal System	30%	\$	734,000
✓ Illumination		10%	\$	245,000
✓ Special Drainage Structures	Bridge Crossing		\$	1,200,000
✓ Water	Minor Adjustments	2%	\$	49,000
✓ Sewer	Minor Adjustments	2%	\$	49,000
✓ Turf and Erosion Control		4%	\$	98,000
✓ Landscaping and Irrigation		2%	\$	49,000
Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal		Allowance Subtotal:	\$	2,595,000

Summary of Costs and Allowances

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,500,000
Engineering/Survey/Testing:		16%	\$ 1,040,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f	\$ 794,000
Impact Fee Project Cost TOTAL:			\$ 8,300,000

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



2. Project Information

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

- Project Number – Identifies which service area the project is in with a corresponding number. The corresponding number does not represent any prioritizations and is used only to identify projects. For example, Project A-9 is in Service Area A and is the 9th project on the list.
- Name – A unique identifier for each project. In some cases, abbreviations are used for the project name.
- Limits – Represents the beginning and ending location for each project.
- Service Area(s) – Represents the service areas where the project is located. Multiple service areas will be listed if the project lies along a service area boundary.
- Impact Fee Class – The costing class to be used in the analysis. The impact fee class provides the width for the various elements in the roadway. The construction costs are variable, based on the Transportation Master Plan classification of the roadway. Modification to roadway element widths are utilized in cases where a portion of the facility currently exists and the road is only to be widened, or where the road is planned to be widened to an interim configuration. Examples of these are access management projects, median widening projects (widening that occurs in an existing median), and are designated in the summary sheets at the beginning of each service area's Conceptual Level Cost Projections in **Appendix A**. Other specialized cases are noted in the short description box located in this section
- Ultimate Class – the ultimate classification of the roadway, if different from the Impact Fee Class based on determination of need in the 10-year window
- Length (ft) – The distance measured in feet that is used to cost out the project.



3. Construction Pay Items

A typical roadway project consists of several costs, including the following: planning, survey, design engineering, permitting, right-of way acquisition, and construction and testing. While the construction cost component of a project may consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. The pay items used in the 2023 RIF CIP are as follows:

- Unclassified street excavation;
- HMAC Surface courses (asphalt, in depth);
- Flexible roadway base;
- Lime stabilized subgrade;
- Surface treated prime coat;
- Concrete sidewalks;
- Concrete curb and gutter; and
- Turn lanes and median openings.

4. Construction Component Allowances

A percentage of the paving construction cost is allotted for various major construction component allowances, as appropriate. These allowances include traffic control, pavement markings, signs and posts, roadway drainage, illumination, water and sewer adjustments, turf and erosion control, landscaping and irrigation, mobilization, and preparation of right-of-way. These allowance percentages are also based on historical data.

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



5. Summary of Cost and Allowances

To determine the total Impact Fee Project Cost, sixteen percent (16%) of the construction cost total is added for engineering, surveying, and testing. Cost per square foot are also allotted ROW/easement acquisition based on \$20 for widenings and \$10 for new roadway alignments.

The Impact Fee Project Cost Total is then the Construction Cost Total plus engineering, surveying, and testing; plus contingency, plus ROW/easement acquisition; and minus roadway escrow agreements.

E. Summary of Roadway Impact Fee CIP Costs

Tables 4.A – 4.D are the 10-Year RIF CIP project lists for each service area with planning level project costs. Individual project cost worksheets can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted.

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



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

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
SA A	A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	Sam Bass Rd to CR 175	1.10	100%	\$ 16,500,000	\$ 16,500,000	
	A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	240' W of Lagoona Dr to Flowstone Ln	0.55	50%	\$ 8,200,000	\$ 4,100,000	
	A-3	4 Lane - Proposed	New Hope Rd (3)	Flowstone Ln to 1000' E of Wyoming Springs Dr	0.46	50%	\$ 11,100,000	\$ 5,550,000	
	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	50%	\$ 9,152,896	\$ 4,576,448	
	A-7	6 Lane - Enhanced	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	50%	\$ 5,180,000	\$ 2,590,000	
	A-8	6 Lane - Enhanced	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	100%	\$ 5,200,000	\$ 5,200,000	
	A-9	6 Lane - Enhanced	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	50%	\$ 6,960,000	\$ 3,480,000	
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	390' N of GoldenOak Cir to Alondra Way	0.13	100%	\$ 1,800,000	\$ 1,800,000	
	A-11	4 Lane - Proposed	Eagles Nest Dr (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	1.73	100%	\$ 41,600,000	\$ 41,600,000	
	A-12	4 Lane - Enhanced (1/2)	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.79	100%	\$ 13,800,000	\$ 13,800,000	
	A-13	4 Lane - Proposed	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.14	100%	\$ 3,500,000	\$ 3,500,000	
	A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.76	100%	\$ 19,400,000	\$ 19,400,000	
	A-15, B-11	4 Lane - Proposed	Eagles Nest Dr (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.17	100%	\$ 12,216,939	\$ 12,216,939	
	A-16	5 Lane - Enhanced	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	100%	\$ 2,100,000	\$ 2,100,000	
	A-17	5 Lane - Enhanced	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	100%	\$ 5,000,000	\$ 5,000,000	
	A-21	3 Lane - Enhanced	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	50%	\$ 3,900,000	\$ 1,950,000	
	A-22	3 Lane - Enhanced	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	100%	\$ 2,100,000	\$ 2,100,000	
	A-23	3 Lane - Enhanced	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	0.21	100%	\$ 2,400,000	\$ 2,400,000	
	A-24	3 Lane - Enhanced	Sam Bass Rd (6)	Hairy Man Rd to Chisholm Trl Rd	1.33	50%	\$ 14,800,000	\$ 7,400,000	
	A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	Sam Bass Rd to Creek Bend Blvd	0.88	100%	\$ 26,379,928	\$ 26,379,928	
	A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	100%	\$ 11,012,302	\$ 11,012,302	
	A-29	4 Lane - Proposed	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	100%	\$ 18,900,346	\$ 18,900,346	
	A-30	4 Lane - Enhanced	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	100%	\$ 1,400,000	\$ 1,400,000	
	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%	\$ 12,560,624	\$ 6,280,312	
		Proj. #	Intersection Improvements	Location	Improve ment(s)		% In Service Area	Total Project Cost	Cost in Service Area
		AI-1		Sam Bass Rd and FM 3406	SIGNAL		100%	\$ 550,000	\$ 550,000
		AI-2		Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%	\$ 2,500,000	\$ 1,875,000
		AI-3		Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	\$ 240,000	\$ 240,000
		-		Update ITS and Traffic Managemnet Infrastructure	-		25%	\$ 20,900,000	\$ 5,225,000
		Service Area Roadway Project Cost Subtotal							\$ 219,236,275
		Service Area Intersection Project Cost Subtotal							\$ 7,890,000
		2023 Roadway Impact Fee Study Cost Per Service Area							\$ 23,750
		Total Cost in SERVICE AREA A							\$ 227,150,025

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



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

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area	
SA B	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	50%	\$ 9,152,896	\$ 4,576,448	
	B-4	6 Lane - Enhanced	University Oaks Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	100%	\$ 17,220,832	\$ 17,220,832	
	B-5	6 Lane - Enhanced	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	50%	\$ 53,300,000	\$ 26,650,000	
	B-6	4 Lane - Enhanced	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	100%	\$ 8,200,000	\$ 8,200,000	
	B-7	4 Lane - Enhanced	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	50%	\$ 17,000,000	\$ 8,500,000	
	B-8	4 Lane - Enhanced	University Blvd (5)	Lunata Way to Kenney Fort Blvd (Future)	0.16	100%	\$ 4,300,000	\$ 4,300,000	
	B-9	4 Lane - Enhanced	N Mays St (2)	350' S of University Blvd to 2000' S of University Blvd	0.31	100%	\$ 8,300,000	\$ 8,300,000	
	A-15, B-11	4 Lane - Proposed	Eagles Nest (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%	\$ 12,216,939	\$ 6,108,470	
	B-12	4 Lane - Proposed	Eagles Nest (2)	IH 35 NBFR to Cypress Blvd	0.69	100%	\$ 21,436,451	\$ 21,436,451	
	B-13	4 Lane - Enhanced	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	100%	\$ 5,500,000	\$ 5,500,000	
	B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	100%	\$ 1,600,000	\$ 1,600,000	
	B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	50%	\$ 900,000	\$ 450,000	
	B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	100%	\$ 700,000	\$ 700,000	
	B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	50%	\$ 300,000	\$ 150,000	
	B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	100%	\$ 1,200,000	\$ 1,200,000	
	B-21	4 Lane - Proposed	Wallin Bradley (2)	College Park (Future) to A.W. Grimes Blvd	0.37	100%	\$ 6,600,000	\$ 6,600,000	
	B-22	4 Lane - Proposed	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	100%	\$ 21,700,000	\$ 21,700,000	
	B-23	3 Lane - Existing	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	100%	\$ 1,795,839	\$ 1,795,839	
	B-24	4 Lane - Proposed	Medical Center Pkwy	College Park to Seton Pkwy	0.27	100%	\$ 1,058,160	\$ 1,058,160	
	B-25	4 Lane - Enhanced	Avery Nelson Pkwy (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	100%	\$ 14,000,000	\$ 14,000,000	
	B-26	4 Lane - Enhanced	Avery Nelson Pkwy (2)	3580' E of A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.57	50%	\$ 11,800,000	\$ 5,900,000	
	B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to 145' N of Haselwood Ln	0.58	100%	\$ 15,018,951	\$ 15,018,951	
	B-28, D-9	4 Lane - Enhanced	CR 117 (1)	CR 112 to San Felipe St	0.00	50%	\$ 9,173,038	\$ 9,173,038	
	B-31	6 Lane - Enhanced	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	100%	\$ 14,700,000	\$ 14,700,000	
	B-32	6 Lane - Enhanced (1/3)	Old Settlers Blvd (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.00	100%	\$ 31,100,000	\$ 31,100,000	
	B-34	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	100%	\$ 3,900,000	\$ 3,900,000	
	B-35	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	100%	\$ 800,000	\$ 800,000	
	B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	50%	\$ 1,820,000	\$ 1,820,000	
	B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	100%	\$ 1,620,000	\$ 810,000	
	B-38	6 Lane - Proposed (1/2)	Kenney Fort Blvd (4)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	100%	\$ 6,960,000	\$ 6,960,000	
	B-39, D-10	6 Lane - Proposed	Kenney Fort Blvd (5)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	50%	\$ 5,000,000	\$ 5,000,000	
	B-40, D-11	6 Lane - Proposed	Kenney Fort Blvd (6)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.36	100%	\$ 4,900,000	\$ 2,450,000	
	B-41, D-12	6 Lane - Enhanced	Kenney Fort Blvd (7)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%	\$ 10,700,000	\$ 10,700,000	
	B-42, D-14	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.00	100%	\$ 9,600,000	\$ 9,600,000	
	B-46, C-6	6 Lane - Enhanced	US 79 (3)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	50%	\$ 16,379,383	\$ 8,189,692	
	B-47	3 Lane - Proposed	Joe DiMaggio Blvd Extension	Kenney Fort Blvd to US 79	0.39	100%	\$ 1,600,000	\$ 800,000	
	B-48	3 Lane - Proposed	Wallin Bradley (1)	College Park Dr to Avery Nelson Blvd	0.81	100%	\$ 7,000,000	\$ 7,000,000	
	B-49	4 Lane - Proposed	Wallin Bradley (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	1.01	100%	\$ 9,500,000	\$ 9,500,000	
	B-50	6 Lane - Enhanced	US 79 (2)	AW Grimes to Red Bud Ln	2.63	50%	\$ 18,200,000	\$ 18,200,000	
	B-51, C-28	4 Lane - Existing	Terra Vista Pkwy	Centerbrook Pl to 350' S of Aosta Ln	0.00	50%	\$ 12,760,000	\$ 6,380,000	
		Proj. #	Intersection Improvements	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		% In Service Area	Total Project Cost	Cost in Service Area
		BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%	\$ 2,141,000	\$ 1,070,500
		-		Update ITS and Traffic Managemnet Infrastructure	-		25%	\$ 20,900,000	\$ 5,225,000
Service Area Roadway Project Cost Subtotal								\$ 328,047,880	
Service Area Intersection Project Cost Subtotal								\$ 6,295,500	
2023 Roadway Impact Fee Study Cost Per Service Area								\$ 23,750	
Total Cost in SERVICE AREA B								\$ 334,367,130	

- These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Roadway Capacity Projects within the City of Round Rock.
- These planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.



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

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA C	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%	\$ 12,560,624	\$ 6,280,312
	C-3	4 Lane - Enhanced	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	50%	\$ 1,800,000	\$ 900,000
	C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	100%	\$ 900,000	\$ 900,000
	C-5	4 Lane - Enhanced	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	50%	\$ 8,700,000	\$ 4,350,000
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	IH 35 NBFR to 200' E of Red Bud Ln	1.96	50%	\$ 16,379,383	\$ 8,189,692
	C-7	3 Lane - Existing	McNeil Extension	S Mays St to Georgetown St	0.52	100%	\$ 4,799,620	\$ 4,799,620
	C-8	4 Lane - Enhanced (AM)	S Mays St	Nash St to Gattis School Rd	0.69	100%	\$ 2,000,000	\$ 2,000,000
	C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	100%	\$ 40,800,000	\$ 40,800,000
	C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	50%	\$ 200,000	\$ 100,000
	C-12	4 Lane - Enhanced	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	100%	\$ 2,200,000	\$ 2,200,000
	C-13	4 Lane - Enhanced	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	50%	\$ 2,200,000	\$ 1,100,000
	C-14	4 Lane - Enhanced	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	100%	\$ 2,200,000	\$ 2,200,000
	C-15	4 Lane - Enhanced	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	50%	\$ 2,200,000	\$ 1,100,000
	C-16	4 Lane - Enhanced	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	100%	\$ 1,200,000	\$ 1,200,000
	C-17	4 Lane - Enhanced	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	50%	\$ 13,100,000	\$ 6,550,000
	C-18	4 Lane - Enhanced	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	100%	\$ 4,600,000	\$ 4,600,000
	C-19	4 Lane - Enhanced	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	50%	\$ 18,713,810	\$ 9,356,905
	C-20	6 Lane - Enhanced	Gattis School Rd (1)	S Mays St to Windy Park Dr	1.23	100%	\$ 31,800,000	\$ 31,800,000
	C-21	6 Lane - Enhanced	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	100%	\$ 81,800,000	\$ 81,800,000
	C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	100%	\$ 3,600,000	\$ 3,600,000
	C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	100%	\$ 12,400,000	\$ 12,400,000
	C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	100%	\$ 16,468,640	\$ 16,468,640
	C-26	4 Lane - Enhanced	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	100%	\$ 1,200,000	\$ 1,200,000
	C-27	4 Lane - Enhanced	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	50%	\$ 10,300,000	\$ 5,150,000
	B-51, C-28	6 Lane - Enhanced	US 79 (2)	AW Grimes to Red Bud Ln	2.63	50%	\$ 12,760,000	\$ 6,380,000
		Proj. #	Location	Improvement(s)		% In Service Area	Total Project Cost	Cost in Service Area
		CI-5	Mays St and Liberty Ave	SIGNAL		100%	\$ 550,000	\$ 550,000
		CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%	\$ 848,000	\$ 848,000
		BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%	\$ 2,141,000	\$ 1,070,500
		CI-10	Red Bud Ln and Gattis School Rd	TURN LANES		100%	\$ 1,773,000	\$ 1,773,000
		CI-11	E McNeil Rd and Oakridge Dr	INTERSECTION IMPROVEMENT		100%	\$ 10,000,000	\$ 10,000,000
		-	Update ITS and Traffic Managment Infrastructure	-		25%	\$ 20,900,000	\$ 5,225,000
	Service Area Roadway Project Cost Subtotal							\$ 255,425,168
	Service Area Intersection Project Cost Subtotal							\$ 19,466,500
	2023 Roadway Impact Fee Study Cost Per Service Area							\$ 23,750
	Total Cost in SERVICE AREA C							\$ 274,915,418

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



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

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
S A D	D-1	4 Lane - Proposed	CR 107	CR 107 to University Blvd	0.34	50%	\$ 3,940,000	\$ 1,970,000
	D-2	4 Lane - Enhanced	University Blvd (6)	Kenney Fort Blvd to SH 130	2.44	100%	\$ 8,500,000	\$ 8,500,000
	D-3	4 Lane - Proposed	CR 118	University Blvd to Avery Nelson Pkwy	1.14	100%	\$ 7,800,000	\$ 7,800,000
	D-4	4 Lane - Enhanced	Avery Nelson Pkwy (3)	Kenney Fort Blvd to CR 110	1.11	100%	\$ 10,200,000	\$ 10,200,000
	D-5	4 Lane - Existing	Avery Nelson Pkwy (4)	CR 110 to 5015' E of CR 110	0.95	100%	\$ 12,000,000	\$ 12,000,000
	D-6	4 Lane - Proposed	CR 118	Carmel Creekside Dr to Ed Schmidt Blvd	1.08	100%	\$ 1,960,000	\$ 1,960,000
	B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to 125' N of Haselwood Ln	0.58	100%	\$ 15,018,951	\$ 15,018,951
	D-8	4 Lane - Proposed	Kenney Fort Blvd (6)	125' N of Haselwood Ln to 200' N of Bluffstone Dr	0.12	50%	\$ 15,018,951	\$ 7,509,476
	B-28, D-9	6 Lane - Proposed	Kenney Fort Blvd (7)	200' N of Bluffstone Dr to Old Settlers Blvd	0.36	100%	\$ 9,173,038	\$ 9,173,038
	B-39, D-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Old Settlers Blvd to 2540' S of Old Settler's Blvd	0.30	100%	\$ 5,000,000	\$ 5,000,000
	B-40, D-11	6 Lane - Proposed (1/2)	Kenney Fort Blvd (3)	2540' S of Old Settler's Blvd to 4625' N of Chandler Creek Blvd	0.18	50%	\$ 4,900,000	\$ 2,450,000
	B-41, D-12	6 Lane - Proposed	Kenney Fort Blvd (4)	4625' N of Chandler Creek Blvd to 3115' N of Chandler Creek Blvd	0.36	100%	\$ 10,700,000	\$ 10,700,000
	B-41, D-13	6 Lane - Proposed	Kenney Fort Blvd (8)	3115' N of Chandler Creek Blvd to Chandler Creek Blvd	0.59	100%	\$ 3,700,000	\$ 3,700,000
	B-42, D-14	6 Lane - Proposed	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%	\$ 9,600,000	\$ 9,600,000
	D-15	4 Lane - Proposed	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	100%	\$ 7,300,000	\$ 7,300,000
	D-16	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	50%	\$ 5,600,000	\$ 2,800,000
	D-17	4 Lane - Enhanced (1/2)	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	100%	\$ 4,700,000	\$ 4,700,000
	D-18	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	100%	\$ 8,486,565	\$ 8,486,565
	D-19	4 Lane - Enhanced	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	50%	\$ 3,446,574	\$ 1,723,287
	D-20	4 Lane - Enhanced	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	100%	\$ 7,711,173	\$ 7,711,173
	D-21	4 Lane - Enhanced	CR 122 (1)	Red Bud Ln to 230' SW of Rosalina Loop	0.49	100%	\$ 13,671,273	\$ 13,671,273
	D-22	3 Lane - Proposed	CR 122 (2)	230' SW of Rosalina Loop to 100' S of Emilia Ln	0.09	50%	\$ 2,472,664	\$ 1,236,332
	D-23	3 Lane - Proposed	CR 122 (3)	100' S of Emilia Ln to 100' S of Rosalina Loop	0.04	100%	\$ 1,106,506	\$ 1,106,506
	D-24	3 Lane - Proposed	CR 122 (4)	100' S of Rosalina Loop to 100' S of Penelope Ct	0.13	50%	\$ 3,430,613	\$ 1,715,306
	D-25	4 Lane - Proposed	Old Settlers Blvd	Red Bud Ln to CR 110	0.77	100%	\$ 20,155,000	\$ 20,155,000
	Proj. #	Intersection Improvements	Location	Improvement(s)		% In Service Area	Total Project Cost	Cost in Service Area
	-		Update ITS and Traffic Managemenet Infrastructure	-		25%	\$ 20,900,000	\$ 5,225,000
	Service Area Roadway Project Cost Subtotal							\$ 176,186,906
	Service Area Intersection Project Cost Subtotal							\$ 5,225,000
	2023 Roadway Impact Fee Study Cost Per Service Area							\$ 23,750
	Total Cost in SERVICE AREA D							\$ 181,435,656



F. Service Unit Calculation

The basic service unit for the computation of Round Rock's Roadway Impact Fees is the vehicle-mile of travel during the afternoon peak-hour (as explained on Pg. 29). 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. Compared to the original 2019 Roadway Impact Fee Study, the 2023 Roadway Impact Fee Study Update projects a higher ratio of multifamily to single family residential development and a higher number of overall units, but a lower square footage of commercial growth over a 10-year period.

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

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

For non-residential land uses, the process is similar. The Land Use Assumptions section of this report provides existing and projected number of building square footages for three (3) categories of employment – basic, service, and retail. 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 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* used in the 2023 Roadway Impact Fee Study Update are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 11th Edition* and the Replica online platforms. The original 2019 Roadway Impact Fee Study utilized the demand factors using the *ITE Trip Generation Manual, 10th Edition* and the National Household Travel Survey performed by the Federal Highway Administration (FHWA).

The *ITE Trip Generation Manual, 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. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips.



The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics 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. Some trips tied to various commercial land uses were assumed by considering traffic within the City of Round Rock. Additionally, trips tied to various industrial land uses were assumed by considering traffic within the counties between Dallas and San Antonio. Trips for all remaining land uses were assumed to be exclusively within the City and County limits.

Compared to the 2019 Roadway Impact Fee Study, the 2023 Roadway Impact Fee Study Update overall projects lower trip lengths and trip rates for residential land uses and projects higher trip lengths and trip rates for non-residential land uses. For example, in ITE Trip Generation Manual, 10th Edition the trip length for single-family housing was 4.30 while in ITE Trip Generation Manual, 11th Edition the trip length decreased to 3.38. The main reason for the decrease is due to the ITE Trip Generation Manual, 11th Edition Manual splitting single-family land use to Single-Family Detach and Single-Family Attached. Refer to **Table 11. Land Use Descriptions** for an explanation of the two different land uses. Additionally, the trip rate in the original 2019 Roadway Impact Fee Study was 0.99 for single-family and decreased to 0.94 in the 2023 Roadway Impact Fee Study Update.



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

Variables:

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

$$\text{where... } L_{\max} = \min(L * OD \text{ or } 6)$$

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), and
OD = Origin-Destination Reduction (50%)

The maximum trip length was limited to six (6) miles based on the maximum trip length within each service area. Chapter 395 of the Texas Local Government Code allows for a service area of six (6) miles, and the service areas within Round Rock are closely approximated with a six (6) mile distance.

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



Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land use categories. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 5. Transportation Demand Factor Calculations

Variable	Residential, Single Family	Residential, Multifamily	Basic	Service	Retail
T	0.94	0.51	0.65	1.44	2.51
P_b	0%	0%	0%	0%	34%
L	6.77	6.24	9.99	6.79	6.74
L_{max}	3.38	3.12	4.99	3.40	3.37
TDF	3.18	1.59	3.24	4.90	8.46
* L _{max} is less than 6 miles for all land uses; therefore this lower trip length is used for calculating the TDF.					

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the growth in total vehicle-miles by service area between the years 2023 – 2033. These estimates and projections lead to the Vehicle-Miles of Travel for both 2023 and 2033.



Table 6. 10-Year Growth Projections

2023 - 2033 Growth Projections¹

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		0.51					0.65	1.44	2.51					
A	1,418	3.18	2,127	1.59	7,892	500,000	1,100,000	300,000	3.24	4.90	8.46	1,620	5,390	2,538	9,548	17,440
B	1,506		2,259		8,383	700,000	600,000	200,000				2,268	2,940	1,692	6,900	15,283
C	717		3,250		7,446	0	3,925,000	400,000				0	19,233	3,384	22,617	30,063
D	340		2,750		5,455	0	220,000	80,000				0	1,078	677	1,755	7,210
Totals	3,981		10,387		29,175	1,200,000	5,845,000	980,000				3,888	28,641	8,291	40,820	69,995

Notes:

¹ From *City of Round Rock 2023 Land Use Assumptions for Roadway Impact Fees*

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

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

⁴ Calculated by multiplying TDF by the number of dwelling units

⁵ From *City of Round Rock 2023 Land Use Assumptions for Roadway Impact Fees*

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

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

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

⁹ 'Retail' corresponds to Shopping Center land use and *trip generation rate*

¹⁰ Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use

¹¹ Residential plus non-residential vehicle-mile totals for each Service Area

Table 7. 10-Year Growth Projections Vehicle Miles of Increase (2023-2033)

SERVICE AREA	VEH-MILES
A	17,440
B	15,283
C	30,063
D	7,210



V. ROADWAY IMPACT FEE CALCULATION

A. Maximum Assessable Impact Fee Per Service Unit

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

Table 8 illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation. The calculation of the maximum assessable impact fee is shown in **Table 9**. The Roadway Impact Fee CIP consists of both roadway segment and intersection improvements. The roadway segment component is referred to as the “Roadway Impact Fee CIP,” while the intersection component is referred to as the “Intersection Impact Fee CIP.”

Table 8. Maximum Assessable Roadway Impact Fee Computation

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

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

2	<i>Total Vehicle-Miles of Existing Demand</i>	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from Appendix B – Roadway Impact Fee CIP Units of Supply)
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A number of facilities identified in the RIF CIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently being used by existing traffic.

3	<i>Total Vehicle-Miles of Existing Deficiencies</i>	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from Appendix C – Existing Roadway Facilities Inventory)
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In order to ensure that existing deficiencies on the City’s roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Roadway Impact Fee CIP – will have these additional trips removed from the calculation.



4	<i>Net Amount of Vehicle-Miles of Capacity Added</i>	A measurement of the amount of vehicle-miles added by the RIF CIP that will not be utilized by existing demand (Line 1 – Line 2 – Line 3)
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This calculation identifies the portion of the RIF CIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	<i>Total Cost of the Roadway Impact Fee CIP within the Service Area</i>	The total cost of the roadway projects within each service area (from Table 4: 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections)
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This line simply identifies the total cost of all the roadway projects identified in each service area.

6	<i>Cost of Net Capacity Supplied</i>	The total Roadway Impact Fee CIP cost (Line 5) prorated by the ratio of Net Capacity Added (Line 4) to Total Capacity Added (Line 1). [(Line 4 / Line 1) * (Line 5)]
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Using the ratio of vehicle-miles added by the Roadway Impact Fee CIP available to serve future growth to the total vehicle-miles added, the total cost of the RIF CIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	<i>Cost to Meet Existing Needs and Usage</i>	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)
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This line is provided for information purposes only – it is to present the portion of the total cost of the Roadway Impact Fee CIP that is required to meet existing demand.

8	<i>Total Vehicle-Miles of New Demand over Ten Years</i>	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 6)
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This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

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

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

11	<i>Cost of Roadway Impact Fee CIP Attributable to New Growth</i>	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).
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This value is the total Roadway Impact Fee CIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.



12	<i>Total Cost of the Intersection Impact Fee CIP within the Service Area</i>	The total cost of the intersection projects within each service area (from Table 4: 10-Year Roadway Impact Fee Capacity Improvements Plan with Conceptual Level Cost Projections)
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This line simply identifies the total cost of all the intersection projects identified in each service area.

13	<i>Percent of Intersection Capacity Added Attributable to New Growth</i>	The result of dividing Total Vehicle-Miles of New Demand (Line 8) by the vehicle-mile carrying capacity in each service area (Table 6).
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In order to ensure that the capacity added by the Intersection Impact Fee 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-mile carrying capacity.

14	<i>Cost of Intersection Impact Fee CIP Attributable to New Growth</i>	The result of multiplying the Cost of Net Capacity Added (Line 12) by the Percent of Capacity Added Attributable to New Growth (Line 13). (Line 12 * Line 13)
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This value is the total Intersection Impact Fee CIP project cost (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

15	<i>Cost of Total Roadway Impact Fee CIP Attributable to New Growth</i>	The result of adding the Cost of the Roadway Impact Fee CIP Attributable to new growth (Line 11) to the Cost of the Intersection Impact Fee CIP Attributable to new growth (Line 14) less credits for previous contributions (Line 11 + Line 14).
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This value is the Total Roadway Impact Fee CIP project cost (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. Plan for Financing and the Ad Valorem Tax Credit

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

- (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the transportation improvements plan; or
- (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the transportation improvements plan..."

The plan is summarized, as prepared by NewGen Strategies in **Appendix D** and **Appendix E**, Plan for Awarding the Roadway Impact Fee Credit. The following table summarizes the portions of **Table 9** that utilize this credit calculation.



Line	Title	Description
16	Financing Costs	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
17	Interest Earnings	(from Appendix D – Plan for Awarding the Roadway Impact Fee Credit)
18	Cost of the Roadway Impact Fee CIP and Financing Attributable to New Growth	The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, and Interest Earnings. (Line 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 D – Plan for Awarding the Roadway Impact Fee Credit)
21	Recoverable Cost of the Roadway 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 CIP and Financing (Line 21) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 21 / Line 8)



C. Maximum Assessable Impact Fee Determination

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

- Financing
 - Method of financing (i.e. cash or debt financing)
 - The level of financing (e.g. 50% debt and 50% cash)
 - Cost of financing
 - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Vehicle Mile Growth
- Portion of Ad Valorem Tax Revenue Used to Fund Impact Fee Roadway Improvements

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

Once the cost of capacity added that is attributable to growth (**Max Fee Table** - line 18) is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Based on discussions with City staff, unless specified otherwise, it is assumed that the City will debt finance 50% of the future project costs, and cash funded the remaining 50%. For debt financing, the cost of financing is based on the City staff estimates of future debt costs for bonds issued with 20-year terms, as shown in **Appendix E**. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.



Currently, the exact timing and annual level of cash capital expenditures over the forecast period is indeterminate; therefore, it is assumed that cash capital expenditures will occur in equal amounts over the 10-year program period. It is also assumed that for debt-financed capital projects, the City will expend debt proceeds over a 2-year timeframe. For the calculation of the maximum assessable impact fee, debt is assumed to be issued in equal amounts for every year.

Because debt is issued over 20-year terms and impact fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. Because of the generation of the fund balance, excess monies will be available for interest earnings.

Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order to recognize that interest earnings are used to fund only impact fee eligible improvements, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 3.40%, which is the average Texpool 12-month average rate per City Staff.

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

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



the portion of ad valorem tax revenues generated by new vehicle miles during the program period that are used for payment of improvements that are included in the Roadway Impact Fee CIP. It should be noted that the credit is not a determination to recognize the total ad valorem tax revenue generated by new vehicle miles, but is only a credit for the portion of ad valorem tax revenue that is used for payment of improvements that are included in the Roadway Impact Fee CIP. Theoretically, the credit determination could be zero (\$0) if the City does not utilize any of the new vehicle mile ad valorem tax revenue to fund improvements that are included in the Roadway Impact Fee CIP. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the debt-funded projects (50% of the improvement costs included in the Roadway Impact Fee CIP but not otherwise funded) could potentially be funded by ad valorem tax revenue.

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



Table 9. Maximum Assessable Roadway Impact Fee

	SERVICE AREA:	A	B	C	D
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B)	39,675	71,824	66,389	46,553
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B)	8,586	9,264	15,868	2,299
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, APPENDIX C)	1,589	1,851	1,709	1,192
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	29,500	60,709	48,812	43,062
5	TOTAL COST OF THE ROADWAY IMPACT FEE CIP AND STUDY WITHIN SERVICE AREA (FROM TABLES 5A TO 5C)	\$ 219,260,025	\$ 328,071,630	\$ 255,448,918	\$ 176,210,656
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 163,028,878	\$ 277,301,467	\$ 187,816,846	\$ 162,996,655
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	\$ 56,231,147	\$ 50,770,163	\$ 67,632,072	\$ 13,214,001
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 7 AND LAND USE ASSUMPTIONS)	17,440	15,283	30,063	7,210
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	59.1%	25.2%	61.6%	16.7%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	59.1%	25.2%	61.6%	16.7%
11	COST OF ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	\$ 96,350,067	\$ 69,879,970	\$ 115,695,177	\$ 27,220,441
12	TOTAL COST OF THE INTERSECTION IMPACT FEE CIP WITHIN SERVICE AREA (FROM TABLES 4A TO 4C)	\$ 7,890,000	\$ 6,295,500	\$ 19,466,500	\$ 5,225,000
13	PERCENT OF INTERSECTION CAPACITY ADDED ATTRIBUTABLE TO GROWTH (FROM TABLE 7 AND LAND USE ASSUMPTIONS)	27.6%	21.1%	19.0%	32.5%
14	COST OF INTERSECTION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 12 * LINE 13)	\$ 2,177,640	\$ 1,328,351	\$ 3,698,635	\$ 1,698,125
15	COST OF TOTAL ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 14)	\$ 98,527,707	\$ 71,208,321	\$ 119,393,812	\$ 28,918,566
16	FINANCING COSTS (FROM APPENDIX D)	\$ 23,947,285	\$ 17,641,852	\$ 23,280,687	\$ 7,233,864
17	INTEREST EARNINGS (FROM APPENDIX D)	\$ (19,167,248)	\$ (14,107,526)	\$ (22,623,260)	\$ (5,785,589)
18	COST OF THE ROADWAY IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO NEW GROWTH (LINE 15 + LINE 16 + LINE 17)	\$ 103,307,744	\$ 74,742,647	\$ 120,051,240	\$ 30,366,842
19	PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 18 / LINE 8)	\$ 5,924	\$ 4,891	\$ 3,993	\$ 4,212
20	CREDIT FOR AD VALOREM TAXES (FROM APPENDIX D)	\$ (3,196,329)	\$ (1,925,151)	\$ (5,273,827)	\$ (399,023)
21	RECOVERABLE COST OF ROADWAY IMPACT FEE CIP AND FINANCING (LINE 18 + LINE 20)	\$ 100,111,415	\$ 72,817,496	\$ 114,777,413	\$ 29,967,819
22	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 21 / LINE 8)	\$ 5,740	\$ 4,765	\$ 3,818	\$ 4,156



D. Service Unit Demand Per Unit of Development

The Roadway Impact Fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City will utilize the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 10**. This table lists the predominant land uses that may occur within the City of Round Rock. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of local uses are found in this table. The descriptions for each land use are presented in **Table 11**. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column in **Table 10**, if applicable to the land use, presents the percentage of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 11th Edition*, the latest edition. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning. However, for land uses not contained within the 11th Edition of the *ITE Trip Generation Manual*, an alternative service unit demand could be calculated by completing a trip generation study based on the procedure identified in the *ITE Trip Generation Handbook*.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The 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 six (6) miles, the maximum trip length used for calculation is



reduced to six (6) miles. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

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

For any alternative service unit not represented in the LUVMET, the table below anticipated to be used for trip lengths within the City of Round Rock. The alternative service unit computation should be expressed as a multiplier to computed trip rates to determine the vehicle miles per development unit.

Figure 7- Other Land Uses Trip Length Multiplier

Land Use	Trip Length Multiplier (miles)
Industrial	4.99
Residential	3.38
Lodging	3.91
Office	3.40
Retail & Dining	3.37
School	2.41
Convenience Stop	1.35
All other uses	3.98



Table 10. Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	2019 Study Trip Length (mi)	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PARKING AREA											
Park-and-Ride Lot with Bus or Light Rail Service	090	Occupied Parking Space(s)	0.55			0.55	8.09	n/a	4.04	4.04	2.22
INDUSTRIAL											
General Light Industrial	110	1,000 SQ FT	0.65			0.65	9.99	12.89	4.99	4.99	3.24
Industrial Park	130	1,000 SQ FT	0.34			0.34	9.99	12.89	4.99	4.99	1.70
Manufacturing	140	1,000 SQ FT	0.47			0.47	9.99	12.89	4.99	4.99	2.35
Warehousing	150	1,000 SQ FT	0.18			0.18	9.99	12.89	4.99	4.99	0.90
Mini-Warehouse	151	1,000 SQ FT	0.15			0.15	9.99	12.89	4.99	4.99	0.75
High-Cube Transload and Short-Term Storage Warehouse	154	1,000 SQ FT	0.10			0.10	9.99	n/a	4.99	4.99	0.50
High-Cube Fulfillment Center Warehouse	155	1,000 SQ FT	0.16			0.16	9.99	n/a	4.99	4.99	0.80
High-Cube Parcel Hub Warehouse	156	1,000 SQ FT	0.64			0.64	9.99	n/a	4.99	4.99	3.19
High-Cube Cold Storage Warehouse	157	1,000 SQ FT	0.12			0.12	9.99	n/a	4.99	4.99	0.60
Data Center	160	1,000 SQ FT	0.09			0.09	8.09	n/a	4.05	4.05	0.36
Utilities	170	1,000 SQ FT	2.16			2.16	8.09	n/a	4.05	4.05	8.75
Specialty Trade Contractor	180	1,000 SQ FT	1.93			1.93	8.09	n/a	4.05	4.05	7.82
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	6.77	8.59	3.38	3.38	3.18
Single-Family Attached Housing	215	Dwelling Unit	0.57			0.57	6.77	n/a	3.38	3.38	1.93
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	6.24	8.59	3.12	3.12	1.59
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	6.24	8.59	3.12	3.12	1.22
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	6.24	8.59	3.12	3.12	1.00
Off-Campus Student Apartment	225	Bedrooms	0.24			0.24	6.24	n/a	3.12	3.12	0.75
Off-Campus Student Apartment (Mid-Rise)	226	Bedrooms	0.21			0.21	6.24	n/a	3.12	3.12	0.66
Off-Campus Student Apartment (High-Rise)	227	Bedrooms	0.04			0.04	6.24	n/a	3.12	3.12	0.12
Mobile Home Park	240	Dwelling Unit	0.58			0.58	6.77	8.59	3.38	3.38	1.96
Senior Adult Housing-Detached	251	Dwelling Unit	0.30			0.30	6.24	8.59	3.12	3.12	0.94
Senior Adult Housing-Attached	252	Dwelling Unit	0.25			0.25	6.24	8.59	3.12	3.12	0.78
Congregate Care Facility	253	Dwelling Unit	0.18			0.18	6.24	n/a	3.12	3.12	0.56
Assisted Living	254	Beds	0.26			0.26	6.24	8.59	3.12	3.12	0.81
Continuing Care Retirement Community	255	Units	0.19			0.19	6.24	n/a	3.12	3.12	0.59
Recreational Homes	260	Dwelling Unit	0.29			0.29	6.24	n/a	3.12	3.12	0.90
Timeshare	265	Dwelling Unit	0.63			0.63	6.24	n/a	3.12	3.12	1.97
Residential Planned Unit Development	270	Dwelling Unit	0.69			0.69	6.77	n/a	3.38	3.38	2.33
LODGING											
Hotel	310	Room	0.59			0.59	7.81	5.41	3.91	3.91	2.31
All Suites Hotel	311	Room	0.36			0.36	7.81	n/a	3.91	3.91	1.41
Business Hotel	312	Room	0.31			0.31	7.81	n/a	3.91	3.91	1.21
Motel	320	Room	0.36			0.36	7.81	5.41	3.91	3.91	1.41
Resort Hotel	330	Room	0.41			0.41	7.81	n/a	3.91	3.91	1.60
RECREATIONAL											
Public Park	411	Acres	0.11			0.11	6.70	n/a	3.35	3.35	0.37
Golf Course	430	Holes	0.28			0.28	6.70	6.35	3.35	3.35	0.94
Golf Driving Range	432	Driving Positions	1.25			1.25	6.70	6.35	3.35	3.35	4.19
Batting Cages	433	Cages	2.22			2.22	7.81	n/a	3.91	3.91	8.68
Multipurpose Recreational Facility	435	1,000 SQ FT	3.58			3.58	7.81	n/a	3.91	3.91	14.00
Trampoline Park	436	1,000 SQ FT	1.50			1.50	7.81	n/a	3.91	3.91	5.87
Bowling Alley	437	Lanes	1.30			1.30	7.81	n/a	3.91	3.91	5.08
Movie Theater (Friday)	445a	1,000 SQ FT	4.80			4.80	7.81	n/a	3.91	3.91	18.77
Ice Skating Rink	465	1,000 SQ FT	1.33			1.33	7.81	6.35	3.91	3.91	5.20
Casino	473	1,000 SQ FT	22.61			22.61	7.81	n/a	3.91	3.91	88.41
Soccer Complex	488	Fields	16.43			16.43	6.70	n/a	3.35	3.35	55.04
Health/Fitness Club	492	1,000 SQ FT	3.45			3.45	7.81	n/a	3.91	3.91	13.49
Athletic Club	493	1,000 SQ FT	6.29			6.29	7.81	n/a	3.91	3.91	24.59
Recreational Community Center	495	1,000 SQ FT	2.50			2.50	7.81	6.35	3.91	3.91	9.78

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: ITE rate adjusted upward by KHA based on logical relationship to other categories



Table 10 (Cont'd). Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	2019 Study Trip Length (mi)	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
INSTITUTIONAL											
Elementary School	520	Students	0.16			0.16	4.81	n/a	2.41	2.41	0.39
Middle School/Junior High School	522	Students	0.15			0.15	4.81	3.39	2.41	2.41	0.36
High School	525	Students	0.14			0.14	4.81	n/a	2.41	2.41	0.34
Private School (K-8)	530	Students	0.26			0.26	4.81	n/a	2.41	2.41	0.63
Private School (K-12)	532	Students	3.00			3.00	4.81	n/a	2.41	2.41	7.23
Private High School	534	Students	0.19			0.19	4.81	n/a	2.41	2.41	0.46
Charter Elementary School (1)	536	Students	0.16			0.16	4.81	n/a	2.41	2.41	0.39
Charter School (K-12)	538	Students	0.30			0.30	4.81	n/a	2.41	2.41	0.72
Junior / Community College	540	Students	0.11			0.11	4.81	3.39	2.41	2.41	0.27
University / College	550	Students	0.15			0.15	7.95	3.39	3.98	3.98	0.60
Church	560	1,000 SQ FT	0.49			0.49	7.95	6.30	3.98	3.98	1.95
Day Care Center	565	1,000 SQ FT	11.12	44%	A	6.23	7.95	3.39	3.98	3.98	24.80
Cemetery	566	Acres	0.46			0.46	7.95	n/a	3.98	3.98	1.83
Fire Rescue Station	575	1,000 SQ FT	0.48			0.48	7.95	n/a	3.98	3.98	1.91
Library	590	1,000 SQ FT	8.16			8.16	7.95	n/a	3.98	3.98	32.48
MEDICAL											
Hospital	610	1,000 SQ FT	0.86			0.86	7.96	6.76	3.98	3.98	3.42
Nursing Home	620	Beds	0.59			0.59	7.96	6.76	3.98	3.98	2.35
Clinic	630	1,000 SQ FT	3.69			3.69	7.96	6.76	3.98	3.98	14.69
Animal Hospital/Veterinary Clinic	640	1,000 SQ FT	3.53			3.53	7.96	6.76	3.98	3.98	14.05
Free-Standing Emergency Room	650	1,000 SQ FT	1.52			1.52	7.96	n/a	3.98	3.98	6.05
OFFICE											
General Office Building	710	1,000 SQ FT	1.44			1.44	6.79	6.76	3.40	3.40	4.90
Small Office Building	712	1,000 SQ FT	2.16			2.16	6.79	n/a	3.40	3.40	7.34
Corporate Headquarters Building	714	1,000 SQ FT	1.30			1.30	6.79	6.76	3.40	3.40	4.42
Single Tenant Office Building	715	1,000 SQ FT	1.76			1.76	6.79	6.76	3.40	3.40	5.98
Medical-Dental Office Building	720	1,000 SQ FT	3.93			3.93	6.79	6.76	3.40	3.40	13.36
Government Office Building	730	1,000 SQ FT	1.71			1.71	6.79	n/a	3.40	3.40	5.81
State Motor Vehicles Department	731	1,000 SQ FT	5.20			5.20	6.79	n/a	3.40	3.40	17.68
United States Post Office	732	1,000 SQ FT	11.21			11.21	6.79	n/a	3.40	3.40	38.11
Office Park	750	1,000 SQ FT	1.07			1.07	6.79	6.76	3.40	3.40	3.64
Business Park	770	1,000 SQ FT	1.22			1.22	6.79	n/a	3.40	3.40	4.15
COMMERCIAL											
Automobile Related											
Automobile Sales (New)	840	1,000 SQ FT	2.42			2.42	6.74	n/a	3.37	3.37	8.16
Automobile Sales (Used)	841	1,000 SQ FT	3.75			3.75	6.74	5.41	3.37	3.37	12.64
Automobile Parts Sales	843	1,000 SQ FT	4.90			4.90	6.74	5.41	3.37	3.37	16.51
Tire Store	848	1,000 SQ FT	3.75	28%	A	2.70	6.74	5.41	3.37	3.37	9.10
Tire Superstore	849	1,000 SQ FT	2.11			2.11	6.74	n/a	3.37	3.37	7.11
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85			4.85	6.74	5.41	3.37	3.37	16.34
Automobile Care Center	942	1,000 SQ FT	3.11			3.11	6.74	5.41	3.37	3.37	10.48
Automobile Parts and Service Center	943	1,000 SQ FT	2.06			2.06	6.74	n/a	3.37	3.37	6.94
Gasoline/Service Station	944	Vehicle Fueling Position	14.03	42%	A	8.14	2.70	1.20	1.35	1.35	10.99
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	18.42	62%	A	7.00	2.70	1.20	1.35	1.35	9.45
Self-Service Car Wash	947	Stall	5.54			5.54	2.70	1.20	1.35	1.35	7.48
Truck Stop	950	Fueling Postions	15.42			15.42	2.70	n/a	1.35	1.35	20.82

Key to Sources of Pass-by Rates:

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

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

C: ITE rate adjusted upward by KHA based on logical relationship to other categories



Table 10 (Cont'd). Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	2019 Study Trip Length (mi)	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
Dining											
Food Cart Pod	926	1,000 SQ FT	6.16			6.16	6.74	n/a	3.37	3.37	20.76
Fast Casual Restaurant	930	1,000 SQ FT	12.55	44%	B	7.03	6.74	n/a	3.37	3.37	23.69
Fine Dining Restaurant	931	1,000 SQ FT	7.80	44%	A	4.37	6.74	n/a	3.37	3.37	14.73
High Turnover (Sit-Down) Restaurant	932	1,000 SQ FT	9.05	43%	A	5.16	6.74	5.41	3.37	3.37	17.39
Fast Food Restaurant without Drive-Thru Window	933	1,000 SQ FT	33.21	44%	B	18.60	6.74	3.39	3.37	3.37	62.68
Fast Food Restaurant with Drive-Thru Window	934	1,000 SQ FT	33.03	49%	A	16.85	6.74	3.39	3.37	3.37	56.78
Fast-Food Restaurant w/ D.T. No Indoor Seats	935	Drive-in Lanes	59.50	49%	B	30.35	6.74	n/a	3.37	3.37	102.28
Coffee/Donut Shop w/o D.T.	936	1,000 SQ FT	32.29	49%	B	16.47	6.74	n/a	3.37	3.37	55.50
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SQ FT	43.38	49%	B	22.12	6.74	1.20	3.37	3.37	74.54
Coffee/Donut Shop w/ D.T. No Indoor Seats	938	1,000 SQ FT	15.08	49%	B	7.69	6.74	n/a	3.37	3.37	25.92
Winery	970	1,000 SQ FT	7.31			7.31	6.74	n/a	3.37	3.37	24.63
Drinking Place	975	1,000 SQ FT	11.36			11.36	6.74	n/a	3.37	3.37	38.28
Other Retail											
Tractor Supply Store	810	1,000 SQ FT	1.40			1.40	6.74	n/a	3.37	3.37	4.72
Construction Equipment Rental Store	811	1,000 SQ FT	0.99			0.99	6.74	n/a	3.37	3.37	3.34
Free-Standing Store	815	1,000 SQ FT	4.86	17%	A	4.03	6.74	n/a	3.37	3.37	13.58
Hardware/Paint Store	816	1,000 SQ FT	2.98	26%	A	2.21	6.74	n/a	3.37	3.37	7.45
Nursery (Garden Center)	817	1,000 SQ FT	6.94			6.94	6.74	6.35	3.37	3.37	23.39
Shopping Center (>150k)	820	1,000 SQ FT GLA	3.81	34%	A	2.51	6.74	6.35	3.37	3.37	8.46
Shopping Plaza (40k - 150k) (Supermarket)	821	1,000 SQ FT GLA	9.03	34%	B	5.96	6.74	n/a	3.37	3.37	20.09
Shopping Plaza (40k - 150k) (No Supermarket)	821a	1,000 SQ FT GLA	5.19	34%	B	3.43	6.74	n/a	3.37	3.37	11.56
Strip Retail Plaza (<40k)	822	1,000 SQ FT GLA	25.00	34%	B	16.50	6.74	n/a	3.37	3.37	55.61
Factory Outlet Center	823	1,000 SQ FT	2.29			2.29	6.74	n/a	3.37	3.37	7.72
Recreational Vehicle Sales	842	1,000 SQ FT	0.77			0.77	6.74	n/a	3.37	3.37	2.59
Supermarket	850	1,000 SQ FT	8.95	36%	A	5.73	6.74	6.35	3.37	3.37	19.31
Convenience Market	851	1,000 SQ FT	49.11	51%	A	24.06	6.74	n/a	3.37	3.37	81.08
Discount Club	857	1,000 SQ FT	4.19	37%	A	2.64	6.74	n/a	3.37	3.37	8.90
Sporting Goods Superstore	861	1,000 SQ FT	2.14			2.14	6.74	n/a	3.37	3.37	7.21
Home Improvement Superstore	862	1,000 SQ FT	2.29	42%	A	1.33	6.74	6.35	3.37	3.37	4.48
Electronics Superstore	863	1,000 SQ FT	4.25			4.25	6.74	n/a	3.37	3.37	14.32
Pet Supply Superstore	866	1,000 SQ FT	3.55			3.55	6.74	n/a	3.37	3.37	11.96
Office Supply Superstore	867	1,000 SQ FT	2.77			2.77	6.74	n/a	3.37	3.37	9.33
Discount Home Furnishing Superstore	869	1,000 SQ FT	1.57			1.57	6.74	n/a	3.37	3.37	5.29
Department Store	875	1,000 SQ FT	1.95			1.95	6.74	6.35	3.37	3.37	6.57
Apparel Store	876	1,000 SQ FT	4.12			4.12	6.74	n/a	3.37	3.37	13.88
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SQ FT	8.51	53%	A	4.00	6.74	6.35	3.37	3.37	13.48
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SQ FT	10.25	49%	A	5.23	6.74	6.35	3.37	3.37	17.63
Furniture Store	890	1,000 SQ FT	0.52	53%	A	0.24	6.74	n/a	3.37	3.37	0.81
Liquor Store (l)	899	1,000 SQ FT	16.62			16.62	6.74	n/a	3.37	3.37	56.01
SERVICES											
Walk-In Bank	911	1,000 SQ FT	12.13	35%	B	7.88	7.95	3.39	3.98	3.98	31.36
Drive-In Bank	912	Drive-in Lanes	21.01	35%	A	13.66	7.95	3.39	3.98	3.98	54.37

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: ITE rate adjusted upward by KHA based on logical relationship to other categories



Table 11. Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
PARKING AREA		
Park-and-Ride Lot with Bus or Light Rail Service	090	Area used for the transfer of people between private vehicles and buses or light rail
INDUSTRIAL		
General Light Industrial	110	Facility has an emphasis on activities other than manufacturing and typically has minimal office space
Industrial Park	130	A mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another
Manufacturing	140	Primary activity is conversion of raw materials or parts into finished products
Warehousing	150	Devoted to storage of materials but may include office and maintenance areas
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
High-Cube Transload and Short-Term Storage Warehouse	154	A transload facility typically has little storage duration, high throughput, and its operations are high efficiency. A short-term HCW is a distribution facility often with custom/special features built into the structure for the movement of large volumes of freight with only short-term storage of products.
High-Cube Fulfillment Center Warehouse	155	Building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses
High-Cube Parcel Hub Warehouse	156	Typically serves as a regional and local freight-forwarder facility for time sensitive shipments via airfreight and ground carriers
High-Cube Cold Storage Warehouse	157	Has substantial temperature-controlled environments for frozen food and other perishable products
Data Center	160	A free-standing warehouse type of facility that is primarily used for off-site storage of computer systems and associated components including applications and secure data
Utilities	170	A free-standing building that can house office space, a storage area, and electromechanical or industrial equipment that support a local electrical, communication, water supply or control, or sewage treatment utility
Specialty Trade Contractor	180	A business primarily involved in providing contract repairs and services to meet industrial or residential needs
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Single-Family Attached Housing	215	Any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space
Multifamily Housing (Low-Rise)	220	Includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors
Multifamily Housing (Mid-Rise)	221	Includes apartments and condominiums located in a building that has between four and 10 floors of living space
Multifamily Housing (High-Rise)	222	Includes apartments, townhouses, and condominiums. Each building has more than 10 floors of living space.
Off-Campus Student Apartment	225	Student apartment (low-rise) complex houses college or university students in structures with two or three floors of living space
Off-Campus Student Apartment (Mid-Rise)	226	Complex houses college or university students in structures with between four and 10 floors of living space
Off-Campus Student Apartment (High-Rise)	227	Complex houses college or university students in structures with more than 10 floors of living space
Mobile Home Park	240	Generally consists of manufactured homes that are sited and installed on permanent foundations
Senior Adult Housing-Detached	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Attached	252	Consists of attached independent living developments that include limited social or recreation services
Congregate Care Facility	253	An independent living development that provides centralized amenities such as dining, housekeeping, communal transportation, and organized social/recreational activities
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities.
Continuing Care Retirement Community	255	Enables a resident to transition in place from independent living to increased care as the medical needs of the resident change. Housing options may include various combinations of senior adult housing (both single-family and multifamily), congregate care, assisted living, and nursing home
Recreational Homes	260	Either (1) a second home used by its owner periodically for recreation or (2) rented on a seasonal basis
Timeshare	265	Development where multiple purchasers buy interests in the same property and each purchaser receives the right to use the facility for a period of time each year
Residential Planned Unit Development	270	Containing any combination of residential land uses. These developments might also contain supporting services such as limited retail and recreational facilities
LODGING		
Hotel	310	Lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention facilities
All Suites Hotel	311	Lodging that provides sleeping accommodations, a small restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom
Business Hotel	312	Lodging aimed toward the business traveler but also accommodates a growing number of recreational travelers
Motel	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
Resort Hotel	330	Provides sleeping accommodations, and caters to the tourist and vacation industry, often providing a wide variety of recreational facilities/programs



Table 11 (Cont'd). Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
RECREATIONAL		
Public Park	411	Public park is owned and operated by a municipal, county, state, or federal agency. The parks surveyed vary widely as to location, type, and number of facilities, including boating or swimming facilities, beaches, hiking trails, ball fields, soccer fields, campsites, and picnic facilities.
Golf Course	430	May include municipal courses and private country clubs; may have driving ranges, pro shops, and restaurant/banquet facilities
Golf Driving Range	432	Facilities with driving tees for practice; may provide individual or group lessons; may have prop shop and/or refreshment facilities
Batting Cages	433	Area for batting practice that is enclosed by fencing or netting
Multipurpose Recreational Facility	435	Contains two or more of the following land uses combined at one site: miniature golf, batting cages, video arcade, bumper boats, go-carts, and golf driving range. A refreshment area may also be provided
Trampoline Park	436	Recreational facility that houses wall-to-wall trampolines and other facilities such as climbing walls, gymnastics tumble tracks, inflatable basketball, dodge ball facilities, foam pits, and warrior courses
Bowling Alley	437	A recreational facility that includes bowling lanes. A small lounge, restaurant and/or snack bar, video games, and pool tables may also be available.
Movie Theater (Friday)	445a	Place where movies are screened for public entertainment. A theater includes a lobby, refreshment area, and audience seating for each movie screen.
Ice Skating Rink	465	Rinks for ice skating and related sports; may contain spectator areas and refreshment facilities
Casino	473	Facility that exists for the primary purpose of deriving revenue from gaming operations. The games conducted at these facilities include but are not limited to table games, electronic slot machines, video poker and lottery games, and electronic table games.
Soccer Complex	488	Facility that is used for non-professional soccer games. It may consist of multiple fields.
Health/Fitness Club	492	A privately-owned facility that primarily focuses on individual fitness or training
Athletic Club	493	A privately-owned facility that offers comprehensive athletic facilities. An athletic club typically has courts for racquet sport; a basketball court; a sauna or spa; and fitness, exercise, and weightlifting rooms
Recreational Community Center	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
INSTITUTIONAL		
Elementary School	520	A public school that typically serves students attending kindergarten through the fifth or sixth grade
Middle School/Junior High School	522	Serves students who have not yet entered high school
High School	525	A public school that serves students who have completed middle or junior high school
Private School (K-8)	530	A private school (K-8) serves students attending kindergarten through the eighth grade.
Private School (K-12)	532	A private school (K-12) serves students attending kindergarten through the 12th grade
Private High School	534	A private high school serves students who have completed middle school, junior high school, or an elementary school that takes students through 8th grade.
Charter Elementary School (1)	536	An elementary school that is publicly funded and privately managed. The school serves students attending kindergarten through the fifth, sixth, or eighth grade.
Charter School (K-12)	538	A school that is publicly funded and privately managed. The school serves students attending kindergarten through the 12th grade.
Junior / Community College	540	Two-year junior, community, or technical colleges
University / College	550	Four-year universities or colleges that may or may not offer graduate programs
Church	560	Churches and houses of worship
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Cemetery	566	Place for burying the deceased, possibly including buildings used for funeral services, a mausoleum, and a crematorium.
Fire Rescue Station	575	A building that houses emergency services equipment, firefighting apparatus, and the individuals that provide emergency firefighting services
Library	590	A facility that houses shelved books and reading rooms or areas
MEDICAL		
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Clinic	630	Facilities with limited diagnostic and outpatient care
Animal Hospital/Veterinary Clinic	640	Rest and convalescent homes with residents who do little or no driving
Free-Standing Emergency Room	650	A facility that specializes in personal medical care and treatment of people. They are typically open 24 hours a day, 7 days a week, 365 days per year.
OFFICE		
General Office Building	710	Office buildings which house multiple tenants
Small Office Building	712	Office building with less than or equal to 10,000 square feet of gross floor area
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Medical-Dental Office Building	720	Multi-tenant building with offices for physicians and/or dentists
Government Office Building	730	An individual building containing either the entire function or simply one agency of a city, county, state, federal, or other governmental unit
State Motor Vehicles Department	731	an office-type building where driver license testing, vehicle registration, and other related functions are administered
United States Post Office	732	A federal building that contains service windows for mailing packages and letters, post office boxes, offices, sorting and distributing facilities for mail, and vehicle storage areas
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system
Business Park	770	Group of flex-type or incubator one- or two-story buildings served by a common roadway system



Table 11 (Cont'd). Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
COMMERCIAL		
Automobile Related		
Automobile Sales (New)	840	Sale or leasing of new cars is the primary business at these facilities
Automobile Sales (Used)	841	Sale or leasing of used cars is the primary business at these facilities
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Tire Superstore	849	A warehouse-like facility with the primary function of selling and installing tires for automobiles and small trucks
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstery
Automobile Parts and Service Center	943	Sells automobile parts for do-it-yourself maintenance and repair including tires, batteries, oil, and sparks plugs
Gasoline/Service Station	944	Gasoline sales without convenience store or car wash; may include repair
Gasoline/Service Station w/ Conv Market	945	Gasoline sales with convenience store and car washes where the primary business is gasoline sales
Self-Service Car Wash	947	Has stalls for driver to park and wash the vehicle
Truck Stop	950	Facility located adjacent to an interstate highway interchange that provides commercial vehicle fueling, space and supplies for self-service vehicle maintenance
Dining		
Food Cart Pod	926	A group of food carts or food trucks congregated in an established location
Fast Casual Restaurant	930	A sit-down restaurant with no (or very limited) wait staff or table service
Fine Dining Restaurant	931	A full-service eating establishment with a typical duration of stay of at least 1 hour
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Fast Food Restaurant without Drive-Thru Window	933	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
Fast Food Restaurant with Drive-Thru Window	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
Fast-Food Restaurant w/ D.T. No Indoor Seats	935	Any fast-food restaurant that provides drive-through service only
Coffee/Donut Shop w/o D.T.	936	Any coffee and donut restaurant that does not have a drive-through window
Coffee/Donut Shop with Drive-Thru Window	937	Any coffee and donut restaurant that has a drive-through window as well as a walk-in entrance area
Coffee/Donut Shop w/ D.T. No Indoor Seats	938	Any coffee and donut restaurant that has only drive-through window service
Wine Tasting Room	970	Designated area found in conjunction with a winery in which customers can try samples of a winery's products
Drinking Place	975	Contains a bar, where alcoholic beverages and food are sold, and possibly some type of entertainment
Other Retail		
Tractor Supply Store	810	A free-standing facility that specializes in the sale of agricultural and garden equipment
Construction Equipment Rental Store	811	A business that specializes in the rental of construction equipment tools and supplies
Free-Standing Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Hardware/Paint Store	816	A free-standing building that sells hardware and paint supplies
Nursery (Garden Center)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Shopping Center (>150k)	820	Integrated group of commercial establishments; planning, owned, and managed as a unit
Shopping Plaza (40k - 150k) (Supermarket)	821	An integrated group of commercial establishments that is planned, developed, owned, and managed as a unit
Shopping Plaza (40k - 150k) (No Supermarket)	821a	An integrated group of commercial establishments that is planned, developed, owned, and managed as a unit
Strip Retail Plaza (<40k)	822	Integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA)
Factory Outlet Center	823	A shopping center that primarily houses factory outlet stores, attracting customers from a wide geographic area, very often from a larger area than a regional shopping center
Recreational Vehicle Sales	842	Free-standing facility that specializes in the sales of new RVs
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM
Convenience Market	851	A small retail business that sells grocery and other everyday items that a person may need or want as a matter of convenience
Discount Club	857	A discount store or warehouse where shoppers pay a membership fee in order to take advantage of discounted prices on a wide variety of items
Sporting Goods Superstore	861	Businesses specializing in child-oriented merchandise
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Electronics Superstore	863	A free-standing facility that specializes in the sale of electronic merchandise
Pet Supply Superstore	866	A free-standing facility that specializes in the sale of pets and pet supplies, food, and accessories
Office Supply Superstore	867	A free-standing facility that specializes in the sale of office equipment and supplies
Discount Home Furnishing Superstore	869	Free-standing facility that sells an extensive variety of home furnishings and accessories
Department Store	875	Free-standing stores that specialize in the sale of apparel, footwear, bedding, home products, jewelry, etc.
Apparel Store	876	An individual store specializing in the sale of clothing
Pharmacy/Drugstore w/o Drive-Thru Window	880	Facilities that primarily sell prescription and non-prescription drugs without a drive-through window
Pharmacy/Drugstore w/ Drive-Thru Window	881	Facilities that primarily sell prescription and non-prescription drugs with a drive-through window
Marijuana Dispensary	882	Stand-alone facility where cannabis is sold to patients or retail consumers in a legal manner
Furniture Store	890	Full-service retail facility that specializes in the sale of furniture and often carpeting
Liquor Store (1)	899	Specializes in the sale of prepackaged alcoholic beverages intended to be consumed off the store's premises
SERVICES		
Walk-In Bank	911	Banks with their own parking lots, no drive-in lanes but contain non-drive-through ATMs
Drive-In Bank	912	Banking facilities to conduct financial transactions from the vehicle; also usually apart of walk-in bank



VI. SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable Roadway Impact Fee calculations.

Example 1:

Development Type - One (1) Unit of Single-Family Housing in Service Area A

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 9 [Land Use – Vehicle-Mile Equivalency Table]</i> Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 3.18
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	<i>From Table 9, Line 19 [Maximum Assessable Fee Per Service Unit]</i> Service Area A: \$5,740
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 * 3.18 * \$5,740 Maximum Assessable Impact Fee = \$18,253.20

Example 2:

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

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 9 [Land Use – Vehicle-Mile Equivalency Table]</i> Development Type: 100,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 4.48
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	<i>From Table 9, Line 19 [Maximum Assessable Fee Per Service Unit]</i> Service Area C: \$3,818
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 100 * 4.48 * \$3,818 Maximum Assessable Impact Fee = \$1,710,464

VII. ADOPTION AND ADMINISTRATION OF ROADWAY IMPACT FEES

A. Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and Roadway Impact Fees CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. This CIAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a public hearing on the Land Use Assumptions, RIF CIP and Impact Fee Ordinance. One public hearing is required for the 2023 Roadway Impact Fee Study Update, per Chapter 395.054.

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

B. Collection and Use of Roadway Impact Fees

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



VIII. CONCLUSIONS

The City of Round Rock has established a process to implement the assessment and collection of Roadway Impact Fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable Roadway Impact Fee that could be assessed by the City of Round Rock, as shown in the previously referenced **Table 9**. This document serves as a guide to the assessment of Roadway Impact Fees pertaining to future development, and the City's need for transportation improvements to accommodate that growth. Following the public hearing process, the City Council may establish an impact fee amount to be collected, up to the calculated maximum and establish the Roadway Impact Fee Ordinance accordingly.

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

Below is the listing of the 2023 Roadway Impact Fee Study Update's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

Service Area	2019 Maximum Fee Per Service Unit (per Vehicle-Mile)	2023 Maximum Fee Per Service Unit (per Vehicle-Mile)
A	\$2,678	\$5,740
B	\$2,933	\$4,765
C	\$2,511	\$3,818
D	-	\$4,156

A. Conceptual Level Project Cost Projections

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

B. Roadway Impact Fee CIP Service Units of Supply

C. Existing Roadway Facilities Inventory

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

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

Appendix A – Conceptual Level Project Cost Projections

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area A

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	(1/2) Widening	Sam Bass Rd	CR 175	100%	\$ 16,500,000	\$ 16,500,000
A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	(1/2) Widening	240' W of Lagoona Dr	Flowstone Ln	50%	\$ 8,200,000	\$ 4,100,000
A-3	4 Lane - Proposed	New Hope Rd (3)	New	Flowstone Ln	1000' E of Wyoming Springs Dr	50%	\$ 11,100,000	\$ 5,550,000
A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	Widening	IH 35 SBFR	IH 35 NBFR	50%	\$ 9,152,896	\$ 4,576,448
A-7	6 Lane - Enhanced	RM 1431 (1)	Widening	1100' W of Mayfield Ranch Blvd	850' E of Stone Oak Dr	50%	\$ 5,180,000	\$ 2,590,000
A-8	6 Lane - Enhanced	RM 1431 (2)	Widening	850' E of Stone Oak Dr	5195' E of Stone Oak St	100%	\$ 5,200,000	\$ 5,200,000
A-9	6 Lane - Enhanced	RM 1431 (3)	Widening	5195' E of Stone Oak St	IH 35 SBFR	50%	\$ 6,960,000	\$ 3,480,000
A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	(1/2) Widening	390' N of GoldenOak Cir	Alondra Way	100%	\$ 1,800,000	\$ 1,800,000
A-11	4 Lane - Proposed	Eagles Nest Dr (1)	New	Wyoming Springs Dr	Chisholm Trl Rd (Future)	100%	\$ 41,600,000	\$ 41,600,000
A-12	4 Lane - Enhanced (1/2)	Creek Bend Blvd (1)	New	RM 1431	West End Pl	100%	\$ 13,800,000	\$ 13,800,000
A-13	4 Lane - Proposed	Creek Bend Blvd (2)	(1/2) Widening	West End Pl	Camino Del Verdes Pl	100%	\$ 3,500,000	\$ 3,500,000
A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	New	RM 1431	CR 173	100%	\$ 19,400,000	\$ 19,400,000
A-15, B-11	4 Lane - Proposed	Eagles Nest Dr (2)	New	Chisholm Trl Rd (Future)	IH 35 NBFR	100%	\$ 12,216,939	\$ 12,216,939
A-16	5 Lane - Enhanced	CR 173	Widening	IH 35 SBFR	3250' N of Wolle Ln	100%	\$ 2,100,000	\$ 2,100,000
A-17	5 Lane - Enhanced	Chisholm Trl Rd (2)	Widening	3250' N of Wolle Ln	1980' N of Wolle Ln	100%	\$ 5,000,000	\$ 5,000,000
A-21	3 Lane - Enhanced	Sam Bass Rd (3)	Widening	FM 3406	Desert Willow Dr	50%	\$ 3,900,000	\$ 1,950,000
A-22	3 Lane - Enhanced	Sam Bass Rd (4)	Widening	Desert Willow Dr	Creek Bend Blvd	100%	\$ 2,100,000	\$ 2,100,000
A-23	3 Lane - Enhanced	Sam Bass Rd (5)	Widening	Creek Bend Blvd	Hairy Man Dr	100%	\$ 2,400,000	\$ 2,400,000
A-24	3 Lane - Enhanced	Sam Bass Rd (6)	Widening	Hairy Man Rd	Chisholm Trl Rd	50%	\$ 14,800,000	\$ 7,400,000
A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	New	Sam Bass Rd	Creek Bend Blvd	100%	\$ 26,379,928	\$ 26,379,928
A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Previously Constructed	Brushy Creek	Wyoming Springs Dr	100%	\$ 11,012,302	\$ 11,012,302
A-29	4 Lane - Proposed	Deepwood Dr (1)	New	Sam Bass Rd	345' N of RM 620	100%	\$ 18,900,346	\$ 18,900,346
A-30	4 Lane - Enhanced	Deepwood Dr (2)	Widening	345' N of RM 620	RM 620	100%	\$ 1,400,000	\$ 1,400,000
A-31, C-1	6 Lane - Enhanced	RM 620	Widening	Deepwood Dr	IH 35 SBFR	50%	\$ 12,560,624	\$ 6,280,312

TOTAL \$ 255,163,035 \$ 219,236,275

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Intersection Improvements - Service Area A

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
AI-1	Sam Bass Rd and FM 3406	SIGNAL		100%	\$ 550,000	\$ 550,000
AI-2	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%	\$ 2,500,000	\$ 1,875,000
AI-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	\$ 240,000	\$ 240,000
-	Update ITS and Traffic Managmenet Infrastructure			25%	\$ 20,900,000	\$ 5,225,000
TOTAL					\$ 24,190,000	\$ 7,890,000

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

City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-1
Name:	New Hope Rd (1)	This project consists of widening existing pavement with half of a 4 lane divided arterial.		
Limits:	Sam Bass Rd to CR 175			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced (1/2)			
Length (lf):	5,817			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	21,150	cy	\$ 24.33	\$ 515,000
201	12" Asphalt (Type C)	11,518	ton	\$ 139.92	\$ 1,612,000
301	16" Base	7,756	cy	\$ 66.92	\$ 519,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	18,744	sy	\$ 7.30	\$ 137,000
501	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,490	gal	\$ 7.30	\$ 25,000
601	10' Concrete Sidewalk	116,341	sf	\$ 10.95	\$ 1,274,000
701	Machine Laid Curb & Gutter	11,634	lf	\$ 36.50	\$ 425,000
801	Turn Lanes and Median Openings	3,525	sy	\$ 243.06	\$ 857,000
Paving Construction Cost Subtotal:					\$ 5,364,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	268,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	107,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,609,000
✓	Illumination		10%	\$	536,000
✓	Special Drainage Structures	Bridge Crossing		\$	800,000
✓	Water	Minor Adjustments	2%	\$	107,000
✓	Sewer	Minor Adjustments	2%	\$	107,000
✓	Turf and Erosion Control		2%	\$	107,000
✓	Landscaping and Irrigation		4%	\$	215,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	3,856,000
Paving and Allowance Subtotal:				\$	9,220,000
Construction Contingency:				15%	\$ 1,383,000
Mobilization				8%	\$ 738,000
Prep ROW				4%	\$ 369,000
Construction Cost TOTAL:				\$	11,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 11,800,000
Engineering/Survey/Testing:		16%	\$ 1,888,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 2,792,000
Impact Fee Project Cost TOTAL:			\$ 16,500,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-2
Name:	New Hope Rd (2)	This project consists of widening existing pavement with half of a 4 lane divided arterial.		
Limits:	240' W of Lagoon Dr to Flowstone Ln			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced (1/2)			
Length (lf):	2,903			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	10,554	cy	\$ 24.33	\$ 257,000
201	12" Asphalt (Type C)	5,748	ton	\$ 139.92	\$ 804,000
301	16" Base	3,870	cy	\$ 66.92	\$ 259,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	9,354	sy	\$ 7.30	\$ 68,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,742	gal	\$ 7.30	\$ 13,000
601	10' Concrete Sidewalk	58,057	sf	\$ 10.95	\$ 636,000
701	Machine Laid Curb & Gutter	5,806	lf	\$ 36.50	\$ 212,000
801	Turn Lanes and Median Openings	1,759	sy	\$ 243.06	\$ 428,000
Paving Construction Cost Subtotal:					\$ 2,677,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 134,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 54,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 803,000
✓	Illumination			10%	\$ 268,000
✓	Special Drainage Structures	Bridge Crossing			\$ 400,000
✓	Water	Minor Adjustments		2%	\$ 54,000
✓	Sewer	Minor Adjustments		2%	\$ 54,000
✓	Turf and Erosion Control			2%	\$ 54,000
✓	Landscaping and Irrigation			4%	\$ 107,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 1,928,000
Paving and Allowance Subtotal:					\$ 4,605,000
Construction Contingency:				15%	\$ 691,000
Mobilization				8%	\$ 368,000
Prep ROW				4%	\$ 184,000
Construction Cost TOTAL:					\$ 5,900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,900,000
Engineering/Survey/Testing:		16%	\$ 944,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,393,000
Impact Fee Project Cost TOTAL:			\$ 8,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-3
Name:	New Hope Rd (3)	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	Flowstone Ln to 1000' E of Wyoming Springs Dr			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	2,447			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	17,791	cy	\$ 24.33	\$ 433,000
202	12" Asphalt (Type C)	9,689	ton	\$ 139.92	\$ 1,356,000
302	16" Base	6,524	cy	\$ 66.92	\$ 437,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	15,767	sy	\$ 7.30	\$ 115,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,936	gal	\$ 7.30	\$ 21,000
602	10' Concrete Sidewalk	48,932	sf	\$ 10.95	\$ 536,000
702	Machine Laid Curb & Gutter	9,786	lf	\$ 36.50	\$ 357,000
802	Turn Lanes and Median Openings	1,483	sy	\$ 243.06	\$ 360,000
Paving Construction Cost Subtotal:					\$ 3,615,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 72,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,085,000	
✓	Illumination		10%	\$ 362,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 72,000	
✓	Sewer	Minor Adjustments	2%	\$ 72,000	
✓	Turf and Erosion Control		2%	\$ 72,000	
✓	Landscaping and Irrigation		4%	\$ 145,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 1,880,000	
Paving and Allowance Subtotal:				\$ 5,495,000	
Construction Contingency:				15%	\$ 824,000
Mobilization				8%	\$ 440,000
Prep ROW				4%	\$ 220,000
Construction Cost TOTAL:				\$ 7,000,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,000,000
Engineering/Survey/Testing:		16%	\$ 1,120,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 2,936,000
Impact Fee Project Cost TOTAL:			\$ 11,100,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-4, B-1
Name:	Westinghouse Rd (1)	This project consists of the construction of a new 6 lane undivided bridge section, u-turn bridge and frontage road realignment.		
Limits:	IH 35 SBFR to IH 35 NBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,014			
Service Area(s):	A,B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 38,928,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 38,928,000
Engineering/Survey/Testing:		-	\$ 6,228,480
ROW/Easement Acquisition:	TxDOT Roadway	-	\$ 608,000
Overall Project Cost Total:			\$ 45,764,480
City Contribution:			\$ 9,152,896
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 9,152,896

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-7
Name:	RM 1431 (1)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	1100' W of Mayfield Ranch Blvd to 850' E of Stone			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	5,137			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	50,613	cy	\$ 24.33	\$ 1,232,000
205	12" Asphalt (Type C)	28,632	ton	\$ 139.92	\$ 4,006,000
305	16" Base	19,281	cy	\$ 66.92	\$ 1,290,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	45,666	sy	\$ 7.30	\$ 333,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	8,676	gal	\$ 7.30	\$ 63,000
605	10' Concrete Sidewalk	102,747	sf	\$ 10.95	\$ 1,125,000
705	Machine Laid Curb & Gutter	20,549	lf	\$ 36.50	\$ 750,000
805	Turn Lanes and Median Openings	3,114	sy	\$ 243.06	\$ 757,000
Paving Construction Cost Subtotal:					\$ 9,556,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 478,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 191,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 2,867,000
✓	Illumination			10%	\$ 956,000
✓	Special Drainage Structures	Bridge Crossing			\$ 500,000
✓	Water	Minor Adjustments		2%	\$ 191,000
✓	Sewer	Minor Adjustments		2%	\$ 191,000
✓	Turf and Erosion Control			2%	\$ 191,000
✓	Landscaping and Irrigation			4%	\$ 382,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 5,947,000
Paving and Allowance Subtotal:					\$ 15,503,000
Construction Contingency:				15%	\$ 2,325,000
Mobilization				8%	\$ 1,240,000
Prep ROW				4%	\$ 620,000
Construction Cost TOTAL:					\$ 19,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 19,700,000
Engineering/Survey/Testing:		16%	\$ 3,152,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 3,082,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 5,180,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-8
Name:	RM 1431 (2)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	850' E of Stone Oak Dr to 5195' E of Stone Oak St			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	4,343			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	42,790	cy	\$ 24.33	\$ 1,041,000
205	12" Asphalt (Type C)	24,207	ton	\$ 139.92	\$ 3,387,000
305	16" Base	16,301	cy	\$ 66.92	\$ 1,091,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	38,607	sy	\$ 7.30	\$ 282,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	7,335	gal	\$ 7.30	\$ 54,000
605	10' Concrete Sidewalk	86,866	sf	\$ 10.95	\$ 951,000
705	Machine Laid Curb & Gutter	17,373	lf	\$ 36.50	\$ 634,000
805	Turn Lanes and Median Openings	2,632	sy	\$ 243.06	\$ 640,000
Paving Construction Cost Subtotal:					\$ 8,080,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	404,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	162,000
✓	Roadway Drainage	Standard Internal System	30%	\$	2,424,000
✓	Illumination		10%	\$	808,000
✓	Special Drainage Structures	Bridge Crossing		\$	3,200,000
✓	Water	Minor Adjustments	2%	\$	162,000
✓	Sewer	Minor Adjustments	2%	\$	162,000
✓	Turf and Erosion Control		2%	\$	162,000
✓	Landscaping and Irrigation		4%	\$	323,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	7,807,000
Paving and Allowance Subtotal:					\$ 15,887,000
Construction Contingency:				15%	\$ 2,383,000
Mobilization				8%	\$ 1,271,000
Prep ROW				4%	\$ 635,000
Construction Cost TOTAL:					\$ 20,200,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 20,200,000
Engineering/Survey/Testing:		16%	\$ 3,232,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 2,606,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 5,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-9
Name:	RM 1431 (3)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	5195' E of Stone Oak St to IH 35 SBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	7,075			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	69,707	cy	\$ 24.33	\$ 1,696,000
205	12" Asphalt (Type C)	39,434	ton	\$ 139.92	\$ 5,517,000
305	16" Base	26,555	cy	\$ 66.92	\$ 1,777,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	62,893	sy	\$ 7.30	\$ 459,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	11,950	gal	\$ 7.30	\$ 87,000
605	10' Concrete Sidewalk	141,510	sf	\$ 10.95	\$ 1,550,000
705	Machine Laid Curb & Gutter	28,302	lf	\$ 36.50	\$ 1,033,000
805	Turn Lanes and Median Openings	4,288	sy	\$ 243.06	\$ 1,042,000
Paving Construction Cost Subtotal:					\$ 13,161,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	658,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	263,000
✓	Roadway Drainage	Standard Internal System	30%	\$	3,948,000
✓	Illumination		10%	\$	1,316,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	263,000
✓	Sewer	Minor Adjustments	2%	\$	263,000
✓	Turf and Erosion Control		2%	\$	263,000
✓	Landscaping and Irrigation		4%	\$	526,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 7,500,000	
Paving and Allowance Subtotal:				\$ 20,661,000	
Construction Contingency:				15%	\$ 3,099,000
Mobilization				8%	\$ 1,653,000
Prep ROW				4%	\$ 826,000
Construction Cost TOTAL:				\$ 26,300,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 26,300,000
Engineering/Survey/Testing:		16%	\$ 4,208,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 4,245,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 6,960,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-10
Name:	Wyoming Springs Dr (3)	This project consists of widening existing pavement with half of a 4 lane divided arterial.		
Limits:	390' N of GoldenOak Cir to Alondra Way			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced (1/2)			
Length (lf):	703			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,557	cy	\$ 24.33	\$ 62,000
201	12" Asphalt (Type C)	1,393	ton	\$ 139.92	\$ 195,000
301	16" Base	938	cy	\$ 66.92	\$ 63,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	2,267	sy	\$ 7.30	\$ 17,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	422	gal	\$ 7.30	\$ 3,000
601	10' Concrete Sidewalk	14,068	sf	\$ 10.95	\$ 154,000
701	Machine Laid Curb & Gutter	1,407	lf	\$ 36.50	\$ 51,000
801	Turn Lanes and Median Openings	426	sy	\$ 243.06	\$ 104,000
Paving Construction Cost Subtotal: \$					649,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 32,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 13,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 195,000
✓	Illumination			10%	\$ 65,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 13,000
✓	Sewer	Minor Adjustments		2%	\$ 13,000
✓	Turf and Erosion Control			2%	\$ 13,000
✓	Landscaping and Irrigation			4%	\$ 26,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$	370,000
				Paving and Allowance Subtotal: \$	1,019,000
				Construction Contingency:	15% \$ 153,000
				Mobilization	8% \$ 82,000
				Prep ROW	4% \$ 41,000
				Construction Cost TOTAL: \$	1,300,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,300,000
Engineering/Survey/Testing:		16%	\$ 208,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 338,000
Impact Fee Project Cost TOTAL:			\$ 1,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-11
Name:	Eagles Nest Dr (1)	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	Wyoming Springs Dr to Chisholm Trl Rd (Future)			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	9,140			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	66,463	cy	\$ 24.33	\$ 1,617,000
202	12" Asphalt (Type C)	36,195	ton	\$ 139.92	\$ 5,064,000
302	16" Base	24,374	cy	\$ 66.92	\$ 1,631,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	58,903	sy	\$ 7.30	\$ 430,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	10,968	gal	\$ 7.30	\$ 80,000
602	10' Concrete Sidewalk	182,802	sf	\$ 10.95	\$ 2,002,000
702	Machine Laid Curb & Gutter	36,560	lf	\$ 36.50	\$ 1,334,000
802	Turn Lanes and Median Openings	5,539	sy	\$ 243.06	\$ 1,346,000
Paving Construction Cost Subtotal:					\$ 13,504,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 270,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 4,051,000	
✓	Illumination		10%	\$ 1,350,000	
✓	Special Drainage Structures	Minor Stream Crossing		\$ 200,000	
✓	Water	Minor Adjustments	2%	\$ 270,000	
✓	Sewer	Minor Adjustments	2%	\$ 270,000	
✓	Turf and Erosion Control		2%	\$ 270,000	
✓	Landscaping and Irrigation		4%	\$ 540,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 7,221,000	
Paving and Allowance Subtotal:				\$ 20,725,000	
Construction Contingency:				15%	\$ 3,109,000
Mobilization				8%	\$ 1,658,000
Prep ROW				4%	\$ 829,000
Construction Cost TOTAL:				\$ 26,400,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 26,400,000
Engineering/Survey/Testing:		16%	\$ 4,224,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 10,968,000
Impact Fee Project Cost TOTAL:			\$ 41,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Creek Bend Blvd (1)	This project consists of the construction of a new 4 lane divided arterial.	A-12
Limits:	RM 1431 to West End Pl		
Impact Fee Class:	4 Lane - Enhanced (1/2)		
Ultimate Class:	4 Lane - Enhanced (1/2)		
Length (lf):	4,164		
Service Area(s):	A		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	15,138	cy	\$ 24.33	\$ 368,000
201	12" Asphalt (Type C)	8,244	ton	\$ 139.92	\$ 1,153,000
301	16" Base	5,552	cy	\$ 66.92	\$ 371,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	13,416	sy	\$ 7.30	\$ 98,000
501	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,498	gal	\$ 7.30	\$ 18,000
601	10' Concrete Sidewalk	83,273	sf	\$ 10.95	\$ 912,000
701	Machine Laid Curb & Gutter	8,327	lf	\$ 36.50	\$ 304,000
801	Turn Lanes and Median Openings	2,523	sy	\$ 243.06	\$ 613,000
Paving Construction Cost Subtotal:					\$ 3,837,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 77,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,151,000	
✓	Illumination		10%	\$ 384,000	
✓	Special Drainage Structures	Minor Stream Crossing		\$ 100,000	
✓	Water	Minor Adjustments	2%	\$ 77,000	
✓	Sewer	Minor Adjustments	2%	\$ 77,000	
✓	Turf and Erosion Control		2%	\$ 77,000	
✓	Landscaping and Irrigation		4%	\$ 153,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 2,096,000	
Paving and Allowance Subtotal:				\$ 5,933,000	
Construction Contingency:				15%	\$ 890,000
Mobilization				8%	\$ 475,000
Prep ROW				4%	\$ 237,000
Construction Cost TOTAL:				\$ 7,600,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,600,000
Engineering/Survey/Testing:		16%	\$ 1,216,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 4,996,000
Impact Fee Project Cost TOTAL:			\$ 13,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. A-13
Name:	Creek Bend Blvd (2)	This project consists of widening existing pavement with half of a 4 lane divided arterial.	
Limits:	West End PI to Camino Del Verdes PI		
Impact Fee Class:	4 Lane - Proposed		
Ultimate Class:	4 Lane - Proposed		
Length (lf):	764		
Service Area(s):	A		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,556	cy	\$ 24.33	\$ 135,000
202	12" Asphalt (Type C)	3,025	ton	\$ 139.92	\$ 423,000
302	16" Base	2,037	cy	\$ 66.92	\$ 136,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	4,924	sy	\$ 7.30	\$ 36,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	917	gal	\$ 7.30	\$ 7,000
602	10' Concrete Sidewalk	15,280	sf	\$ 10.95	\$ 167,000
702	Machine Laid Curb & Gutter	3,056	lf	\$ 36.50	\$ 112,000
802	Turn Lanes and Median Openings	463	sy	\$ 243.06	\$ 113,000
Paving Construction Cost Subtotal:					\$ 1,129,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	56,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	23,000
✓	Roadway Drainage	Standard Internal System	30%	\$	339,000
✓	Illumination		10%	\$	113,000
✓	Special Drainage Structures	Minor Stream Crossing		\$	300,000
✓	Water	Minor Adjustments	2%	\$	23,000
✓	Sewer	Minor Adjustments	2%	\$	23,000
✓	Turf and Erosion Control		2%	\$	23,000
✓	Landscaping and Irrigation		4%	\$	45,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 945,000	
Paving and Allowance Subtotal:				\$ 2,074,000	
Construction Contingency:				15%	\$ 311,000
Mobilization				8%	\$ 166,000
Prep ROW				4%	\$ 83,000
Construction Cost TOTAL:				\$ 2,700,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,700,000
Engineering/Survey/Testing:		16%	\$ 432,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 367,000
Impact Fee Project Cost TOTAL:			\$ 3,500,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Chisholm Trl Rd (1)	This project consists of the construction of a new 4 lane divided arterial.	A-14
Limits:	RM 1431 to CR 173		
Impact Fee Class:	4 Lane - Proposed		
Ultimate Class:	4 Lane - Proposed		
Length (lf):	3,995		
Service Area(s):	A		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	29,051	cy	\$ 24.33	\$ 707,000
202	12" Asphalt (Type C)	15,821	ton	\$ 139.92	\$ 2,214,000
302	16" Base	10,654	cy	\$ 66.92	\$ 713,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	25,746	sy	\$ 7.30	\$ 188,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	4,794	gal	\$ 7.30	\$ 35,000
602	10' Concrete Sidewalk	79,903	sf	\$ 10.95	\$ 875,000
702	Machine Laid Curb & Gutter	15,981	lf	\$ 36.50	\$ 583,000
802	Turn Lanes and Median Openings	2,421	sy	\$ 243.06	\$ 589,000
Paving Construction Cost Subtotal:					\$ 5,904,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 118,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,771,000	
✓	Illumination		10%	\$ 590,000	
✓	Special Drainage Structures	Bridge Crossing		\$ 900,000	
✓	Water	Minor Adjustments	2%	\$ 118,000	
✓	Sewer	Minor Adjustments	2%	\$ 118,000	
✓	Turf and Erosion Control		2%	\$ 118,000	
✓	Landscaping and Irrigation		4%	\$ 236,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 3,969,000	
Paving and Allowance Subtotal:				\$ 9,873,000	
Construction Contingency:				15%	\$ 1,481,000
Mobilization				8%	\$ 790,000
Prep ROW				4%	\$ 395,000
Construction Cost TOTAL:				\$ 12,600,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 12,600,000
Engineering/Survey/Testing:		16%	\$ 2,016,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 4,794,000
Impact Fee Project Cost TOTAL:			\$ 19,400,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-15, B-11
Name:	Eagles Nest (1)	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	Chisholm Trl Rd (Future) to IH 35 NBF			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	400			
Service Area(s):	A,B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 10,612,800

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City Estimate	-	\$ 10,612,800
Engineering/Survey/Testing:	From City Estimate	11%	\$ 1,167,408
ROW/Easement Acquisition:	From City Estimate	-	\$ 436,731
Overall Project Cost Total:			\$ 12,216,939
City Contribution:			\$ 12,216,939
Impact Fee Project Cost:			\$ 12,216,939

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. A-16
Name:	CR 173	This project consists of the reconstruction of existing pavement to a 5 lane divided arterial.	
Limits:	IH 35 SBFR to 3250' N of Wolle Ln		
Impact Fee Class:	5 Lane - Enhanced		
Ultimate Class:	5 Lane - Enhanced		
Length (lf):	538		
Service Area(s):	A		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	4,545	cy	\$ 24.33	\$ 111,000
211	12" Asphalt (Type C)	2,684	ton	\$ 139.92	\$ 376,000
311	16" Base	1,807	cy	\$ 66.92	\$ 121,000
411	10" Lime Stabilization (with Lime @ 45#/sy)	4,186	sy	\$ 7.30	\$ 31,000
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	813	gal	\$ 7.30	\$ 6,000
611	10' Concrete Sidewalk	10,764	sf	\$ 10.95	\$ 118,000
711	Machine Laid Curb & Gutter	1,076	lf	\$ 36.50	\$ 39,000
811	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal: \$					802,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 40,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 16,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 241,000
✓	Illumination			10%	\$ 80,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 16,000
✓	Sewer	Minor Adjustments		2%	\$ 16,000
✓	Turf and Erosion Control			2%	\$ 16,000
✓	Landscaping and Irrigation			4%	\$ 32,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$	457,000
				Paving and Allowance Subtotal: \$	1,259,000
Construction Contingency:				15%	\$ 189,000
Mobilization				8%	\$ 101,000
Prep ROW				4%	\$ 50,000
Construction Cost TOTAL: \$					1,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,600,000
Engineering/Survey/Testing:		16%	\$ 256,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 258,000
Impact Fee Project Cost TOTAL:			\$ 2,100,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-17
Name:	Chisholm Trl Rd (2)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	3250' N of Wolle Ln to 1980' N of Wolle Ln			
Impact Fee Class:	5 Lane - Enhanced			
Ultimate Class:	5 Lane - Enhanced			
Length (lf):	1,272			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
111	Unclassified Street Excavation	10,740	cy	\$ 24.33	\$ 261,000
211	12" Asphalt (Type C)	6,342	ton	\$ 139.92	\$ 887,000
311	16" Base	4,271	cy	\$ 66.92	\$ 286,000
411	10" Lime Stabilization (with Lime @ 45#/sy)	9,892	sy	\$ 7.30	\$ 72,000
511	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,922	gal	\$ 7.30	\$ 14,000
611	10' Concrete Sidewalk	25,436	sf	\$ 10.95	\$ 279,000
711	Machine Laid Curb & Gutter	2,544	lf	\$ 36.50	\$ 93,000
811	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 1,892,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 95,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 38,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 568,000
✓	Illumination			10%	\$ 189,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 38,000
✓	Sewer	Minor Adjustments		2%	\$ 38,000
✓	Turf and Erosion Control			2%	\$ 38,000
✓	Landscaping and Irrigation			4%	\$ 76,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 1,080,000
				Paving and Allowance Subtotal:	\$ 2,972,000
Construction Contingency:				15%	\$ 446,000
Mobilization				8%	\$ 238,000
Prep ROW				4%	\$ 119,000
Construction Cost TOTAL:				\$	3,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,800,000
Engineering/Survey/Testing:		16%	\$ 608,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 610,000
Impact Fee Project Cost TOTAL:			\$ 5,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-21
Name:	Sam Bass Rd (3)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	FM 3406 to Desert Willow Dr			
Impact Fee Class:	3 Lane - Enhanced			
Ultimate Class:	3 Lane - Enhanced			
Length (lf):	1,853			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	5,507	cy	\$ 24.33	\$ 134,000
210	5" Asphalt (Type C)	3,002	ton	\$ 139.92	\$ 420,000
310	10" Base	3,032	cy	\$ 66.92	\$ 203,000
410	10" Lime Stabilization (with Lime @ 45#/sy)	11,327	sy	\$ 7.30	\$ 83,000
510	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,183	gal	\$ 7.30	\$ 16,000
610	10' Concrete Sidewalk	37,069	sf	\$ 10.95	\$ 406,000
710	Machine Laid Curb & Gutter	3,707	lf	\$ 36.50	\$ 135,000
810	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 1,397,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	70,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	28,000
✓	Roadway Drainage	Standard Internal System	30%	\$	419,000
✓	Illumination		10%	\$	140,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	28,000
✓	Sewer	Minor Adjustments	2%	\$	28,000
✓	Turf and Erosion Control		2%	\$	28,000
✓	Landscaping and Irrigation		4%	\$	56,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	797,000
Paving and Allowance Subtotal:				\$	2,194,000
Construction Contingency:				15%	\$ 329,000
Mobilization				8%	\$ 176,000
Prep ROW				4%	\$ 88,000
Construction Cost TOTAL:				\$	2,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,800,000
Engineering/Survey/Testing:		16%	\$ 448,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 667,000
Impact Fee Project Cost TOTAL:			\$ 3,900,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-22
Name:	Sam Bass Rd (4)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	Desert Willow Dr to Creek Bend Blvd			
Impact Fee Class:	3 Lane - Enhanced			
Ultimate Class:	3 Lane - Enhanced			
Length (lf):	991			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	2,945	cy	\$ 24.33	\$ 72,000
210	5" Asphalt (Type C)	1,605	ton	\$ 139.92	\$ 225,000
310	10" Base	1,621	cy	\$ 66.92	\$ 108,000
410	10" Lime Stabilization (with Lime @ 45#/sy)	6,057	sy	\$ 7.30	\$ 44,000
510	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,167	gal	\$ 7.30	\$ 9,000
610	10' Concrete Sidewalk	19,822	sf	\$ 10.95	\$ 217,000
710	Machine Laid Curb & Gutter	1,982	lf	\$ 36.50	\$ 72,000
810	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 747,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 37,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 15,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 224,000
✓	Illumination			10%	\$ 75,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 15,000
✓	Sewer	Minor Adjustments		2%	\$ 15,000
✓	Turf and Erosion Control			2%	\$ 15,000
✓	Landscaping and Irrigation			4%	\$ 30,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 426,000
				Paving and Allowance Subtotal:	\$ 1,173,000
Construction Contingency:				15%	\$ 176,000
Mobilization				8%	\$ 94,000
Prep ROW				4%	\$ 47,000
Construction Cost TOTAL:				\$ 1,500,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,500,000
Engineering/Survey/Testing:		16%	\$ 240,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 357,000
Impact Fee Project Cost TOTAL:			\$ 2,100,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-23
Name:	Sam Bass Rd (5)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	Creek Bend Blvd to Hairy Man Dr			
Impact Fee Class:	3 Lane - Enhanced			
Ultimate Class:	3 Lane - Enhanced			
Length (lf):	1,121			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	3,330	cy	\$ 24.33	\$ 81,000
210	5" Asphalt (Type C)	1,815	ton	\$ 139.92	\$ 254,000
310	10" Base	1,833	cy	\$ 66.92	\$ 123,000
410	10" Lime Stabilization (with Lime @ 45#/sy)	6,849	sy	\$ 7.30	\$ 50,000
510	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,320	gal	\$ 7.30	\$ 10,000
610	10' Concrete Sidewalk	22,414	sf	\$ 10.95	\$ 245,000
710	Machine Laid Curb & Gutter	2,241	lf	\$ 36.50	\$ 82,000
810	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 845,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	42,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	17,000
✓	Roadway Drainage	Standard Internal System	30%	\$	254,000
✓	Illumination		10%	\$	85,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	17,000
✓	Sewer	Minor Adjustments	2%	\$	17,000
✓	Turf and Erosion Control		2%	\$	17,000
✓	Landscaping and Irrigation		4%	\$	34,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	483,000
Paving and Allowance Subtotal:					\$ 1,328,000
Construction Contingency:				15%	\$ 199,000
Mobilization				8%	\$ 106,000
Prep ROW				4%	\$ 53,000
Construction Cost TOTAL:					\$ 1,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 403,000
Impact Fee Project Cost TOTAL:			\$ 2,400,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-24
Name:	Sam Bass Rd (6)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	Hairy Man Rd to Chisholm Trl Rd			
Impact Fee Class:	3 Lane - Enhanced			
Ultimate Class:	3 Lane - Enhanced			
Length (lf):	7,007			
Service Area(s):	A			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
110	Unclassified Street Excavation	20,821	cy	\$ 24.33	\$ 507,000
210	5" Asphalt (Type C)	11,348	ton	\$ 139.92	\$ 1,588,000
310	10" Base	11,463	cy	\$ 66.92	\$ 767,000
410	10" Lime Stabilization (with Lime @ 45#/sy)	42,824	sy	\$ 7.30	\$ 313,000
510	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	8,253	gal	\$ 7.30	\$ 60,000
610	10' Concrete Sidewalk	140,150	sf	\$ 10.95	\$ 1,535,000
710	Machine Laid Curb & Gutter	14,015	lf	\$ 36.50	\$ 512,000
810	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 5,282,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	264,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	106,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,585,000
✓	Illumination		10%	\$	528,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	106,000
✓	Sewer	Minor Adjustments	2%	\$	106,000
✓	Turf and Erosion Control		2%	\$	106,000
✓	Landscaping and Irrigation		4%	\$	211,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 3,012,000	
Paving and Allowance Subtotal:				\$	8,294,000
Construction Contingency:				15%	\$ 1,244,000
Mobilization				8%	\$ 664,000
Prep ROW				4%	\$ 332,000
Construction Cost TOTAL:				\$	10,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,600,000
Engineering/Survey/Testing:		16%	\$ 1,696,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 2,523,000
Impact Fee Project Cost TOTAL:			\$ 14,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-26
Name:	Wyoming Springs Dr (4)	This project consists of the construction of a new 4 lane divided arterial with bridges over Brushy Creek and Dry Fork Creek.		
Limits:	Sam Bass Rd to Creek Bend Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,646			
Service Area(s):	A			

Roadway Construction Cost Projection	
	Construction Cost TOTAL: \$ 18,604,928

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 18,604,928
Engineering/Survey/Testing:	From City estimate	-	\$ 2,200,000
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 5,575,000
Overall Project Cost Total:			\$ 26,379,928
City Contribution:			\$ 26,379,928
Impact Fee Project Cost:			\$ 26,379,928

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-28
Name:	Creek Bend Blvd (3)	This project consists of the previous construction of a 4 lane divided arterial.		
Limits:	Brushy Creek to Wyoming Springs Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,123			
Service Area(s):	A			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 8,245,045

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 8,245,045
Engineering/Survey/Testing:		-	\$ 1,964,288
ROW/Easement Acquisition:	Existing Alignment	-	\$ 802,969
Overall Project Cost Total:			\$ 11,012,302
City Contribution:			\$ 11,012,302
Impact Fee Project Cost (100%):			\$ 11,012,302

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	A-29
Name:	Deepwood Dr (1)	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	Sam Bass Rd to 345' N of RM 620			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,770			
Service Area(s):	A			

Roadway Construction Cost Projection	
	Construction Cost TOTAL: \$ 11,119,830

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 11,119,830
Engineering/Survey/Testing:		-	\$ 1,130,516
ROW/Easement Acquisition:	New Roadway Alignment	-	\$ 6,650,000
Overall Project Cost Total:			\$ 18,900,346
City Contribution:			\$ 18,900,346
Impact Fee Project Cost:			\$ 18,900,346

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. A-30
Name:	Deepwood Dr (2)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.	
Limits:	345' N of RM 620 to RM 620		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	346		
Service Area(s):	A		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,514	cy	\$ 24.33	\$ 61,000
203	12" Asphalt (Type C)	1,369	ton	\$ 139.92	\$ 192,000
303	16" Base	922	cy	\$ 66.92	\$ 62,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	2,228	sy	\$ 7.30	\$ 16,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	415	gal	\$ 7.30	\$ 3,000
603	10' Concrete Sidewalk	6,916	sf	\$ 10.95	\$ 76,000
703	Machine Laid Curb & Gutter	1,383	lf	\$ 36.50	\$ 50,000
803	Turn Lanes and Median Openings	210	sy	\$ 243.06	\$ 51,000
Paving Construction Cost Subtotal: \$					511,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 26,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 10,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 153,000
✓	Illumination			10%	\$ 51,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 10,000
✓	Sewer	Minor Adjustments		2%	\$ 10,000
✓	Turf and Erosion Control			2%	\$ 10,000
✓	Landscaping and Irrigation			4%	\$ 20,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$	290,000
				Paving and Allowance Subtotal: \$	801,000
Construction Contingency:				15%	\$ 120,000
Mobilization				8%	\$ 64,000
Prep ROW				4%	\$ 32,000
Construction Cost TOTAL: \$					1,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,100,000
Engineering/Survey/Testing:		16%	\$ 176,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 166,000
Impact Fee Project Cost TOTAL:			\$ 1,400,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	RM 620	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.	A-31, C-1
Limits:	Deepwood Dr to IH 35 SBFR		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	4,923		
Service Area(s):	A,C		

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 25,545,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 25,545,000
Engineering/Survey/Testing:		-	\$ 2,600,000
ROW/Easement Acquisition:	TxDOT Roadway	-	\$ 14,629,808
Overall Project Cost Total:			\$ 42,774,808
City Contribution:			\$ 12,560,624
Impact Fee Project Cost (29%):			\$ 12,560,624

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City of Round Rock - 2023 Roadway Impact Fee Study

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

Roadway Improvements - Service Area B

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	Widening	IH 35 SBFR	IH 35 NBFR	50%	\$ 9,152,896	\$ 4,576,448
B-4	6 Lane - Enhanced	University Blvd (1)	Previously Constructed	University Oaks Blvd	335' W of Sunrise Dr	100%	\$ 17,220,832	\$ 17,220,832
B-5	6 Lane - Enhanced	University Blvd (2)	Widening	335' W of Sunrise Dr	A.W. Grimes Blvd	50%	\$ 53,300,000	\$ 26,650,000
B-6	4 Lane - Enhanced	University Blvd (3)	Widening	A.W. Grimes Blvd	1830' E of A.W. Grimes Blvd	100%	\$ 8,200,000	\$ 8,200,000
B-7	4 Lane - Enhanced	University Blvd (4)	Widening	1830' E of A.W. Grimes Blvd	Lunata Way	50%	\$ 17,000,000	\$ 8,500,000
B-8	4 Lane - Enhanced	University Blvd (5)	Widening	Lunata Way	Kenney Fort Blvd (Future)	100%	\$ 4,300,000	\$ 4,300,000
B-9	4 Lane - Enhanced	N Mays St (2)	Widening	350' S of University Blvd	2000' S of University Blvd	100%	\$ 8,300,000	\$ 8,300,000
A-15, B-11	4 Lane - Proposed	Eagles Nest (1)	New	Chisholm Trl Rd (Future)	IH 35 NBFR	50%	\$ 12,216,939	\$ 6,108,470
B-12	4 Lane - Proposed	Eagles Nest (2)	New	IH 35 NBFR	Cypress Blvd	100%	\$ 21,436,451	\$ 21,436,451
B-13	4 Lane - Enhanced	N Mays St (4)	Widening	Paloma Dr	540' N of Steam Way	100%	\$ 5,500,000	\$ 5,500,000
B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Access Management	Hidden Valley Dr	325' S of Eagles Nest St	100%	\$ 1,600,000	\$ 1,600,000
B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	Access Management	325' S of Eagles Nest St	Applegate Cir	50%	\$ 900,000	\$ 450,000
B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Access Management	Applegate Cir	Lake Dr	100%	\$ 700,000	\$ 700,000
B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Access Management	Lake Dr	545' S of Lake Dr	50%	\$ 300,000	\$ 150,000
B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	Access Management	545' S of Lake Dr	Old Settlers Blvd	100%	\$ 1,200,000	\$ 1,200,000
B-21	4 Lane - Proposed	Wallin Bradley (2)	Widening	College Park (Future)	A.W. Grimes Blvd	100%	\$ 6,600,000	\$ 6,600,000
B-22	4 Lane - Proposed	College Park (2)	New	Avery Nelson Rd	1355' N of Old Settlers Blvd	100%	\$ 21,700,000	\$ 21,700,000
B-23	3 Lane - Existing	Seton Pkwy	Previously Constructed	2400' N of Avery Nelson Blvd	Avery Nelson Blvd	100%	\$ 1,795,839	\$ 1,795,839
B-24	4 Lane - Proposed	Medical Center Pkwy	New	College Park	Seton Pkwy	100%	\$ 1,058,160	\$ 1,058,160
B-25	4 Lane - Enhanced	Avery Nelson Pkwy (1)	Widening	A.W. Grimes Blvd	3580' E of A.W. Grimes Blvd	100%	\$ 14,000,000	\$ 14,000,000
B-26	4 Lane - Enhanced	Avery Nelson Pkwy (2)	Widening	3580' E of A.W. Grimes Blvd	Kenney Fort Blvd (Future)	50%	\$ 11,800,000	\$ 5,900,000
B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	New	CR 117	145' N of Haselwood Ln	100%	\$ 15,018,951	\$ 15,018,951
B-28, D-9	6 Lane - Proposed	Kenney Fort Blvd (3)	New	200' N of Bluffstone Dr	Old Settlers Blvd	100%	\$ 9,173,038	\$ 9,173,038
B-31	6 Lane - Enhanced (1/3)	Old Settlers Blvd (1)	Widening	N Mays St	Sunrise Rd	100%	\$ 14,700,000	\$ 14,700,000
B-32	6 Lane - Enhanced	Old Settlers Blvd (2)	Widening	Sunrise Rd	A.W. Grimes Blvd	100%	\$ 31,100,000	\$ 31,100,000
B-34	4 Lane - Enhanced (AM)	N Mays St	Access Management	540' N of Steam Way	Northwest Dr	100%	\$ 3,900,000	\$ 3,900,000
B-35	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Access Management	Old Settlers Blvd	Country Aire Dr	100%	\$ 800,000	\$ 800,000
B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Widening	Old Settlers Blvd	375' S of Chandler Creek Blvd	100%	\$ 1,820,000	\$ 1,820,000
B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	Widening	375' S of Chandler Creek Blvd	1250' N of Tiger Trl	50%	\$ 1,620,000	\$ 810,000
B-38	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	Widening	1250' N of Tiger Trl	US 79	100%	\$ 6,960,000	\$ 6,960,000
B-39, D-10	6 Lane - Proposed (1/2)	Kenney Fort Blvd (4)	(1/2) Widening	Old Settler's Blvd	2540' S of Old Settler's Blvd	100%	\$ 5,000,000	\$ 5,000,000
B-40, D-11	6 Lane - Proposed	Kenney Fort Blvd (5)	Widening	Old Settler's Blvd	2540' S of Old Settler's Blvd	50%	\$ 4,900,000	\$ 2,450,000

City of Round Rock - 2023 Roadway Impact Fee Study

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

Roadway Improvements - Service Area B

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
B-41, D-12	6 Lane - Proposed	Kenney Fort Blvd (6)	New	2540' S of Old Settlers Blvd	Chandler Creek Blvd	100%	\$ 10,700,000	\$ 10,700,000
B-42, D-14	6 Lane - Enhanced	Kenney Fort Blvd (7)	Widening	Chandler Creek Blvd	Joe DiMaggio Blvd	100%	\$ 9,600,000	\$ 9,600,000
B-46, C-6	6 Lane - Enhanced	US 79 (1)	Widening	IH 35 NBFR	AW Grimes	50%	\$ 16,379,383	\$ 8,189,692
B-47	6 Lane - Enhanced	US 79 (3)	Widening	200' E of Red Bud Ln	1690' E of Red Bud Ln	50%	\$ 1,600,000	\$ 800,000
B-48	3 Lane - Proposed	Joe Dimaggio Blvd Extension	New	Kenney Fort Blvd	US 79	100%	\$ 7,000,000	\$ 7,000,000
B-49	3 Lane - Proposed	Wallin Bradley (1)	New	College Park Dr	Avery Nelson Blvd	100%	\$ 9,500,000	\$ 9,500,000
B-50	4 Lane - Proposed	Wallin Bradley (3)	New	A.W. Grimes Blvd	Kenney Fort Blvd (Future)	100%	\$ 18,200,000	\$ 18,200,000
B-51, C-28	6 Lane - Enhanced	US 79 (2)	Widening	AW Grimes	Red Bud Ln	50%	\$ 12,760,000	\$ 6,380,000
TOTAL							\$ 399,012,489	\$ 328,047,880

Intersection Improvements - Service Area B

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER	TURN LANES	50%	\$ 2,141,000	\$ 1,070,500
-	Update ITS and Traffic Managemenet Infrastructure			25%	\$ 20,900,000	\$ 5,225,000
TOTAL					\$ 23,041,000	\$ 6,295,500

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-4
Name:	University Blvd (1)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	University Oaks Blvd to 335' W of Sun			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	2,601			
Service Area(s):	B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 13,672,344

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 13,672,344
Engineering/Survey/Testing:		-	\$ 1,987,487
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,561,000
Overall Project Cost Total:			\$ 17,220,832
City Contribution:			\$ 17,220,832
Impact Fee Project Cost:			\$ 17,220,832

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-5
Name:	University Blvd (2)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	335' W of Sunrise Dr to A.W. Grimes E			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	10,701			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	105,425	cy	\$ 24.33	\$ 2,565,000
205	12" Asphalt (Type C)	59,641	ton	\$ 139.92	\$ 8,345,000
305	16" Base	40,162	cy	\$ 66.92	\$ 2,687,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	95,121	sy	\$ 7.30	\$ 694,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	18,073	gal	\$ 7.30	\$ 132,000
605	10' Concrete Sidewalk	214,021	sf	\$ 10.95	\$ 2,344,000
705	Machine Laid Curb & Gutter	42,804	lf	\$ 36.50	\$ 1,562,000
805	Turn Lanes and Median Openings	6,485	sy	\$ 243.06	\$ 1,576,000
Paving Construction Cost Subtotal:					\$ 19,905,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	995,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	398,000
✓	Roadway Drainage	Standard Internal System	30%	\$	5,972,000
✓	Illumination		10%	\$	1,991,000
✓	Special Drainage Structures	Bridge Crossing		\$	500,000
✓	Water	Minor Adjustments	2%	\$	398,000
✓	Sewer	Minor Adjustments	2%	\$	398,000
✓	Turf and Erosion Control		4%	\$	796,000
✓	Landscaping and Irrigation		2%	\$	398,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	11,846,000
Paving and Allowance Subtotal:					\$ 31,751,000
Construction Contingency:				15%	\$ 4,763,000
Mobilization				8%	\$ 2,540,000
Prep ROW				4%	\$ 1,270,000
Construction Cost TOTAL:					\$ 40,400,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 40,400,000
Engineering/Survey/Testing:		16%	\$ 6,464,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 6,421,000
Impact Fee Project Cost TOTAL:			\$ 53,300,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-6
Name:	University Blvd (3)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,922			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	13,977	cy	\$ 24.33	\$ 340,000
203	12" Asphalt (Type C)	7,612	ton	\$ 139.92	\$ 1,065,000
303	16" Base	5,126	cy	\$ 66.92	\$ 343,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	12,387	sy	\$ 7.30	\$ 90,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,307	gal	\$ 7.30	\$ 17,000
603	10' Concrete Sidewalk	38,444	sf	\$ 10.95	\$ 421,000
703	Machine Laid Curb & Gutter	7,689	lf	\$ 36.50	\$ 281,000
803	Turn Lanes and Median Openings	1,165	sy	\$ 243.06	\$ 283,000
Paving Construction Cost Subtotal:					\$ 2,840,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	142,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	57,000
✓	Roadway Drainage	Standard Internal System	30%	\$	852,000
✓	Illumination		10%	\$	284,000
✓	Special Drainage Structures	Bridge Crossing		\$	500,000
✓	Water	Minor Adjustments	2%	\$	57,000
✓	Sewer	Minor Adjustments	2%	\$	57,000
✓	Turf and Erosion Control		4%	\$	114,000
✓	Landscaping and Irrigation		2%	\$	57,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,120,000
Paving and Allowance Subtotal:				\$	4,960,000
Construction Contingency:				15%	\$ 744,000
Mobilization				8%	\$ 397,000
Prep ROW				4%	\$ 198,000
Construction Cost TOTAL:				\$	6,300,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,300,000
Engineering/Survey/Testing:		16%	\$ 1,008,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 923,000
Impact Fee Project Cost TOTAL:			\$ 8,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-7
Name:	University Blvd (4)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	1830' E of A.W. Grimes Blvd to Lunata Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	4,093			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	29,763	cy	\$ 24.33	\$ 724,000
203	12" Asphalt (Type C)	16,208	ton	\$ 139.92	\$ 2,268,000
303	16" Base	10,915	cy	\$ 66.92	\$ 730,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	26,377	sy	\$ 7.30	\$ 193,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	4,912	gal	\$ 7.30	\$ 36,000
603	10' Concrete Sidewalk	81,861	sf	\$ 10.95	\$ 896,000
703	Machine Laid Curb & Gutter	16,372	lf	\$ 36.50	\$ 598,000
803	Turn Lanes and Median Openings	2,481	sy	\$ 243.06	\$ 603,000
Paving Construction Cost Subtotal:					\$ 6,048,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	302,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	121,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,814,000
✓	Illumination		10%	\$	605,000
✓	Special Drainage Structures	Bridge Crossing		\$	700,000
✓	Water	Minor Adjustments	2%	\$	121,000
✓	Sewer	Minor Adjustments	2%	\$	121,000
✓	Turf and Erosion Control		4%	\$	242,000
✓	Landscaping and Irrigation		2%	\$	121,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	4,147,000
Paving and Allowance Subtotal:					\$ 10,195,000
Construction Contingency:				15%	\$ 1,529,000
Mobilization				8%	\$ 816,000
Prep ROW				4%	\$ 408,000
Construction Cost TOTAL:					\$ 13,000,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 13,000,000
Engineering/Survey/Testing:		16%	\$ 2,080,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,965,000
Impact Fee Project Cost TOTAL:			\$ 17,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-8
Name:	University Blvd (5)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	Lunata Way to Kenney Fort Blvd (Futu			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	839			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	6,099	cy	\$ 24.33	\$ 148,000
203	12" Asphalt (Type C)	3,321	ton	\$ 139.92	\$ 465,000
303	16" Base	2,237	cy	\$ 66.92	\$ 150,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	5,405	sy	\$ 7.30	\$ 39,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,006	gal	\$ 7.30	\$ 7,000
603	10' Concrete Sidewalk	16,775	sf	\$ 10.95	\$ 184,000
703	Machine Laid Curb & Gutter	3,355	lf	\$ 36.50	\$ 122,000
803	Turn Lanes and Median Openings	508	sy	\$ 243.06	\$ 124,000
Paving Construction Cost Subtotal:					\$ 1,239,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 62,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 25,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 372,000
✓	Illumination			10%	\$ 124,000
✓	Special Drainage Structures	Bridge Crossing			\$ 700,000
✓	Water	Minor Adjustments		2%	\$ 25,000
✓	Sewer	Minor Adjustments		2%	\$ 25,000
✓	Turf and Erosion Control			4%	\$ 50,000
✓	Landscaping and Irrigation			2%	\$ 25,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 1,408,000
				Paving and Allowance Subtotal:	\$ 2,647,000
Construction Contingency:				15%	\$ 397,000
Mobilization				8%	\$ 212,000
Prep ROW				4%	\$ 106,000
Construction Cost TOTAL:				\$	3,400,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,400,000
Engineering/Survey/Testing:		16%	\$ 544,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 403,000
Impact Fee Project Cost TOTAL:			\$ 4,300,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-9
Name:	N Mays St (2)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	350' S of University Blvd to 2000' S of University Blv			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,655			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	12,031	cy	\$ 24.33	\$ 293,000
203	12" Asphalt (Type C)	6,552	ton	\$ 139.92	\$ 917,000
303	16" Base	4,412	cy	\$ 66.92	\$ 295,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	10,662	sy	\$ 7.30	\$ 78,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,985	gal	\$ 7.30	\$ 14,000
603	10' Concrete Sidewalk	33,090	sf	\$ 10.95	\$ 362,000
703	Machine Laid Curb & Gutter	6,618	lf	\$ 36.50	\$ 242,000
803	Turn Lanes and Median Openings	1,003	sy	\$ 243.06	\$ 244,000
Paving Construction Cost Subtotal:					\$ 2,445,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 122,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 49,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 734,000
✓	Illumination			10%	\$ 245,000
✓	Special Drainage Structures	Bridge Crossing			\$ 1,200,000
✓	Water	Minor Adjustments		2%	\$ 49,000
✓	Sewer	Minor Adjustments		2%	\$ 49,000
✓	Turf and Erosion Control			4%	\$ 98,000
✓	Landscaping and Irrigation			2%	\$ 49,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 2,595,000
Paving and Allowance Subtotal:					\$ 5,040,000
Construction Contingency:				15%	\$ 756,000
Mobilization				8%	\$ 403,000
Prep ROW				4%	\$ 202,000
Construction Cost TOTAL:					\$ 6,500,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,500,000
Engineering/Survey/Testing:		16%	\$ 1,040,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 794,000
Impact Fee Project Cost TOTAL:			\$ 8,300,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-12
Name:	Eagles Nest (2)	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	IH 35 NBFR to Cypress Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	3,644			
Service Area(s):	B			

Roadway Construction Cost Projection	
	Construction Cost TOTAL: \$ 17,010,230

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City Estimate	-	\$ 17,010,230
Engineering/Survey/Testing:	From City Estimate	11%	\$ 1,871,125
ROW/Easement Acquisition:	From City Estimate	-	\$ 2,555,096
Overall Project Cost Total:			\$ 21,436,451
City Contribution:			\$ 21,436,451
Impact Fee Project Cost:			\$ 21,436,451

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-13
Name:	N Mays St (4)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	Paloma Dr to 540' N of Steam Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,402			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,197	cy	\$ 24.33	\$ 248,000
203	12" Asphalt (Type C)	5,553	ton	\$ 139.92	\$ 777,000
303	16" Base	3,740	cy	\$ 66.92	\$ 250,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	9,037	sy	\$ 7.30	\$ 66,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,683	gal	\$ 7.30	\$ 12,000
603	10' Concrete Sidewalk	28,046	sf	\$ 10.95	\$ 307,000
703	Machine Laid Curb & Gutter	5,609	lf	\$ 36.50	\$ 205,000
803	Turn Lanes and Median Openings	850	sy	\$ 243.06	\$ 207,000
Paving Construction Cost Subtotal:					\$ 2,072,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	104,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	41,000
✓	Roadway Drainage	Standard Internal System	30%	\$	622,000
✓	Illumination		10%	\$	207,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	41,000
✓	Sewer	Minor Adjustments	2%	\$	41,000
✓	Turf and Erosion Control		4%	\$	83,000
✓	Landscaping and Irrigation		2%	\$	41,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,180,000
Paving and Allowance Subtotal:					\$ 3,252,000
Construction Contingency:				15%	\$ 488,000
Mobilization				8%	\$ 260,000
Prep ROW				4%	\$ 130,000
Construction Cost TOTAL:					\$ 4,200,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,200,000
Engineering/Survey/Testing:		16%	\$ 672,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 673,000
Impact Fee Project Cost TOTAL:			\$ 5,500,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-15
Name:	Sunrise Rd (2)	This project consists of the reconstruction of existing pavement to include a median.		
Limits:	Hidden Valley Dr to 325' S of Eagles Nest St			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	2,858			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	5,363	cy	\$ 24.33	\$ 130,000
204	Asphalt (Type C)	0	ton	\$ 139.92	\$ -
304	Base	0	cy	\$ 66.92	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30	\$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	\$ 7.30	\$ -
604	Concrete Sidewalk	0	sf	\$ 10.95	\$ -
704	Machine Laid Curb & Gutter	5,715	lf	\$ 36.50	\$ 209,000
804	Turn Lanes and Median Openings	1,732	sy	\$ 243.06	\$ 421,000
Paving Construction Cost Subtotal:					\$ 760,000
Major Construction Component Allowances**:					
Item Description		Notes		Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct		\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)		\$750	\$ 11,000
	Roadway Drainage	None Anticipated		0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr		\$2,800	\$ 123,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Utilities	Minor Adjustments		\$1,000 / STA	\$ 6,000
✓	ADA Ramps & Requirements	4 ramps / 600'		\$2,200	\$ 42,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls		\$10 / SY	\$ 135,000
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 332,000
				Paving and Allowance Subtotal:	\$ 1,092,000
				Construction Contingency:	15% \$ 164,000
				Mobilization	5% \$ 55,000
				Prep ROW	\$3,000 / STA \$ 9,000
				Construction Cost TOTAL:	\$ 1,400,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,400,000
Engineering/Survey/Testing:		16%	\$ 224,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 1,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-16
Name:	Sunrise Rd (3)	This project consists of the reconstruction of existing pavement to include a median.		
Limits:	325' S of Eagles Nest St to Applegate Cir			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	1,576			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	2,958	cy	\$ 24.33	\$ 72,000
204	Asphalt (Type C)	0	ton	\$ 139.92	\$ -
304	Base	0	cy	\$ 66.92	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30	\$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	\$ 7.30	\$ -
604	Concrete Sidewalk	0	sf	\$ 10.95	\$ -
704	Machine Laid Curb & Gutter	3,153	lf	\$ 36.50	\$ 115,000
804	Turn Lanes and Median Openings	955	sy	\$ 243.06	\$ 232,000
Paving Construction Cost Subtotal: \$					419,000
Major Construction Component Allowances**:					
Item Description		Notes		Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct		\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)		\$750	\$ 6,000
	Roadway Drainage	None Anticipated		0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr		\$2,800	\$ 68,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Utilities	Minor Adjustments		\$1,000 / STA	\$ 3,000
✓	ADA Ramps & Requirements	4 ramps / 600'		\$2,200	\$ 23,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls		\$10 / SY	\$ 74,000
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$	189,000
Paving and Allowance Subtotal:				\$	608,000
Construction Contingency:				15%	\$ 91,000
Mobilization				5%	\$ 30,000
Prep ROW				\$3,000 / STA	\$ 5,000
Construction Cost TOTAL:				\$	800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 800,000
Engineering/Survey/Testing:		16%	\$ 128,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 900,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Sunrise Rd (4)	This project consists of the reconstruction of existing pavement to include a median.	B-17
Limits:	Applegate Cir to Lake Dr		
Impact Fee Class:	4 Lane - Enhanced (AM)		
Ultimate Class:	4 Lane - Enhanced (AM)		
Length (lf):	1,075		
Service Area(s):	B		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	2,017	cy	\$ 49,000
204	Asphalt (Type C)	0	ton	\$ -
304	Base	0	cy	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ -
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ -
604	Concrete Sidewalk	0	sf	\$ -
704	Machine Laid Curb & Gutter	2,149	lf	\$ 78,000
804	Turn Lanes and Median Openings	651	sy	\$ 158,000
Paving Construction Cost Subtotal:				\$ 285,000
Major Construction Component Allowances**:				
Item Description	Notes	Unit Price	Item Cost	
✓ Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000	
✓ Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 4,000	
Roadway Drainage	None Anticipated	0%	\$ -	
✓ Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 46,000	
Special Drainage Structures	None Anticipated		\$ -	
✓ Utilities	Minor Adjustments	\$1,000 / STA	\$ 2,000	
✓ ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 16,000	
✓ Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 51,000	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 134,000
Paving and Allowance Subtotal:				\$ 419,000
Construction Contingency:		15%	\$ 63,000	
Mobilization		5%	\$ 21,000	
Prep ROW		\$3,000 / STA	\$ 3,000	
Construction Cost TOTAL:				\$ 600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 600,000
Engineering/Survey/Testing:		16%	\$ 96,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Sunrise Rd (5)	This project consists of the reconstruction of existing pavement to include a median.	B-18
Limits:	Lake Dr to 545' S of Lake Dr		
Impact Fee Class:	4 Lane - Enhanced (AM)		
Ultimate Class:	4 Lane - Enhanced (AM)		
Length (lf):	543		
Service Area(s):	B		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	1,019	cy	\$ 25,000
204	Asphalt (Type C)	0	ton	\$ -
304	Base	0	cy	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ -
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ -
604	Concrete Sidewalk	0	sf	\$ -
704	Machine Laid Curb & Gutter	1,086	lf	\$ 40,000
804	Turn Lanes and Median Openings	329	sy	\$ 80,000
Paving Construction Cost Subtotal:				\$ 145,000
Major Construction Component Allowances**:				
Item Description	Notes	Unit Price	Item Cost	
✓ Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000	
✓ Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 2,000	
Roadway Drainage	None Anticipated	0%	\$ -	
✓ Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 23,000	
Special Drainage Structures	None Anticipated		\$ -	
✓ Utilities	Minor Adjustments	\$1,000 / STA	\$ 1,000	
✓ ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 8,000	
✓ Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 26,000	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 75,000
Paving and Allowance Subtotal:				\$ 220,000
Construction Contingency:		15%	\$ 33,000	
Mobilization		5%	\$ 11,000	
Prep ROW		\$3,000 / STA	\$ 2,000	
Construction Cost TOTAL:				\$ 300,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 300,000
Engineering/Survey/Testing:		16%	\$ 48,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 300,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-19
Name:	Sunrise Rd (6)	This project consists of the reconstruction of existing pavement to include a median.		
Limits:	545' S of Lake Dr to Old Settlers Blvd			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	2,098			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	3,937	cy	\$ 24.33	\$ 96,000
204	Asphalt (Type C)	0	ton	\$ 139.92	\$ -
304	Base	0	cy	\$ 66.92	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30	\$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	\$ 7.30	\$ -
604	Concrete Sidewalk	0	sf	\$ 10.95	\$ -
704	Machine Laid Curb & Gutter	4,196	lf	\$ 36.50	\$ 153,000
804	Turn Lanes and Median Openings	1,271	sy	\$ 243.06	\$ 309,000
Paving Construction Cost Subtotal: \$					558,000
Major Construction Component Allowances**:					
Item Description		Notes		Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct		\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)		\$750	\$ 8,000
	Roadway Drainage	None Anticipated		0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr		\$2,800	\$ 90,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Utilities	Minor Adjustments		\$1,000 / STA	\$ 4,000
✓	ADA Ramps & Requirements	4 ramps / 600'		\$2,200	\$ 31,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls		\$10 / SY	\$ 99,000
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$	247,000
Paving and Allowance Subtotal: \$					805,000
Construction Contingency:				15%	\$ 121,000
Mobilization				5%	\$ 40,000
Prep ROW				\$3,000 / STA	\$ 6,000
Construction Cost TOTAL: \$					1,000,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,000,000
Engineering/Survey/Testing:		16%	\$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 1,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-21
Name:	Wallin Bradley (2)	This project consists of the construction of a new 4 lane undivided collector.		
Limits:	College Park (Future) to A.W. Grimes			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,971			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	14,333	cy	\$ 24.33	\$ 349,000
202	12" Asphalt (Type C)	7,805	ton	\$ 139.92	\$ 1,092,000
302	16" Base	5,256	cy	\$ 66.92	\$ 352,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	12,703	sy	\$ 7.30	\$ 93,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,365	gal	\$ 7.30	\$ 17,000
602	10' Concrete Sidewalk	39,422	sf	\$ 10.95	\$ 432,000
702	Machine Laid Curb & Gutter	7,884	lf	\$ 36.50	\$ 288,000
802	Turn Lanes and Median Openings	1,195	sy	\$ 243.06	\$ 290,000
Paving Construction Cost Subtotal:					\$ 2,913,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 58,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 874,000	
✓	Illumination		10%	\$ 291,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 58,000	
✓	Sewer	Minor Adjustments	2%	\$ 58,000	
✓	Turf and Erosion Control		4%	\$ 117,000	
✓	Landscaping and Irrigation		2%	\$ 58,000	
			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 1,514,000	
Paving and Allowance Subtotal:				\$	4,427,000
Construction Contingency:				15%	\$ 664,000
Mobilization				8%	\$ 354,000
Prep ROW				4%	\$ 177,000
Construction Cost TOTAL:				\$	5,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,700,000
Engineering/Survey/Testing:		16%	\$ 912,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	
Impact Fee Project Cost TOTAL:			\$ 6,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-22
Name:	College Park (2)	This project consisted of the construction of a 4 lane divided arterial.		
Limits:	Avery Nelson Rd to 1355' N of Old Settlers Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,800			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	34,903	cy	\$ 24.33	\$ 849,000
202	12" Asphalt (Type C)	19,008	ton	\$ 139.92	\$ 2,659,000
302	16" Base	12,800	cy	\$ 66.92	\$ 857,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	30,933	sy	\$ 7.30	\$ 226,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	5,760	gal	\$ 7.30	\$ 42,000
602	10' Concrete Sidewalk	95,999	sf	\$ 10.95	\$ 1,051,000
702	Machine Laid Curb & Gutter	19,200	lf	\$ 36.50	\$ 701,000
802	Turn Lanes and Median Openings	2,909	sy	\$ 243.06	\$ 707,000
Paving Construction Cost Subtotal:					\$ 7,092,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 142,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 2,128,000	
✓	Illumination		10%	\$ 709,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 142,000	
✓	Sewer	Minor Adjustments	2%	\$ 142,000	
✓	Turf and Erosion Control		4%	\$ 284,000	
✓	Landscaping and Irrigation		2%	\$ 142,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 3,689,000	
Paving and Allowance Subtotal:				\$ 10,781,000	
Construction Contingency:				15%	\$ 1,617,000
Mobilization				8%	\$ 862,000
Prep ROW				4%	\$ 431,000
Construction Cost TOTAL:				\$ 13,700,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 13,700,000
Engineering/Survey/Testing:		16%	\$ 2,192,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 5,760,000
Impact Fee Project Cost TOTAL:			\$ 21,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-23
Name:	Seton Pkwy	This project consists of the construction of a new 3 lane undivided collector.		
Limits:	2400' N of Avery Nelson Blvd to Avery Nelson Blvd			
Impact Fee Class:	3 Lane - Existing			
Ultimate Class:	3 Lane - Existing			
Length (lf):	2,397			
Service Area(s):	B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 1,857,129

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,857,129
Engineering/Survey/Testing:		-	\$ 237,238
ROW/Easement Acquisition:	Existing Alignment	-	\$ -
		Overall Project Cost Total:	\$ 2,094,367
		City Contribution:	\$ 1,795,839
		Impact Fee Project Cost (86%):	\$ 1,795,839

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-24
Name:	Medical Center Pkwy	This project consists of the construction of a new 4 lane divided arterial.		
Limits:	College Park to Seton Pkwy			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,412			
Service Area(s):	B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 1,094,274

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,094,274
Engineering/Survey/Testing:		-	\$ 139,787
ROW/Easement Acquisition:	Existing Alignment	-	\$ -
Overall Project Cost Total:			\$ 1,234,061
City Contribution:			\$ 1,058,160
Impact Fee Project Cost (86%):			\$ 1,058,160

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-25
Name:	Avery Nelson Pkwy (1)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,580			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	26,032	cy	\$ 24.33	\$ 633,000
203	12" Asphalt (Type C)	14,176	ton	\$ 139.92	\$ 1,984,000
303	16" Base	9,546	cy	\$ 66.92	\$ 639,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	23,071	sy	\$ 7.30	\$ 168,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	4,296	gal	\$ 7.30	\$ 31,000
603	10' Concrete Sidewalk	71,598	sf	\$ 10.95	\$ 784,000
703	Machine Laid Curb & Gutter	14,320	lf	\$ 36.50	\$ 523,000
803	Turn Lanes and Median Openings	2,170	sy	\$ 243.06	\$ 527,000
Paving Construction Cost Subtotal:					\$ 5,289,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	264,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	106,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,587,000
✓	Illumination		10%	\$	529,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	106,000
✓	Sewer	Minor Adjustments	2%	\$	106,000
✓	Turf and Erosion Control		4%	\$	212,000
✓	Landscaping and Irrigation		2%	\$	106,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	3,016,000
Paving and Allowance Subtotal:				\$	8,305,000
Construction Contingency:				15%	\$ 1,246,000
Mobilization				8%	\$ 664,000
Prep ROW				4%	\$ 332,000
Construction Cost TOTAL:				\$	10,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,600,000
Engineering/Survey/Testing:		16%	\$ 1,696,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,718,000
Impact Fee Project Cost TOTAL:			\$ 14,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-26
Name:	Avery Nelson Pkwy (2)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.		
Limits:	3580' E of A.W. Grimes Blvd to Kenney Fort Blvd (F			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,011			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	21,894	cy	\$ 24.33	\$ 533,000
203	12" Asphalt (Type C)	11,923	ton	\$ 139.92	\$ 1,668,000
303	16" Base	8,029	cy	\$ 66.92	\$ 537,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	19,403	sy	\$ 7.30	\$ 142,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,613	gal	\$ 7.30	\$ 26,000
603	10' Concrete Sidewalk	60,217	sf	\$ 10.95	\$ 659,000
703	Machine Laid Curb & Gutter	12,043	lf	\$ 36.50	\$ 440,000
803	Turn Lanes and Median Openings	1,825	sy	\$ 243.06	\$ 444,000
Paving Construction Cost Subtotal:					\$ 4,449,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	222,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	89,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,335,000
✓	Illumination		10%	\$	445,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	89,000
✓	Sewer	Minor Adjustments	2%	\$	89,000
✓	Turf and Erosion Control		4%	\$	178,000
✓	Landscaping and Irrigation		2%	\$	89,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,536,000
Paving and Allowance Subtotal:				\$	6,985,000
Construction Contingency:				15%	\$ 1,048,000
Mobilization				8%	\$ 559,000
Prep ROW				4%	\$ 279,000
Construction Cost TOTAL:				\$	8,900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,900,000
Engineering/Survey/Testing:		16%	\$ 1,424,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,445,000
Impact Fee Project Cost TOTAL:			\$ 11,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-27, D-7
Name:	Kenney Fort Blvd (1)	This project consists of the construction of a new 6 lane divided arterial.		
Limits:	CR 117 to 145' N of Haselwood Ln			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	3,074			
Service Area(s):	B,D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 11,034,874

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 11,034,874
Engineering/Survey/Testing:	From City estimate	-	\$ 846,007
ROW/Easement Acquisition:	New Roadway Alignment	-	\$ 3,138,070
Overall Project Cost Total:			\$ 15,018,951
City Contribution:			\$ 15,018,951
Impact Fee Project Cost :			\$ 15,018,951

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-31
Name:	Old Settlers Blvd (1)	This project consists of widening existing pavement to a 6 lane divided arterial.		
Limits:	N Mays St to Sunrise Rd			
Impact Fee Class:	6 Lane - Enhanced (1/3)			
Ultimate Class:	6 Lane - Enhanced (1/3)			
Length (lf):	7,044			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	26,438	cy	\$ 24.33	\$ 643,000
206	12" Asphalt (Type C)	6,027	ton	\$ 139.92	\$ 843,000
306	16" Base	9,740	cy	\$ 66.92	\$ 652,000
406	10" Lime Stabilization (with Lime @ 45#/sy)	25,046	sy	\$ 7.30	\$ 183,000
506	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	4,383	gal	\$ 7.30	\$ 32,000
606	10' Concrete Sidewalk	140,884	sf	\$ 10.95	\$ 1,543,000
706	Machine Laid Curb & Gutter	14,088	lf	\$ 36.50	\$ 514,000
806	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 4,410,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	221,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	88,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,323,000
✓	Illumination		10%	\$	441,000
✓	Special Drainage Structures	Minor Stream Crossing		\$	100,000
✓	Water	Minor Adjustments	2%	\$	88,000
✓	Sewer	Minor Adjustments	2%	\$	88,000
✓	Turf and Erosion Control		4%	\$	176,000
✓	Landscaping and Irrigation		2%	\$	88,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,613,000
Paving and Allowance Subtotal:				\$	7,023,000
Construction Contingency:				15%	\$ 1,053,000
Mobilization				8%	\$ 562,000
Prep ROW				4%	\$ 281,000
Construction Cost TOTAL:					\$ 9,000,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,000,000
Engineering/Survey/Testing:		16%	\$ 1,440,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 4,227,000
Impact Fee Project Cost TOTAL:			\$ 14,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-32
Name:	Old Settlers Blvd (2)	This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.		
Limits:	Sunrise Rd to A.W. Grimes Blvd			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	5,954			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	58,656	cy	\$ 24.33	\$ 1,427,000
205	12" Asphalt (Type C)	33,183	ton	\$ 139.92	\$ 4,643,000
305	16" Base	22,345	cy	\$ 66.92	\$ 1,495,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	52,923	sy	\$ 7.30	\$ 386,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	10,055	gal	\$ 7.30	\$ 73,000
605	10' Concrete Sidewalk	119,077	sf	\$ 10.95	\$ 1,304,000
705	Machine Laid Curb & Gutter	23,815	lf	\$ 36.50	\$ 869,000
805	Turn Lanes and Median Openings	3,608	sy	\$ 243.06	\$ 877,000
Paving Construction Cost Subtotal:					\$ 11,074,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	554,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	221,000
✓	Roadway Drainage	Standard Internal System	30%	\$	3,322,000
✓	Illumination		10%	\$	1,107,000
✓	Special Drainage Structures	Bridge Crossing		\$	1,200,000
✓	Water	Minor Adjustments	2%	\$	221,000
✓	Sewer	Minor Adjustments	2%	\$	221,000
✓	Turf and Erosion Control		4%	\$	443,000
✓	Landscaping and Irrigation		2%	\$	221,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	7,510,000
Paving and Allowance Subtotal:					\$ 18,584,000
Construction Contingency:				15%	\$ 2,788,000
Mobilization				8%	\$ 1,487,000
Prep ROW				4%	\$ 743,000
Construction Cost TOTAL:					\$ 23,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 23,700,000
Engineering/Survey/Testing:		16%	\$ 3,792,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 3,572,000
Impact Fee Project Cost TOTAL:			\$ 31,100,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-34
Name:	N Mays St	This project consists of the reconstruction of existing pavement to include a median.		
Limits:	540' N of Steam Way to Northwest Dr			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	7,524			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	14,118	cy	\$ 24.33	\$ 344,000
204	Asphalt (Type C)	0	ton	\$ 139.92	\$ -
304	Base	0	cy	\$ 66.92	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30	\$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	\$ 7.30	\$ -
604	Concrete Sidewalk	0	sf	\$ 10.95	\$ -
704	Machine Laid Curb & Gutter	15,047	lf	\$ 36.50	\$ 549,000
804	Turn Lanes and Median Openings	4,560	sy	\$ 243.06	\$ 1,108,000
Paving Construction Cost Subtotal:					\$ 2,001,000
Major Construction Component Allowances**:					
	Item Description	Notes		Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct		\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)		\$750	\$ 28,000
	Roadway Drainage	None Anticipated		0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr		\$2,800	\$ 324,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Utilities	Minor Adjustments		\$1,000 / STA	\$ 15,000
✓	ADA Ramps & Requirements	4 ramps / 600'		\$2,200	\$ 110,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls		\$10 / SY	\$ 305,000
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 797,000
Paving and Allowance Subtotal:					\$ 2,798,000
Construction Contingency:				15%	\$ 420,000
Mobilization				5%	\$ 140,000
Prep ROW				\$3,000 / STA	\$ 23,000
Construction Cost TOTAL:					\$ 3,400,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,400,000
Engineering/Survey/Testing:		16%	\$ 544,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 3,900,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Sunrise Rd (7)	This project consists of the reconstruction of existing pavement to include a median.	B-35
Limits:	Old Settlers Blvd to Country Aire Dr		
Impact Fee Class:	4 Lane - Enhanced (AM)		
Ultimate Class:	4 Lane - Enhanced (AM)		
Length (lf):	1,485		
Service Area(s):	B		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	2,786	cy	\$ 68,000
204	Asphalt (Type C)	0	ton	\$ -
304	Base	0	cy	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ -
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ -
604	Concrete Sidewalk	0	sf	\$ -
704	Machine Laid Curb & Gutter	2,970	lf	\$ 108,000
804	Turn Lanes and Median Openings	900	sy	\$ 219,000
Paving Construction Cost Subtotal:				\$ 395,000
Major Construction Component Allowances**:				
Item Description		Notes	Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 6,000
	Roadway Drainage	None Anticipated	0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 64,000
	Special Drainage Structures	None Anticipated		\$ -
✓	Utilities	Minor Adjustments	\$1,000 / STA	\$ 3,000
✓	ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 22,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 60,000
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 170,000
Paving and Allowance Subtotal:				\$ 565,000
Construction Contingency:			15%	\$ 85,000
Mobilization			5%	\$ 28,000
Prep ROW			\$3,000 / STA	\$ 4,000
Construction Cost TOTAL:				\$ 700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 700,000
Engineering/Survey/Testing:		16%	\$ 112,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-36
Name:	FM 1460 (A.W. Grimes Blvd) (1)	This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.		
Limits:	Old Settlers Blvd to 375' S of Chandler Creek Blvd			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,846			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	18,190	cy	\$ 24.33	\$ 443,000
205	12" Asphalt (Type C)	10,290	ton	\$ 139.92	\$ 1,440,000
305	16" Base	6,930	cy	\$ 66.92	\$ 464,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	16,412	sy	\$ 7.30	\$ 120,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,118	gal	\$ 7.30	\$ 23,000
605	10' Concrete Sidewalk	36,927	sf	\$ 10.95	\$ 404,000
705	Machine Laid Curb & Gutter	7,385	lf	\$ 36.50	\$ 270,000
805	Turn Lanes and Median Openings	1,119	sy	\$ 243.06	\$ 272,000
Paving Construction Cost Subtotal:					\$ 3,436,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	172,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	69,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,031,000
✓	Illumination		10%	\$	344,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	69,000
✓	Sewer	Minor Adjustments	2%	\$	69,000
✓	Turf and Erosion Control		4%	\$	137,000
✓	Landscaping and Irrigation		2%	\$	69,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,960,000
Paving and Allowance Subtotal:				\$	5,396,000
Construction Contingency:				15%	\$ 809,000
Mobilization				8%	\$ 432,000
Prep ROW				4%	\$ 216,000
Construction Cost TOTAL:				\$	6,900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,900,000
Engineering/Survey/Testing:		16%	\$ 1,104,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 1,108,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 1,820,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-37
Name:	FM 1460 (A.W. Grimes Blvd) (2)	This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.		
Limits:	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,055			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	10,389	cy	\$ 24.33	\$ 253,000
205	12" Asphalt (Type C)	5,877	ton	\$ 139.92	\$ 822,000
305	16" Base	3,958	cy	\$ 66.92	\$ 265,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	9,374	sy	\$ 7.30	\$ 68,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,781	gal	\$ 7.30	\$ 13,000
605	10' Concrete Sidewalk	21,091	sf	\$ 10.95	\$ 231,000
705	Machine Laid Curb & Gutter	4,218	lf	\$ 36.50	\$ 154,000
805	Turn Lanes and Median Openings	639	sy	\$ 243.06	\$ 155,000
Paving Construction Cost Subtotal:					\$ 1,961,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 98,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 39,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 588,000
✓	Illumination			10%	\$ 196,000
✓	Special Drainage Structures	Bridge Crossing			\$ 1,900,000
✓	Water	Minor Adjustments		2%	\$ 39,000
✓	Sewer	Minor Adjustments		2%	\$ 39,000
✓	Turf and Erosion Control			4%	\$ 78,000
✓	Landscaping and Irrigation			2%	\$ 39,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 3,016,000
				Paving and Allowance Subtotal:	\$ 4,977,000
Construction Contingency:				15%	\$ 747,000
Mobilization				8%	\$ 398,000
Prep ROW				4%	\$ 199,000
Construction Cost TOTAL:				\$ 6,400,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,400,000
Engineering/Survey/Testing:		16%	\$ 1,024,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 633,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 1,620,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-38
Name:	FM 1460 (A.W. Grimes Blvd) (3)	This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.		
Limits:	1250' N of Tiger Trl to US 79			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	6,599			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	65,017	cy	\$ 24.33	\$ 1,582,000
205	12" Asphalt (Type C)	36,781	ton	\$ 139.92	\$ 5,146,000
305	16" Base	24,768	cy	\$ 66.92	\$ 1,657,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	58,662	sy	\$ 7.30	\$ 428,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	11,146	gal	\$ 7.30	\$ 81,000
605	10' Concrete Sidewalk	131,990	sf	\$ 10.95	\$ 1,445,000
705	Machine Laid Curb & Gutter	26,398	lf	\$ 36.50	\$ 964,000
805	Turn Lanes and Median Openings	4,000	sy	\$ 243.06	\$ 972,000
Paving Construction Cost Subtotal:					\$ 12,275,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	614,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	246,000
✓	Roadway Drainage	Standard Internal System	30%	\$	3,683,000
✓	Illumination		10%	\$	1,228,000
✓	Special Drainage Structures	Bridge Crossing		\$	1,600,000
✓	Water	Minor Adjustments	2%	\$	246,000
✓	Sewer	Minor Adjustments	2%	\$	246,000
✓	Turf and Erosion Control		4%	\$	491,000
✓	Landscaping and Irrigation		2%	\$	246,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	8,600,000
Paving and Allowance Subtotal:					\$ 20,875,000
Construction Contingency:				15%	\$ 3,131,000
Mobilization				8%	\$ 1,670,000
Prep ROW				4%	\$ 835,000
Construction Cost TOTAL:					\$ 26,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 26,600,000
Engineering/Survey/Testing:		16%	\$ 4,256,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 3,960,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 6,960,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. B-39, D-10
Name:	Kenney Fort Blvd (4)	This project consists of widening existing pavement with half of a 6 lane divided arterial.	
Limits:	Old Settler's Blvd to 2540' S of Old Settler's Blvd		
Impact Fee Class:	6 Lane - Proposed (1/2)		
Ultimate Class:	6 Lane - Proposed (1/2)		
Length (lf):	1,566		
Service Area(s):	B,D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	7,713	cy	\$ 24.33	\$ 188,000
207	12" Asphalt (Type C)	4,363	ton	\$ 139.92	\$ 610,000
307	16" Base	2,938	cy	\$ 66.92	\$ 197,000
407	10" Lime Stabilization (with Lime @ 45#/sy)	6,959	sy	\$ 7.30	\$ 51,000
507	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,644	gal	\$ 7.30	\$ 19,000
607	10' Concrete Sidewalk	31,315	sf	\$ 10.95	\$ 343,000
707	Machine Laid Curb & Gutter	3,131	lf	\$ 36.50	\$ 114,000
807	Turn Lanes and Median Openings	949	sy	\$ 243.06	\$ 231,000
Paving Construction Cost Subtotal:					\$ 1,753,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	88,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	35,000
✓	Roadway Drainage	Standard Internal System	30%	\$	526,000
✓	Illumination		10%	\$	175,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	35,000
✓	Sewer	Minor Adjustments	2%	\$	35,000
✓	Turf and Erosion Control		4%	\$	70,000
✓	Landscaping and Irrigation		2%	\$	35,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 999,000	
Paving and Allowance Subtotal:				\$	2,752,000
Construction Contingency:				15%	\$ 413,000
Mobilization				8%	\$ 220,000
Prep ROW				4%	\$ 110,000
Construction Cost TOTAL:				\$	3,500,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,500,000
Engineering/Survey/Testing:		16%	\$ 560,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 939,000
Impact Fee Project Cost TOTAL:			\$ 5,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. B-40, D-11
Name:	Kenney Fort Blvd (5)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.	
Limits:	Old Settler's Blvd to 2540' S of Old Settler's Blvd		
Impact Fee Class:	6 Lane - Proposed		
Ultimate Class:	6 Lane - Proposed		
Length (lf):	970		
Service Area(s):	B,D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	9,560	cy	\$ 24.33	\$ 233,000
208	5" Asphalt (Type C)	5,408	ton	\$ 139.92	\$ 757,000
308	10" Base	3,642	cy	\$ 66.92	\$ 244,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	8,625	sy	\$ 7.30	\$ 63,000
508	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,639	gal	\$ 7.30	\$ 12,000
608	10' Concrete Sidewalk	19,407	sf	\$ 10.95	\$ 213,000
708	Machine Laid Curb & Gutter	3,881	lf	\$ 36.50	\$ 142,000
808	Turn Lanes and Median Openings	588	sy	\$ 243.06	\$ 143,000
Paving Construction Cost Subtotal:					\$ 1,807,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	90,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	36,000
✓	Roadway Drainage	Standard Internal System	30%	\$	542,000
✓	Illumination		10%	\$	181,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	36,000
✓	Sewer	Minor Adjustments	2%	\$	36,000
✓	Turf and Erosion Control		4%	\$	72,000
✓	Landscaping and Irrigation		2%	\$	36,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,029,000
Paving and Allowance Subtotal:					\$ 2,836,000
Construction Contingency:			15%	\$	425,000
Mobilization			8%	\$	227,000
Prep ROW			4%	\$	113,000
Construction Cost TOTAL:					\$ 3,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,700,000
Engineering/Survey/Testing:		16%	\$ 592,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 582,000
Impact Fee Project Cost TOTAL:			\$ 4,900,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-41, D-12
Name:	Kenney Fort Blvd (6)	This project consists of the construction of a new 6 lane divided arterial.		
Limits:	2540' S of Old Settlers Blvd to Chandler Creek Blvd			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	1,877			
Service Area(s):	B,D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	18,493	cy	\$ 24.33	\$ 450,000
208	5" Asphalt (Type C)	10,462	ton	\$ 139.92	\$ 1,464,000
308	10" Base	7,045	cy	\$ 66.92	\$ 471,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	16,686	sy	\$ 7.30	\$ 122,000
508	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,170	gal	\$ 7.30	\$ 23,000
608	10' Concrete Sidewalk	37,543	sf	\$ 10.95	\$ 411,000
708	Machine Laid Curb & Gutter	7,509	lf	\$ 36.50	\$ 274,000
808	Turn Lanes and Median Openings	1,138	sy	\$ 243.06	\$ 277,000
Paving Construction Cost Subtotal:					\$ 3,492,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 70,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,048,000	
✓	Illumination		10%	\$ 349,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 70,000	
✓	Sewer	Minor Adjustments	2%	\$ 70,000	
✓	Turf and Erosion Control		4%	\$ 140,000	
✓	Landscaping and Irrigation		2%	\$ 70,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 1,817,000	
Paving and Allowance Subtotal:				\$	5,309,000
Construction Contingency:				15%	\$ 796,000
Mobilization				8%	\$ 425,000
Prep ROW				4%	\$ 212,000
Construction Cost TOTAL:				\$	6,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,800,000
Engineering/Survey/Testing:		16%	\$ 1,088,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 2,816,000
Impact Fee Project Cost TOTAL:			\$ 10,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Kenney Fort Blvd (7)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.	B-42, D-14
Limits:	Chandler Creek Blvd to Joe DiMaggio		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	1,565		
Service Area(s):	B,D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	15,413	cy	\$ 24.33	\$ 375,000
205	12" Asphalt (Type C)	8,720	ton	\$ 139.92	\$ 1,220,000
305	16" Base	5,872	cy	\$ 66.92	\$ 393,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	13,907	sy	\$ 7.30	\$ 102,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,642	gal	\$ 7.30	\$ 19,000
605	10' Concrete Sidewalk	31,290	sf	\$ 10.95	\$ 343,000
705	Machine Laid Curb & Gutter	6,258	lf	\$ 36.50	\$ 228,000
805	Turn Lanes and Median Openings	948	sy	\$ 243.06	\$ 230,000
Paving Construction Cost Subtotal:					\$ 2,910,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 146,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 58,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 873,000
✓	Illumination			10%	\$ 291,000
✓	Special Drainage Structures	Bridge Crossing			\$ 1,300,000
✓	Water	Minor Adjustments		2%	\$ 58,000
✓	Sewer	Minor Adjustments		2%	\$ 58,000
✓	Turf and Erosion Control			4%	\$ 116,000
✓	Landscaping and Irrigation			2%	\$ 58,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 2,958,000
				Paving and Allowance Subtotal:	\$ 5,868,000
Construction Contingency:				15%	\$ 880,000
Mobilization				8%	\$ 469,000
Prep ROW				4%	\$ 235,000
Construction Cost TOTAL:				\$ 7,500,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,500,000
Engineering/Survey/Testing:		16%	\$ 1,200,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 939,000
Impact Fee Project Cost TOTAL:			\$ 9,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-46, C-6
Name:	US 79 (1)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	IH 35 NBFR to AW Grimes			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	10,325			
Service Area(s):	B,C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 53,060,282

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 53,060,282
Engineering/Survey/Testing:		11%	\$ 5,836,631
ROW/Easement Acquisition:	TxDOT Roadway	-	\$ 23,000,000
Overall Project Cost Total:			\$ 81,896,913
City Contribution:			\$ 16,379,383
Impact Fee Project Cost (20%):			\$ 16,379,383

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-47
Name:	US 79 (3)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.		
Limits:	200' E of Red Bud Ln to 1690' E of Red Bud Ln			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,487			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	14,653	cy	\$ 24.33	\$ 357,000
205	12" Asphalt (Type C)	8,290	ton	\$ 139.92	\$ 1,160,000
305	16" Base	5,582	cy	\$ 66.92	\$ 374,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	13,221	sy	\$ 7.30	\$ 97,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,512	gal	\$ 7.30	\$ 18,000
605	10' Concrete Sidewalk	29,747	sf	\$ 10.95	\$ 326,000
705	Machine Laid Curb & Gutter	5,949	lf	\$ 36.50	\$ 217,000
805	Turn Lanes and Median Openings	901	sy	\$ 243.06	\$ 219,000
Paving Construction Cost Subtotal:					\$ 2,768,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 138,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 55,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 830,000
✓	Illumination			10%	\$ 277,000
✓	Special Drainage Structures	Bridge Crossing			\$ 400,000
✓	Water	Minor Adjustments		2%	\$ 55,000
✓	Sewer	Minor Adjustments		2%	\$ 55,000
✓	Turf and Erosion Control			4%	\$ 111,000
✓	Landscaping and Irrigation			2%	\$ 55,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 1,976,000
Paving and Allowance Subtotal:					\$ 4,744,000
Construction Contingency:				15%	\$ 712,000
Mobilization				8%	\$ 380,000
Prep ROW				4%	\$ 190,000
Construction Cost TOTAL:					\$ 6,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,100,000
Engineering/Survey/Testing:		16%	\$ 976,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 892,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 1,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-48
Name:	Joe Dimaggio Blvd Extension	This project consisted of the construction of a 3 lane undivided collector.		
Limits:	Kenney Fort Blvd to US 79			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	2,078			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	6,173	cy	\$ 24.33	\$ 150,000
209	5" Asphalt (Type C)	3,365	ton	\$ 139.92	\$ 471,000
309	10" Base	3,399	cy	\$ 66.92	\$ 227,000
409	10" Lime Stabilization (with Lime @ 45#/sy)	12,697	sy	\$ 7.30	\$ 93,000
509	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,447	gal	\$ 7.30	\$ 18,000
609	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
709	Machine Laid Curb & Gutter	4,155	lf	\$ 36.50	\$ 152,000
809	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 2,267,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 45,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 680,000	
✓	Illumination		10%	\$ 227,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 45,000	
✓	Sewer	Minor Adjustments	2%	\$ 45,000	
✓	Turf and Erosion Control		4%	\$ 91,000	
✓	Landscaping and Irrigation		2%	\$ 45,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 1,178,000	
Paving and Allowance Subtotal:				\$ 3,445,000	
Construction Contingency:				15%	\$ 517,000
Mobilization				8%	\$ 276,000
Prep ROW				4%	\$ 138,000
Construction Cost TOTAL:				\$ 4,400,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,400,000
Engineering/Survey/Testing:		16%	\$ 704,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 1,870,000
Impact Fee Project Cost TOTAL:			\$ 7,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-49
Name:	Wallin Bradley (1)	This project consisted of the construction of a 3 lane undivided collector.		
Limits:	College Park Dr to Avery Nelson Blvd			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	4,271			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	12,691	cy	\$ 24.33	\$ 309,000
209	5" Asphalt (Type C)	6,917	ton	\$ 139.92	\$ 968,000
309	10" Base	6,987	cy	\$ 66.92	\$ 468,000
409	10" Lime Stabilization (with Lime @ 45#/sy)	26,102	sy	\$ 7.30	\$ 191,000
509	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,031	gal	\$ 7.30	\$ 37,000
609	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
709	Machine Laid Curb & Gutter	8,543	lf	\$ 36.50	\$ 312,000
809	Turn Lanes and Median Openings	0	sy	\$ 243.06	\$ -
Paving Construction Cost Subtotal:					\$ 3,441,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 172,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 69,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 1,032,000
✓	Illumination			10%	\$ 344,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 69,000
✓	Sewer	Minor Adjustments		2%	\$ 69,000
✓	Turf and Erosion Control			4%	\$ 138,000
✓	Landscaping and Irrigation			2%	\$ 69,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 1,962,000
Paving and Allowance Subtotal:					\$ 5,403,000
Construction Contingency:				15%	\$ 810,000
Mobilization				8%	\$ 432,000
Prep ROW				4%	\$ 216,000
Construction Cost TOTAL:					\$ 6,900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,900,000
Engineering/Survey/Testing:		16%	\$ 1,104,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,538,000
Impact Fee Project Cost TOTAL:			\$ 9,500,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-50
Name:	Wallin Bradley (3)	This project consisted of the construction of a 4 lane undivided collector.		
Limits:	A.W. Grimes Blvd to Kenney Fort Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	5,314			
Service Area(s):	B			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	38,639	cy	\$ 24.33	\$ 940,000
202	12" Asphalt (Type C)	21,042	ton	\$ 139.92	\$ 2,944,000
302	16" Base	14,170	cy	\$ 66.92	\$ 948,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	34,244	sy	\$ 7.30	\$ 250,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	6,376	gal	\$ 7.30	\$ 47,000
602	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
702	Machine Laid Curb & Gutter	21,255	lf	\$ 36.50	\$ 776,000
802	Turn Lanes and Median Openings	3,220	sy	\$ 243.06	\$ 783,000
Paving Construction Cost Subtotal:					\$ 7,844,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
✓	Traffic Control	Construction Phase Traffic Control		5%	\$ 392,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 157,000
✓	Roadway Drainage	Standard Internal System		30%	\$ 2,353,000
✓	Illumination			10%	\$ 784,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Water	Minor Adjustments		2%	\$ 157,000
✓	Sewer	Minor Adjustments		2%	\$ 157,000
✓	Turf and Erosion Control			4%	\$ 314,000
✓	Landscaping and Irrigation			2%	\$ 157,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 4,471,000
Paving and Allowance Subtotal:					\$ 12,315,000
Construction Contingency:				15%	\$ 1,847,000
Mobilization				8%	\$ 985,000
Prep ROW				4%	\$ 493,000
Construction Cost TOTAL:					\$ 15,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 15,700,000
Engineering/Survey/Testing:		16%	\$ 2,512,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	
Impact Fee Project Cost TOTAL:			\$ 18,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. B-51, C-28
Name:	US 79 (2)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.	
Limits:	AW Grimes to Red Bud Ln		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	13,902		
Service Area(s):	B,C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	136,965	cy	\$ 24.33	\$ 3,333,000
205	12" Asphalt (Type C)	77,483	ton	\$ 139.92	\$ 10,841,000
305	16" Base	52,177	cy	\$ 66.92	\$ 3,491,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	123,578	sy	\$ 7.30	\$ 902,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	23,480	gal	\$ 7.30	\$ 171,000
605	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
705	Machine Laid Curb & Gutter	55,610	lf	\$ 36.50	\$ 2,030,000
805	Turn Lanes and Median Openings	8,426	sy	\$ 243.06	\$ 2,048,000
Paving Construction Cost Subtotal:					\$ 23,972,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	1,199,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	479,000
✓	Roadway Drainage	Standard Internal System	30%	\$	7,192,000
✓	Illumination		10%	\$	2,397,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	479,000
✓	Sewer	Minor Adjustments	2%	\$	479,000
✓	Turf and Erosion Control		4%	\$	959,000
✓	Landscaping and Irrigation		2%	\$	479,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	13,663,000
Paving and Allowance Subtotal:					\$ 37,635,000
Construction Contingency:				15%	\$ 5,645,000
Mobilization				8%	\$ 3,011,000
Prep ROW				4%	\$ 1,505,000
Construction Cost TOTAL:					\$ 47,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 47,800,000
Engineering/Survey/Testing:		16%	\$ 7,648,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 8,341,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 12,760,000

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City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area C

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-31, C-1	6 Lane - Enhanced	RM 620	Widening	Deepwood Dr	IH 35 SBFR	50%	\$ 12,560,624	\$ 6,280,312
C-3	4 Lane - Enhanced	CR 172 (2)	Widening	Hesters Crossing Rd	445' N of Hesters Crossing Rd	50%	\$ 1,800,000	\$ 900,000
C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Access Management	Dry Creek Dr	IH 35 SBFR	100%	\$ 900,000	\$ 900,000
C-5	4 Lane - Enhanced	Bratton Ln	Widening	IH 35 SBFR	1160' S of Michael Angelo Way	50%	\$ 8,700,000	\$ 4,350,000
B-46, C-6	6 Lane - Enhanced	US 79 (1)	Widening	IH 35 NBFR	200' E of Red Bud Ln	50%	\$ 16,379,383	\$ 8,189,692
C-7	3 Lane - Existing	McNeil Extension	Previously Constructed	S Mays St	Georgetown St	100%	\$ 4,799,620	\$ 4,799,620
C-8	4 Lane - Enhanced (AM)	S Mays St	Access Management	Nash St	Gattis School Rd	100%	\$ 2,000,000	\$ 2,000,000
C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	New	Forest Creek Dr	830' S of Gattis School Rd	100%	\$ 40,800,000	\$ 40,800,000
C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Access Management	Forest Ridge Blvd	265' S of Forest Ridge Blvd	50%	\$ 200,000	\$ 100,000
C-12	4 Lane - Enhanced	Red Bud Ln (2)	Widening	265' S of Forest Ridge Blvd	280' S of Woodlawn Ln	100%	\$ 2,200,000	\$ 2,200,000
C-13	4 Lane - Enhanced	Red Bud Ln (3)	Widening	280' S of Woodlawn Ln	130' S of Old Oaks Dr	50%	\$ 2,200,000	\$ 1,100,000
C-14	4 Lane - Enhanced	Red Bud Ln (4)	Widening	130' S of Old Oaks Dr	315' S of Country Dr	100%	\$ 2,200,000	\$ 2,200,000
C-15	4 Lane - Enhanced	Red Bud Ln (5)	Widening	315' S of Country Dr	Wildflower Trl	50%	\$ 2,200,000	\$ 1,100,000
C-16	4 Lane - Enhanced	Red Bud Ln (6)	Widening	Wildflower Trl	295' S of Wildflower Trl	100%	\$ 1,200,000	\$ 1,200,000
C-17	4 Lane - Enhanced	Red Bud Ln (7)	Widening	295' S of Wildflower Trl	840' N of Forest Creek Dr	50%	\$ 13,100,000	\$ 6,550,000
C-18	4 Lane - Enhanced	Red Bud Ln (8)	Widening	840' N of Forest Creek Dr	340' S of Forest Creek Dr	100%	\$ 4,600,000	\$ 4,600,000
C-19	4 Lane - Enhanced	Red Bud Ln (9)	Widening	340' S of Forest Creek Dr	Gattis School Rd	50%	\$ 18,713,810	\$ 9,356,905
C-20	6 Lane - Enhanced	Gattis School Rd (1)	Widening	S Mays St	Windy Park Dr	100%	\$ 31,800,000	\$ 31,800,000
C-21	6 Lane - Enhanced	Gattis School Rd (2)	Widening	Windy Park Dr	Red Bud Ln	100%	\$ 81,800,000	\$ 81,800,000
C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Access Management	Gattis School Rd	Greenlawn Blvd	100%	\$ 3,600,000	\$ 3,600,000
C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	New	830' S of Gattis School Rd	SH 45	100%	\$ 12,400,000	\$ 12,400,000
C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	Median Widening	IH 35 NBFR	SH 45 EBFR	100%	\$ 16,468,640	\$ 16,468,640
C-26	4 Lane - Enhanced	Schultz (1)	Widening	SH 45 EBFR	290' S of SH 45 EBFR	100%	\$ 1,200,000	\$ 1,200,000
C-27	4 Lane - Enhanced	Schultz (2)	Widening	290' S of SH 45 EBFR	255' S of Autumn Sage Way	50%	\$ 10,300,000	\$ 5,150,000
B-51, C-28	6 Lane - Enhanced	US 79 (2)	Widening	AW Grimes	Red Bud Ln	50%	\$ 12,760,000	\$ 6,380,000
TOTAL							\$ 304,882,077	\$ 255,425,168

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Intersection Improvements - Service Area C

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
CI-5	Mays St and Liberty Ave	SIGNAL		100%	\$ 550,000	\$ 550,000
CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%	\$ 848,000	\$ 848,000
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER	TURN LANES	50%	\$ 2,141,000	\$ 1,070,500
CI-10	Red Bud Ln and Gattis School Rd	TURN LANES		100%	\$ 1,773,000	\$ 1,773,000
CI-11	E McNeil Rd and Oakridge Dr	INTERSECTION IMPROVEMENT		100%	\$ 10,000,000	\$ 10,000,000
-	Update ITS and Traffic Managemenet Infrastructure			25%	\$ 20,900,000	\$ 5,225,000
TOTAL					\$ 36,212,000	\$ 19,466,500

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-3
Name:	CR 172 (2)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	Hesters Crossing Rd to 445' N of Hesters Crossing			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	445			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,238	cy	\$ 24.33	\$ 79,000
203	12" Asphalt (Type C)	1,763	ton	\$ 139.92	\$ 247,000
303	16" Base	1,187	cy	\$ 66.92	\$ 79,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	2,870	sy	\$ 7.30	\$ 21,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	534	gal	\$ 7.30	\$ 4,000
603	10' Concrete Sidewalk	8,906	sf	\$ 10.95	\$ 98,000
703	Machine Laid Curb & Gutter	1,781	lf	\$ 36.50	\$ 65,000
803	Turn Lanes and Median Openings	270	sy	\$ 243.06	\$ 66,000
Paving Construction Cost Subtotal:					\$ 659,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	33,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	13,000
✓	Roadway Drainage	Standard Internal System	30%	\$	198,000
✓	Illumination		10%	\$	66,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	13,000
✓	Sewer	Minor Adjustments	2%	\$	13,000
✓	Turf and Erosion Control		4%	\$	26,000
✓	Landscaping and Irrigation		2%	\$	13,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	375,000
Paving and Allowance Subtotal:				\$	1,034,000
Construction Contingency:				15%	\$ 155,000
Mobilization				8%	\$ 83,000
Prep ROW				4%	\$ 41,000
Construction Cost TOTAL:				\$	1,400,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,400,000
Engineering/Survey/Testing:		16%	\$ 224,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 214,000
Impact Fee Project Cost TOTAL:			\$ 1,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-4
Name:	Hesters Crossing Rd	This project consists of the construction of a median in the existing center turn lane.		
Limits:	Dry Creek Dr to IH 35 SBFR			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	1,692			
Service Area(s):	C			

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	3,174	cy	\$ 77,000
204	Asphalt (Type C)	0	ton	\$ -
304	Base	0	cy	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ -
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ -
604	Concrete Sidewalk	0	sf	\$ -
704	Machine Laid Curb & Gutter	3,383	lf	\$ 123,000
804	Turn Lanes and Median Openings	1,025	sy	\$ 249,000
Paving Construction Cost Subtotal:				\$ 449,000
Major Construction Component Allowances**:				
Item Description	Notes	Unit Price	Item Cost	
✓ Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000	
✓ Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 6,000	
Roadway Drainage	None Anticipated	0%	\$ -	
✓ Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 73,000	
Special Drainage Structures	None Anticipated		\$ -	
✓ Utilities	Minor Adjustments	\$1,000 / STA	\$ 3,000	
✓ ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 25,000	
✓ Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 80,000	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 202,000
Paving and Allowance Subtotal:				\$ 651,000
Construction Contingency:		15%	\$ 98,000	
Mobilization		5%	\$ 33,000	
Prep ROW		\$3,000 / STA	\$ 5,000	
Construction Cost TOTAL:				\$ 800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 800,000
Engineering/Survey/Testing:		16%	\$ 128,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 900,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-5
Name:	Bratton Ln	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	IH 35 SBFR to 1160' S of Michael Angelo Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,215			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	16,107	cy	\$ 24.33	\$ 392,000
203	12" Asphalt (Type C)	8,772	ton	\$ 139.92	\$ 1,227,000
303	16" Base	5,907	cy	\$ 66.92	\$ 395,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	14,275	sy	\$ 7.30	\$ 104,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,658	gal	\$ 7.30	\$ 19,000
603	10' Concrete Sidewalk	44,301	sf	\$ 10.95	\$ 485,000
703	Machine Laid Curb & Gutter	8,860	lf	\$ 36.50	\$ 323,000
803	Turn Lanes and Median Openings	1,342	sy	\$ 243.06	\$ 326,000
Paving Construction Cost Subtotal:					\$ 3,271,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	164,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	65,000
✓	Roadway Drainage	Standard Internal System	30%	\$	981,000
✓	Illumination		10%	\$	327,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	65,000
✓	Sewer	Minor Adjustments	2%	\$	65,000
✓	Turf and Erosion Control		4%	\$	131,000
✓	Landscaping and Irrigation		2%	\$	65,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,863,000
Paving and Allowance Subtotal:				\$	5,134,000
Construction Contingency:				15%	\$ 770,000
Mobilization				8%	\$ 411,000
Prep ROW				4%	\$ 205,000
Construction Cost TOTAL:				\$	6,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,600,000
Engineering/Survey/Testing:		16%	\$ 1,056,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,063,000
Impact Fee Project Cost TOTAL:			\$ 8,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-7
Name:	McNeil Extension	This project consists of the construction of a new 3 lane collector.		
Limits:	S Mays St to Georgetown St			
Impact Fee Class:	3 Lane - Existing			
Ultimate Class:	3 Lane - Existing			
Length (lf):	2,732			
Service Area(s):	C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 4,350,076

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 4,350,076
Engineering/Survey/Testing:	From City estimate	-	\$ 716,019
ROW/Easement Acquisition:	New Roadway Alignment	-	\$ -
Overall Project Cost Total:			\$ 5,066,094
City Contribution:			\$ 4,799,620
Impact Fee Project Cost (95%):			\$ 4,799,620

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-8
Name:	S Mays St	This project consists of the construction of a median in the existing center turn lane.		
Limits:	Nash St to Gattis School Rd			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	3,657			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	6,862	cy	\$ 24.33	\$ 167,000
204	Asphalt (Type C)	0	ton	\$ 139.92	\$ -
304	Base	0	cy	\$ 66.92	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30	\$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	\$ 7.30	\$ -
604	Concrete Sidewalk	0	sf	\$ 10.95	\$ -
704	Machine Laid Curb & Gutter	7,313	lf	\$ 36.50	\$ 267,000
804	Turn Lanes and Median Openings	2,216	sy	\$ 243.06	\$ 539,000
Paving Construction Cost Subtotal:					\$ 973,000
Major Construction Component Allowances**:					
Item Description		Notes		Unit Price	Item Cost
✓	Traffic Control	Assume 6 months to Construct		\$2,500 / MO	\$ 15,000
✓	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)		\$750	\$ 14,000
	Roadway Drainage	None Anticipated		0%	\$ -
✓	Street Lighting	1 Assem / 100', \$15/LF cond/cndr		\$2,800	\$ 157,000
	Special Drainage Structures	None Anticipated			\$ -
✓	Utilities	Minor Adjustments		\$1,000 / STA	\$ 7,000
✓	ADA Ramps & Requirements	4 ramps / 600'		\$2,200	\$ 54,000
✓	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls		\$10 / SY	\$ 173,000
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 420,000
Paving and Allowance Subtotal:				\$	1,393,000
Construction Contingency:				15%	\$ 209,000
Mobilization				5%	\$ 70,000
Prep ROW				\$3,000 / STA	\$ 11,000
Construction Cost TOTAL:				\$	1,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 2,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-10
Name:	Kenney Fort Blvd (2)	This project consists of the construction of a new 6 lane divided arterial.		
Limits:	Forest Creek Dr to 830' S of Gattis School Rd			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	5,515			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	54,329	cy	\$ 24.33	\$ 1,322,000
208	5" Asphalt (Type C)	30,734	ton	\$ 139.92	\$ 4,300,000
308	10" Base	20,697	cy	\$ 66.92	\$ 1,385,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	49,018	sy	\$ 7.30	\$ 358,000
508	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	9,313	gal	\$ 7.30	\$ 68,000
608	10' Concrete Sidewalk	110,291	sf	\$ 10.95	\$ 1,208,000
708	Machine Laid Curb & Gutter	22,058	lf	\$ 36.50	\$ 805,000
808	Turn Lanes and Median Openings	3,342	sy	\$ 243.06	\$ 812,000
Paving Construction Cost Subtotal:					\$ 10,258,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 205,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 3,077,000	
✓	Illumination		10%	\$ 1,026,000	
✓	Special Drainage Structures	Bridge Crossing		\$ 6,400,000	
✓	Water	Minor Adjustments	2%	\$ 205,000	
✓	Sewer	Minor Adjustments	2%	\$ 205,000	
✓	Turf and Erosion Control		4%	\$ 410,000	
✓	Landscaping and Irrigation		2%	\$ 205,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 11,733,000	
Paving and Allowance Subtotal:				\$ 21,991,000	
Construction Contingency:				15%	\$ 3,299,000
Mobilization				8%	\$ 1,759,000
Prep ROW				4%	\$ 880,000
Construction Cost TOTAL:				\$ 28,000,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 28,000,000
Engineering/Survey/Testing:		16%	\$ 4,480,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 8,272,000
Impact Fee Project Cost TOTAL:			\$ 40,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-11
Name:	Red Bud Ln (1)	This project consists of the construction of a median in the existing center turn lane.		
Limits:	Forest Ridge Blvd to 265' S of Forest Ridge Blvd			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced (AM)			
Length (lf):	265			
Service Area(s):	C			

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	497	cy	\$ 24.33
204	Asphalt (Type C)	0	ton	\$ 139.92
304	Base	0	cy	\$ 66.92
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ 7.30
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ 7.30
604	Concrete Sidewalk	0	sf	\$ 10.95
704	Machine Laid Curb & Gutter	530	lf	\$ 36.50
804	Turn Lanes and Median Openings	161	sy	\$ 243.06
Paving Construction Cost Subtotal:				\$ 70,000
Major Construction Component Allowances**:				
Item Description	Notes	Unit Price	Item Cost	
✓ Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000	
✓ Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 1,000	
Roadway Drainage	None Anticipated	0%	\$ -	
✓ Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 11,000	
Special Drainage Structures	None Anticipated		\$ -	
✓ Utilities	Minor Adjustments	\$1,000 / STA	\$ 1,000	
✓ ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 4,000	
✓ Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 13,000	
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$ 45,000
Paving and Allowance Subtotal:				\$ 115,000
Construction Contingency:		15%	\$ 17,000	
Mobilization		5%	\$ 6,000	
Prep ROW		\$3,000 / STA	\$ 1,000	
Construction Cost TOTAL:				\$ 200,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 200,000
Engineering/Survey/Testing:		16%	\$ 32,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-12
Name:	Red Bud Ln (2)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	265' S of Forest Ridge Blvd to 280' S of Woodlawn			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	565			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,106	cy	\$ 24.33	\$ 100,000
203	12" Asphalt (Type C)	2,236	ton	\$ 139.92	\$ 313,000
303	16" Base	1,506	cy	\$ 66.92	\$ 101,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,639	sy	\$ 7.30	\$ 27,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	678	gal	\$ 7.30	\$ 5,000
603	10' Concrete Sidewalk	11,294	sf	\$ 10.95	\$ 124,000
703	Machine Laid Curb & Gutter	2,259	lf	\$ 36.50	\$ 82,000
803	Turn Lanes and Median Openings	342	sy	\$ 243.06	\$ 83,000
Paving Construction Cost Subtotal:					\$ 835,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	42,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	17,000
✓	Roadway Drainage	Standard Internal System	30%	\$	251,000
✓	Illumination		10%	\$	84,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	17,000
✓	Sewer	Minor Adjustments	2%	\$	17,000
✓	Turf and Erosion Control		4%	\$	33,000
✓	Landscaping and Irrigation		2%	\$	17,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	478,000
Paving and Allowance Subtotal:					\$ 1,313,000
Construction Contingency:				15%	\$ 197,000
Mobilization				8%	\$ 105,000
Prep ROW				4%	\$ 53,000
Construction Cost TOTAL:					\$ 1,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 271,000
Impact Fee Project Cost TOTAL:			\$ 2,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. C-13
Name:	Red Bud Ln (3)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.	
Limits:	280' S of Woodlawn Ln to 130' S of Old Oaks Dr		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	554		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,028	cy	\$ 24.33	\$ 98,000
203	12" Asphalt (Type C)	2,193	ton	\$ 139.92	\$ 307,000
303	16" Base	1,477	cy	\$ 66.92	\$ 99,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,570	sy	\$ 7.30	\$ 26,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	665	gal	\$ 7.30	\$ 5,000
603	10' Concrete Sidewalk	11,078	sf	\$ 10.95	\$ 121,000
703	Machine Laid Curb & Gutter	2,216	lf	\$ 36.50	\$ 81,000
803	Turn Lanes and Median Openings	336	sy	\$ 243.06	\$ 82,000
Paving Construction Cost Subtotal:					\$ 819,000
Major Construction Component Allowances**:					
Item Description		Notes		Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control		5%	\$ 41,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths		2%	\$ 16,000
√	Roadway Drainage	Standard Internal System		30%	\$ 246,000
√	Illumination			10%	\$ 82,000
	Special Drainage Structures	None Anticipated			\$ -
√	Water	Minor Adjustments		2%	\$ 16,000
√	Sewer	Minor Adjustments		2%	\$ 16,000
√	Turf and Erosion Control			4%	\$ 33,000
√	Landscaping and Irrigation			2%	\$ 16,000
	Miscellaneous:			0%	\$ -
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal:	\$ 466,000
				Paving and Allowance Subtotal:	\$ 1,285,000
				Construction Contingency:	15% \$ 193,000
				Mobilization	8% \$ 103,000
				Prep ROW	4% \$ 51,000
				Construction Cost TOTAL:	\$ 1,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 266,000
Impact Fee Project Cost TOTAL:			\$ 2,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-14
Name:	Red Bud Ln (4)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	130' S of Old Oaks Dr to 315' S of Country Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	561			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,078	cy	\$ 24.33	\$ 99,000
203	12" Asphalt (Type C)	2,221	ton	\$ 139.92	\$ 311,000
303	16" Base	1,496	cy	\$ 66.92	\$ 100,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,614	sy	\$ 7.30	\$ 26,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	673	gal	\$ 7.30	\$ 5,000
603	10' Concrete Sidewalk	11,216	sf	\$ 10.95	\$ 123,000
703	Machine Laid Curb & Gutter	2,243	lf	\$ 36.50	\$ 82,000
803	Turn Lanes and Median Openings	340	sy	\$ 243.06	\$ 83,000
Paving Construction Cost Subtotal:					\$ 829,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	41,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	17,000
✓	Roadway Drainage	Standard Internal System	30%	\$	249,000
✓	Illumination		10%	\$	83,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	17,000
✓	Sewer	Minor Adjustments	2%	\$	17,000
✓	Turf and Erosion Control		4%	\$	33,000
✓	Landscaping and Irrigation		2%	\$	17,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	474,000
Paving and Allowance Subtotal:					\$ 1,303,000
Construction Contingency:				15%	\$ 195,000
Mobilization				8%	\$ 104,000
Prep ROW				4%	\$ 52,000
Construction Cost TOTAL:					\$ 1,700,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 269,000
Impact Fee Project Cost TOTAL:			\$ 2,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No. C-15
Name:	Red Bud Ln (5)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.	
Limits:	315' S of Country Dr to Wildflower Trl		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	551		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,003	cy	\$ 24.33	\$ 97,000
203	12" Asphalt (Type C)	2,180	ton	\$ 139.92	\$ 305,000
303	16" Base	1,468	cy	\$ 66.92	\$ 98,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,548	sy	\$ 7.30	\$ 26,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	661	gal	\$ 7.30	\$ 5,000
603	10' Concrete Sidewalk	11,011	sf	\$ 10.95	\$ 121,000
703	Machine Laid Curb & Gutter	2,202	lf	\$ 36.50	\$ 80,000
803	Turn Lanes and Median Openings	334	sy	\$ 243.06	\$ 81,000
Paving Construction Cost Subtotal:					\$ 813,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	41,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	16,000
✓	Roadway Drainage	Standard Internal System	30%	\$	244,000
✓	Illumination		10%	\$	81,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	16,000
✓	Sewer	Minor Adjustments	2%	\$	16,000
✓	Turf and Erosion Control		4%	\$	33,000
✓	Landscaping and Irrigation		2%	\$	16,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 463,000	
Paving and Allowance Subtotal:				\$ 1,276,000	
Construction Contingency:				15%	\$ 191,000
Mobilization				8%	\$ 102,000
Prep ROW				4%	\$ 51,000
Construction Cost TOTAL:				\$ 1,700,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,700,000
Engineering/Survey/Testing:		16%	\$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 264,000
Impact Fee Project Cost TOTAL:			\$ 2,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-16
Name:	Red Bud Ln (6)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	Wildflower Trl to 295' S of Wildflower Trl			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	293			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,133	cy	\$ 24.33	\$ 52,000
203	12" Asphalt (Type C)	1,162	ton	\$ 139.92	\$ 163,000
303	16" Base	782	cy	\$ 66.92	\$ 52,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	1,891	sy	\$ 7.30	\$ 14,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	352	gal	\$ 7.30	\$ 3,000
603	10' Concrete Sidewalk	5,868	sf	\$ 10.95	\$ 64,000
703	Machine Laid Curb & Gutter	1,174	lf	\$ 36.50	\$ 43,000
803	Turn Lanes and Median Openings	178	sy	\$ 243.06	\$ 43,000
Paving Construction Cost Subtotal:					\$ 434,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	22,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	9,000
✓	Roadway Drainage	Standard Internal System	30%	\$	130,000
✓	Illumination		10%	\$	43,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	9,000
✓	Sewer	Minor Adjustments	2%	\$	9,000
✓	Turf and Erosion Control		4%	\$	17,000
✓	Landscaping and Irrigation		2%	\$	9,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	248,000
Paving and Allowance Subtotal:					\$ 682,000
Construction Contingency:				15%	\$ 102,000
Mobilization				8%	\$ 55,000
Prep ROW				4%	\$ 27,000
Construction Cost TOTAL:					\$ 900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 900,000
Engineering/Survey/Testing:		16%	\$ 144,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 141,000
Impact Fee Project Cost TOTAL:			\$ 1,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-17
Name:	Red Bud Ln (7)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	295' S of Wildflower Trl to 840' N of Forest Creek Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,907			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	21,139	cy	\$ 24.33	\$ 514,000
203	12" Asphalt (Type C)	11,512	ton	\$ 139.92	\$ 1,611,000
303	16" Base	7,752	cy	\$ 66.92	\$ 519,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	18,735	sy	\$ 7.30	\$ 137,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,489	gal	\$ 7.30	\$ 25,000
603	10' Concrete Sidewalk	58,142	sf	\$ 10.95	\$ 637,000
703	Machine Laid Curb & Gutter	11,628	lf	\$ 36.50	\$ 424,000
803	Turn Lanes and Median Openings	1,762	sy	\$ 243.06	\$ 428,000
Paving Construction Cost Subtotal:					\$ 4,295,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	215,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	86,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,289,000
✓	Illumination		10%	\$	430,000
✓	Special Drainage Structures	Bridge Crossing		\$	1,200,000
✓	Water	Minor Adjustments	2%	\$	86,000
✓	Sewer	Minor Adjustments	2%	\$	86,000
✓	Turf and Erosion Control		4%	\$	172,000
✓	Landscaping and Irrigation		2%	\$	86,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	3,650,000
Paving and Allowance Subtotal:				\$	7,945,000
Construction Contingency:				15%	\$ 1,192,000
Mobilization				8%	\$ 636,000
Prep ROW				4%	\$ 318,000
Construction Cost TOTAL:				\$	10,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 10,100,000
Engineering/Survey/Testing:		16%	\$ 1,616,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,395,000
Impact Fee Project Cost TOTAL:			\$ 13,100,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-18
Name:	Red Bud Ln (8)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	840' N of Forest Creek Dr to 340' S of Forest Creek			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,182			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	8,594	cy	\$ 24.33	\$ 209,000
203	12" Asphalt (Type C)	4,680	ton	\$ 139.92	\$ 655,000
303	16" Base	3,152	cy	\$ 66.92	\$ 211,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	7,617	sy	\$ 7.30	\$ 56,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,418	gal	\$ 7.30	\$ 10,000
603	10' Concrete Sidewalk	23,638	sf	\$ 10.95	\$ 259,000
703	Machine Laid Curb & Gutter	4,728	lf	\$ 36.50	\$ 173,000
803	Turn Lanes and Median Openings	716	sy	\$ 243.06	\$ 174,000
Paving Construction Cost Subtotal:					\$ 1,747,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	87,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	35,000
✓	Roadway Drainage	Standard Internal System	30%	\$	524,000
✓	Illumination		10%	\$	175,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	35,000
✓	Sewer	Minor Adjustments	2%	\$	35,000
✓	Turf and Erosion Control		4%	\$	70,000
✓	Landscaping and Irrigation		2%	\$	35,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	996,000
Paving and Allowance Subtotal:				\$	2,743,000
Construction Contingency:				15%	\$ 411,000
Mobilization				8%	\$ 219,000
Prep ROW				4%	\$ 110,000
Construction Cost TOTAL:				\$	3,500,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,500,000
Engineering/Survey/Testing:		16%	\$ 560,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 567,000
Impact Fee Project Cost TOTAL:			\$ 4,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-19
Name:	Red Bud Ln (9)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	340' S of Forest Creek Dr to Gattis Sci			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,735			
Service Area(s):	C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 15,998,701

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 15,998,701
Engineering/Survey/Testing:		-	\$ 2,399,805
ROW/Easement Acquisition:	Existing Alignment	-	\$ 315,304
Overall Project Cost Total:			\$ 18,713,810
City Contribution:			\$ 18,713,810
Impact Fee Project Cost:			\$ 18,713,810

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-20
Name:	Gattis School Rd (1)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	S Mays St to Windy Park Dr			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	6,472			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	63,763	cy	\$ 24.33	\$ 1,552,000
205	12" Asphalt (Type C)	36,072	ton	\$ 139.92	\$ 5,047,000
305	16" Base	24,291	cy	\$ 66.92	\$ 1,625,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	57,530	sy	\$ 7.30	\$ 420,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	10,931	gal	\$ 7.30	\$ 80,000
605	10' Concrete Sidewalk	129,443	sf	\$ 10.95	\$ 1,417,000
705	Machine Laid Curb & Gutter	25,889	lf	\$ 36.50	\$ 945,000
805	Turn Lanes and Median Openings	3,923	sy	\$ 243.06	\$ 953,000
Paving Construction Cost Subtotal:					\$ 12,039,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	602,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	241,000
✓	Roadway Drainage	Standard Internal System	30%	\$	3,612,000
✓	Illumination		10%	\$	1,204,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	241,000
✓	Sewer	Minor Adjustments	2%	\$	241,000
✓	Turf and Erosion Control		4%	\$	482,000
✓	Landscaping and Irrigation		2%	\$	241,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	6,864,000
Paving and Allowance Subtotal:					\$ 18,903,000
Construction Contingency:				15%	\$ 2,835,000
Mobilization				8%	\$ 1,512,000
Prep ROW				4%	\$ 756,000
Construction Cost TOTAL:					\$ 24,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 24,100,000
Engineering/Survey/Testing:		16%	\$ 3,856,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 3,883,000
Impact Fee Project Cost TOTAL:			\$ 31,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Gattis School Rd (2)	This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.	C-21
Limits:	Windy Park Dr to Red Bud Ln		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	14,904		
Service Area(s):	C		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	146,834	cy	\$ 24.33	\$ 3,573,000
205	12" Asphalt (Type C)	83,066	ton	\$ 139.92	\$ 11,622,000
305	16" Base	55,937	cy	\$ 66.92	\$ 3,743,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	132,482	sy	\$ 7.30	\$ 967,000
505	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	25,172	gal	\$ 7.30	\$ 184,000
605	10' Concrete Sidewalk	298,084	sf	\$ 10.95	\$ 3,264,000
705	Machine Laid Curb & Gutter	59,617	lf	\$ 36.50	\$ 2,176,000
805	Turn Lanes and Median Openings	9,033	sy	\$ 243.06	\$ 2,196,000
Paving Construction Cost Subtotal:					\$ 27,725,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	1,386,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	555,000
✓	Roadway Drainage	Standard Internal System	30%	\$	8,318,000
✓	Illumination		10%	\$	2,773,000
✓	Special Drainage Structures	Bridge Crossing		\$	5,900,000
✓	Water	Minor Adjustments	2%	\$	555,000
✓	Sewer	Minor Adjustments	2%	\$	555,000
✓	Turf and Erosion Control		4%	\$	1,109,000
✓	Landscaping and Irrigation		2%	\$	555,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	21,706,000
Paving and Allowance Subtotal:					\$ 49,431,000
Construction Contingency:				15%	\$ 7,415,000
Mobilization				8%	\$ 3,954,000
Prep ROW				4%	\$ 1,977,000
Construction Cost TOTAL:					\$ 62,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 62,800,000
Engineering/Survey/Testing:		16%	\$ 10,048,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 8,943,000
Impact Fee Project Cost TOTAL:			\$ 81,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	S Mays St / Dell Way	This project consists of the construction of a median in the existing center turn lane.	C-22
Limits:	Gattis School Rd to Greenlawn Blvd		
Impact Fee Class:	4 Lane - Enhanced (AM)		
Ultimate Class:	4 Lane - Enhanced (AM)		
Length (lf):	6,565		
Service Area(s):	C		

Roadway Construction Cost Projection				
No.	Item Description	Quantity	Unit	Item Cost
104	Unclassified Street Excavation	12,320	cy	\$ 300,000
204	Asphalt (Type C)	0	ton	\$ -
304	Base	0	cy	\$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	\$ -
504	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	0	gal	\$ -
604	Concrete Sidewalk	0	sf	\$ -
704	Machine Laid Curb & Gutter	13,131	lf	\$ 479,000
804	Turn Lanes and Median Openings	3,979	sy	\$ 967,000
Paving Construction Cost Subtotal:				\$ 1,746,000
Major Construction Component Allowances**:				
Item Description	Notes	Unit Price	Item Cost	
✓ Traffic Control	Assume 6 months to Construct	\$2,500 / MO	\$ 15,000	
✓ Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs (\$1.50/LF)	\$750	\$ 25,000	
Roadway Drainage	None Anticipated	0%	\$ -	
✓ Street Lighting	1 Assem / 100', \$15/LF cond/cndr	\$2,800	\$ 282,000	
Special Drainage Structures	None Anticipated		\$ -	
✓ Utilities	Minor Adjustments	\$1,000 / STA	\$ 13,000	
✓ ADA Ramps & Requirements	4 ramps / 600'	\$2,200	\$ 96,000	
✓ Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	\$10 / SY	\$ 310,000	
**Allowances based on % of Paving Construction Cost Subtotal				Allowance Subtotal: \$ 741,000
Paving and Allowance Subtotal:				\$ 2,487,000
Construction Contingency:		15%	\$ 373,000	
Mobilization		5%	\$ 124,000	
Prep ROW		\$3,000 / STA	\$ 20,000	
Construction Cost TOTAL:				\$ 3,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,100,000
Engineering/Survey/Testing:		16%	\$ 496,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		\$ -
Impact Fee Project Cost TOTAL:			\$ 3,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-23
Name:	Kenney Fort Blvd (3)	This project consists of the construction of a new 6 lane divided arterial.		
Limits:	830' S of Gattis School Rd to SH 45			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	2,178			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	21,458	cy	\$ 24.33	\$ 522,000
208	5" Asphalt (Type C)	12,139	ton	\$ 139.92	\$ 1,698,000
308	10" Base	8,175	cy	\$ 66.92	\$ 547,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	19,361	sy	\$ 7.30	\$ 141,000
508	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,679	gal	\$ 7.30	\$ 27,000
608	10' Concrete Sidewalk	43,562	sf	\$ 10.95	\$ 477,000
708	Machine Laid Curb & Gutter	8,712	lf	\$ 36.50	\$ 318,000
808	Turn Lanes and Median Openings	1,320	sy	\$ 243.06	\$ 321,000
Paving Construction Cost Subtotal:					\$ 4,051,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 81,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,215,000	
✓	Illumination		10%	\$ 405,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 81,000	
✓	Sewer	Minor Adjustments	2%	\$ 81,000	
✓	Turf and Erosion Control		4%	\$ 162,000	
✓	Landscaping and Irrigation		2%	\$ 81,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 2,106,000	
Paving and Allowance Subtotal:				\$ 6,157,000	
Construction Contingency:				15%	\$ 924,000
Mobilization				8%	\$ 493,000
Prep ROW				4%	\$ 246,000
Construction Cost TOTAL:				\$ 7,900,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,900,000
Engineering/Survey/Testing:		16%	\$ 1,264,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 3,267,000
Impact Fee Project Cost TOTAL:			\$ 12,400,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-24
Name:	Greenlawn Blvd	This project consists of the reconstruction of existing pavement with one third of a 6 lane divided arterial.		
Limits:	IH 35 NBFR to SH 45 EBFR			
Impact Fee Class:	6 Lane - Enhanced (1/3)			
Ultimate Class:	6 Lane - Enhanced (1/3)			
Length (lf):	5,351			
Service Area(s):	C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 11,429,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 11,429,000
Engineering/Survey/Testing:		16%	\$ 1,828,640
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 3,211,000
Overall Project Cost Total:			\$ 16,468,640
City Contribution:			\$ 16,468,640
Impact Fee Project Cost:			\$ 16,468,640

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-26
Name:	Schultz (1)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	SH 45 EBFR to 290' S of SH 45 EBFR			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	291			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,113	cy	\$ 24.33	\$ 51,000
203	12" Asphalt (Type C)	1,151	ton	\$ 139.92	\$ 161,000
303	16" Base	775	cy	\$ 66.92	\$ 52,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	1,872	sy	\$ 7.30	\$ 14,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	349	gal	\$ 7.30	\$ 3,000
603	10' Concrete Sidewalk	5,811	sf	\$ 10.95	\$ 64,000
703	Machine Laid Curb & Gutter	1,162	lf	\$ 36.50	\$ 42,000
803	Turn Lanes and Median Openings	176	sy	\$ 243.06	\$ 43,000
Paving Construction Cost Subtotal:					\$ 430,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	22,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	9,000
✓	Roadway Drainage	Standard Internal System	30%	\$	129,000
✓	Illumination		10%	\$	43,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	9,000
✓	Sewer	Minor Adjustments	2%	\$	9,000
✓	Turf and Erosion Control		4%	\$	17,000
✓	Landscaping and Irrigation		2%	\$	9,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	247,000
Paving and Allowance Subtotal:					\$ 677,000
Construction Contingency:				15%	\$ 102,000
Mobilization				8%	\$ 54,000
Prep ROW				4%	\$ 27,000
Construction Cost TOTAL:					\$ 900,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 900,000
Engineering/Survey/Testing:		16%	\$ 144,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 139,000
Impact Fee Project Cost TOTAL:			\$ 1,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	C-27
Name:	Schultz (2)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	290' S of SH 45 EBFR to 255' S of Autumn Sage W			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,637			
Service Area(s):	C			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	19,173	cy	\$ 24.33	\$ 467,000
203	12" Asphalt (Type C)	10,441	ton	\$ 139.92	\$ 1,461,000
303	16" Base	7,031	cy	\$ 66.92	\$ 470,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	16,992	sy	\$ 7.30	\$ 124,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,164	gal	\$ 7.30	\$ 23,000
603	10' Concrete Sidewalk	52,734	sf	\$ 10.95	\$ 577,000
703	Machine Laid Curb & Gutter	10,547	lf	\$ 36.50	\$ 385,000
803	Turn Lanes and Median Openings	1,598	sy	\$ 243.06	\$ 388,000
Paving Construction Cost Subtotal:					\$ 3,895,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	195,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	78,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,169,000
✓	Illumination		10%	\$	390,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	78,000
✓	Sewer	Minor Adjustments	2%	\$	78,000
✓	Turf and Erosion Control		4%	\$	156,000
✓	Landscaping and Irrigation		2%	\$	78,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,222,000
Paving and Allowance Subtotal:				\$	6,117,000
Construction Contingency:				15%	\$ 918,000
Mobilization				8%	\$ 489,000
Prep ROW				4%	\$ 245,000
Construction Cost TOTAL:				\$	7,800,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,800,000
Engineering/Survey/Testing:		16%	\$ 1,248,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,266,000
Impact Fee Project Cost TOTAL:			\$ 10,300,000

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City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area D

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
D-1	4 Lane - Proposed	CR 107	New	CR 107	University Blvd	50%	\$ 3,940,000	\$ 1,970,000
D-2	4 Lane - Enhanced	University Blvd (6)	Widening	Kenney Fort Blvd	SH 130	100%	\$ 8,500,000	\$ 8,500,000
D-3	4 Lane - Proposed	CR 118	Widening	University Blvd	Avery Nelson Pkwy	100%	\$ 7,800,000	\$ 7,800,000
D-4	4 Lane - Enhanced	Avery Nelson Pkwy (3)	Widening	Kenney Fort Blvd	CR 110	100%	\$ 10,200,000	\$ 10,200,000
D-5	4 Lane - Existing	Avery Nelson Pkwy (4)	Widening	CR 110	5015' E of CR 110	100%	\$ 12,000,000	\$ 12,000,000
D-6	4 Lane - Proposed	CR 118	Widening	Carmel Creekside Dr	Ed Schmidt Blvd	100%	\$ 1,960,000	\$ 1,960,000
B-27, D-7	6 Lane - Proposed	Kenney Fort Blvd (1)	New	CR 117	125' N of Haselwood Ln	100%	\$ 15,018,951	\$ 15,018,951
D-8	4 Lane - Proposed	Kenney Fort Blvd (6)	Widening	125' N of Haselwood Ln	200' N of Bluffstone Dr	50%	\$ 15,018,951	\$ 7,509,476
B-28, D-9	6 Lane - Proposed	Kenney Fort Blvd (7)	New	200' N of Bluffstone Dr	Old Settlers Blvd	100%	\$ 9,173,038	\$ 9,173,038
B-39, D-10	6 Lane - Proposed	Kenney Fort Blvd (2)	New	Old Settlers Blvd	2540' S of Old Settler's Blvd	100%	\$ 5,000,000	\$ 5,000,000
B-40, D-11	6 Lane - Proposed (1/2)	Kenney Fort Blvd (3)	Previously Constructed	2540' S of Old Settler's Blvd	4625' N of Chandler Creek Blvd	50%	\$ 4,900,000	\$ 2,450,000
B-41, D-12	6 Lane - Proposed	Kenney Fort Blvd (4)	Previously Constructed	4625' N of Chandler Creek Blvd	3115' N of Chandler Creek Blvd	100%	\$ 10,700,000	\$ 10,700,000
B-41, D-13	6 Lane - Proposed	Kenney Fort Blvd (8)	New	3115' N of Chandler Creek Blvd	Chandler Creek Blvd	100%	\$ 3,700,000	\$ 3,700,000
B-42, D-14	6 Lane - Proposed	Kenney Fort Blvd (5)	New	Chandler Creek Blvd	Joe DiMaggio Blvd	100%	\$ 9,600,000	\$ 9,600,000
D-15	4 Lane - Proposed	Red Bud Ln (1)	New	Guadalajara St	160' N of Margarita Loop	100%	\$ 7,300,000	\$ 7,300,000
D-16	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	(1/2) Widening	160' N of Margarita Loop	CR 117	50%	\$ 5,600,000	\$ 2,800,000
D-17	4 Lane - Enhanced (1/2)	Red Bud Ln (3)	(1/2) Widening	CR 117	Old Settlers Blvd	100%	\$ 4,700,000	\$ 4,700,000
D-18	4 Lane - Enhanced	Red Bud Ln (4)	Widening	Old Settlers Blvd	170' N of Joseph St	100%	\$ 8,486,565	\$ 8,486,565
D-19	4 Lane - Enhanced	Red Bud Ln (5)	Widening	170' N of Joseph St	160' S of Covered Wagon Trl	50%	\$ 3,446,574	\$ 1,723,287
D-20	4 Lane - Enhanced	Red Bud Ln (6)	Widening	160' S of Covered Wagon Trl	US 79	100%	\$ 7,711,173	\$ 7,711,173
D-21	4 Lane - Enhanced	CR 122 (1)	Widening	Red Bud Ln	230' SW of Rosalina Loop	100%	\$ 13,671,273	\$ 13,671,273
D-22	3 Lane - Proposed	CR 122 (2)	Widening	230' SW of Rosalina Loop	100' S of Emilia Ln	50%	\$ 2,472,664	\$ 1,236,332
D-23	3 Lane - Proposed	CR 122 (3)	Widening	100' S of Emilia Ln	100' S of Rosalina Loop	100%	\$ 1,106,506	\$ 1,106,506
D-24	3 Lane - Proposed	CR 122 (4)	Widening	100' S of Rosalina Loop	100' S of Penelope Ct	50%	\$ 3,430,613	\$ 1,715,306
D-25	4 Lane - Proposed	Old Settlers Blvd	Widening	Red Bud Ln	CR 110	100%	\$ 20,155,000	\$ 20,155,000
TOTAL							\$ 195,591,307	\$ 176,186,906

City of Round Rock - 2023 Roadway Impact Fee Study

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

Intersection Improvements - Service Area D

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
-	Update ITS and Traffic Managemenet Infrastructure			25%	\$ 20,900,000	\$ 5,225,000
TOTAL						\$ 20,900,000 \$ 5,225,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-1
Name:	CR 107	This project consists of the construction of a new 4 lane divided secondary arterial.		
Limits:	CR 107 to University Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,249			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	30,895	cy	\$ 24.33	\$ 752,000
202	12" Asphalt (Type C)	16,825	ton	\$ 139.92	\$ 2,354,000
302	16" Base	11,330	cy	\$ 66.92	\$ 758,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	27,380	sy	\$ 7.30	\$ 200,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	5,098	gal	\$ 7.30	\$ 37,000
602	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
702	Machine Laid Curb & Gutter	16,995	lf	\$ 36.50	\$ 620,000
802	Turn Lanes and Median Openings	2,575	sy	\$ 243.06	\$ 626,000
Paving Construction Cost Subtotal:					\$ 6,503,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 130,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 1,951,000	
✓	Illumination		10%	\$ 650,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 130,000	
✓	Sewer	Minor Adjustments	2%	\$ 130,000	
✓	Turf and Erosion Control		4%	\$ 260,000	
✓	Landscaping and Irrigation		2%	\$ 130,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 3,381,000	
Paving and Allowance Subtotal:				\$ 9,884,000	
Construction Contingency:				15%	\$ 1,483,000
Mobilization				8%	\$ 791,000
Prep ROW				4%	\$ 395,000
Construction Cost TOTAL:				\$ 12,600,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 12,600,000
Engineering/Survey/Testing:		16%	\$ 2,016,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$10/s.f.	\$ 5,098,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 3,940,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-2
Name:	University Blvd (6)	This project consists of the reconstruction of the existing pavement to a 4 lane divided secondary arterial.		
Limits:	Kenney Fort Blvd to SH 130			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,679			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	12,212	cy	\$ 24.33	\$ 297,000
203	12" Asphalt (Type C)	6,650	ton	\$ 139.92	\$ 930,000
303	16" Base	4,478	cy	\$ 66.92	\$ 300,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	10,823	sy	\$ 7.30	\$ 79,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,015	gal	\$ 7.30	\$ 15,000
603	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
703	Machine Laid Curb & Gutter	6,718	lf	\$ 36.50	\$ 245,000
803	Turn Lanes and Median Openings	1,018	sy	\$ 243.06	\$ 247,000
Paving Construction Cost Subtotal:					\$ 3,269,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	163,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	65,000
✓	Roadway Drainage	Standard Internal System	30%	\$	981,000
✓	Illumination		10%	\$	327,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	65,000
✓	Sewer	Minor Adjustments	2%	\$	65,000
✓	Turf and Erosion Control		4%	\$	131,000
✓	Landscaping and Irrigation		2%	\$	65,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,862,000
Paving and Allowance Subtotal:				\$	5,131,000
Construction Contingency:				15%	\$ 770,000
Mobilization				8%	\$ 410,000
Prep ROW				4%	\$ 205,000
Construction Cost TOTAL:				\$	6,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,600,000
Engineering/Survey/Testing:		16%	\$ 1,056,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 806,000
Impact Fee Project Cost TOTAL:			\$ 8,500,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-3
Name:	CR 118	This project consists of the reconstruction of the existing pavement to a 4 lane divided secondary arterial.		
Limits:	University Blvd to Avery Nelson Pkwy			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,489			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	10,830	cy	\$ 24.33	\$ 264,000
202	12" Asphalt (Type C)	5,898	ton	\$ 139.92	\$ 825,000
302	16" Base	3,972	cy	\$ 66.92	\$ 266,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	9,598	sy	\$ 7.30	\$ 70,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,787	gal	\$ 7.30	\$ 13,000
602	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
702	Machine Laid Curb & Gutter	5,958	lf	\$ 36.50	\$ 217,000
802	Turn Lanes and Median Openings	903	sy	\$ 243.06	\$ 219,000
Paving Construction Cost Subtotal:					\$ 3,030,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	152,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	61,000
✓	Roadway Drainage	Standard Internal System	30%	\$	909,000
✓	Illumination		10%	\$	303,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	61,000
✓	Sewer	Minor Adjustments	2%	\$	61,000
✓	Turf and Erosion Control		4%	\$	121,000
✓	Landscaping and Irrigation		2%	\$	61,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,729,000
Paving and Allowance Subtotal:					\$ 4,759,000
Construction Contingency:				15%	\$ 714,000
Mobilization				8%	\$ 381,000
Prep ROW				4%	\$ 190,000
Construction Cost TOTAL:					\$ 6,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 6,100,000
Engineering/Survey/Testing:		16%	\$ 976,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 715,000
Impact Fee Project Cost TOTAL:			\$ 7,800,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-4
Name:	Avery Nelson Pkwy (3)	This project consists of the reconstruction of the existing pavement to a 4 lane divided secondary arterial.		
Limits:	Kenney Fort Blvd to CR 110			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,255			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	16,395	cy	\$ 24.33	\$ 399,000
203	12" Asphalt (Type C)	8,929	ton	\$ 139.92	\$ 1,249,000
303	16" Base	6,013	cy	\$ 66.92	\$ 402,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	14,530	sy	\$ 7.30	\$ 106,000
503	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,706	gal	\$ 7.30	\$ 20,000
603	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
703	Machine Laid Curb & Gutter	9,019	lf	\$ 36.50	\$ 329,000
803	Turn Lanes and Median Openings	1,366	sy	\$ 243.06	\$ 332,000
Paving Construction Cost Subtotal:					\$ 3,993,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	200,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	80,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,198,000
✓	Illumination		10%	\$	399,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	80,000
✓	Sewer	Minor Adjustments	2%	\$	80,000
✓	Turf and Erosion Control		4%	\$	160,000
✓	Landscaping and Irrigation		2%	\$	80,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,277,000
Paving and Allowance Subtotal:				\$	6,270,000
Construction Contingency:				15%	\$ 941,000
Mobilization				8%	\$ 502,000
Prep ROW				4%	\$ 251,000
Construction Cost TOTAL:				\$	8,000,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 8,000,000
Engineering/Survey/Testing:			\$ 1,110,119
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,082,000
Impact Fee Project Cost TOTAL:			\$ 10,200,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-5
Name:	Avery Nelson Pkwy (4)	This project consists of the reconstruction of the existing pavement to a 4 lane divided secondary arterial.		
Limits:	CR 110 to 5015' E of CR 110			
Impact Fee Class:	4 Lane - Existing			
Ultimate Class:	4 Lane - Existing			
Length (lf):	2,728			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
112	Unclassified Street Excavation	19,837	cy	\$ 24.33	\$ 483,000
212	12" Asphalt (Type C)	10,803	ton	\$ 139.92	\$ 1,512,000
312	16" Base	7,275	cy	\$ 66.92	\$ 487,000
412	10" Lime Stabilization (with Lime @ 45#/sy)	17,581	sy	\$ 7.30	\$ 128,000
512	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	3,274	gal	\$ 7.30	\$ 24,000
612	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
712	Machine Laid Curb & Gutter	10,912	lf	\$ 36.50	\$ 398,000
812	Turn Lanes and Median Openings	1,653	sy	\$ 243.06	\$ 402,000
Paving Construction Cost Subtotal:					\$ 4,590,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	230,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	92,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,377,000
✓	Illumination		10%	\$	459,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	92,000
✓	Sewer	Minor Adjustments	2%	\$	92,000
✓	Turf and Erosion Control		4%	\$	184,000
✓	Landscaping and Irrigation		2%	\$	92,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,618,000
Paving and Allowance Subtotal:				\$	7,208,000
Construction Contingency:				15%	\$ 1,081,000
Mobilization				8%	\$ 577,000
Prep ROW				4%	\$ 288,000
Construction Cost TOTAL:				\$	9,200,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 9,200,000
Engineering/Survey/Testing:		16%	\$ 1,472,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,309,000
Impact Fee Project Cost TOTAL:			\$ 12,000,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-6
Name:	CR 118	This project consists of the reconstruction of the existing pavement to a 4 lane divided secondary arterial.		
Limits:	Carmel Creekside Dr to Ed Schmidt Bl			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	2,091			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	15,202	cy	\$ 24.33	\$ 370,000
202	12" Asphalt (Type C)	8,279	ton	\$ 139.92	\$ 1,158,000
302	16" Base	5,575	cy	\$ 66.92	\$ 373,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	13,473	sy	\$ 7.30	\$ 98,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,509	gal	\$ 7.30	\$ 18,000
602	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
702	Machine Laid Curb & Gutter	8,362	lf	\$ 36.50	\$ 305,000
802	Turn Lanes and Median Openings	1,267	sy	\$ 243.06	\$ 308,000
Paving Construction Cost Subtotal:					\$ 3,786,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	189,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	76,000
✓	Roadway Drainage	Standard Internal System	30%	\$	1,136,000
✓	Illumination		10%	\$	379,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	76,000
✓	Sewer	Minor Adjustments	2%	\$	76,000
✓	Turf and Erosion Control		4%	\$	151,000
✓	Landscaping and Irrigation		2%	\$	76,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	2,159,000
Paving and Allowance Subtotal:				\$	5,945,000
Construction Contingency:				15%	\$ 892,000
Mobilization				8%	\$ 476,000
Prep ROW				4%	\$ 238,000
Construction Cost TOTAL:				\$	7,600,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 7,600,000
Engineering/Survey/Testing:		16%	\$ 1,216,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	\$20/s.f.	\$ 1,003,000
Impact Fee Project Cost TOTAL (20% City Contribution)			\$ 1,960,000

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City of Round Rock
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Kenney Fort Blvd (1)	This project consists of the construction of a new 6 lane divided arterial.	B-27, D-7
Limits:	CR 117 to 125' N of Haselwood Ln		
Impact Fee Class:	6 Lane - Proposed		
Ultimate Class:	6 Lane - Proposed		
Length (lf):	3,074		
Service Area(s):	B,D		

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 11,034,874

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 11,034,874
Engineering/Survey/Testing:	From City estimate	-	\$ 846,007
ROW/Easement Acquisition:	New Roadway Alignment	-	\$ 3,138,070
Overall Project Cost Total:			\$ 15,018,951
City Contribution:			\$ 15,018,951
Impact Fee Project Cost:			\$ 15,018,951

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City of Round Rock
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	B-28, D-9
Name:	Kenney Fort Blvd (3)	This project consists of the construction of a new 6 lane divided arterial.		
Limits:	200' N of Bluffstone Dr to Old Settlers			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	1,878			
Service Area(s):	B,D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 6,739,706

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 6,739,706
Engineering/Survey/Testing:	From City estimate	-	\$ 516,711
ROW/Easement Acquisition:	New Roadway Alignment	-	\$ 1,916,621
Overall Project Cost Total:			\$ 9,173,038
City Contribution:			\$ 9,173,038
Impact Fee Project Cost:			\$ 9,173,038

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Kenney Fort Blvd (8)	This project consists of the construction of a new 6 lane divided arterial.	B-41, D-13
Limits:	3115' N of Chandler Creek Blvd to Chandler Creek Blvd		
Impact Fee Class:	6 Lane - Proposed		
Ultimate Class:	6 Lane - Proposed		
Length (lf):	201		
Service Area(s):	B,D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	1,984	cy	\$ 24.33	\$ 48,000
208	5" Asphalt (Type C)	1,122	ton	\$ 139.92	\$ 157,000
308	10" Base	756	cy	\$ 66.92	\$ 51,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	1,790	sy	\$ 7.30	\$ 13,000
508	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	340	gal	\$ 7.30	\$ 2,000
608	10' Concrete Sidewalk	105,600	sf	\$ 10.95	\$ 1,156,000
708	Machine Laid Curb & Gutter	806	lf	\$ 36.50	\$ 29,000
808	Turn Lanes and Median Openings	122	sy	\$ 243.06	\$ 30,000
Paving Construction Cost Subtotal:					\$ 1,486,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
Traffic Control		None Anticipated	0%	\$ -	
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 30,000	
✓	Roadway Drainage	Standard Internal System	30%	\$ 446,000	
✓	Illumination		10%	\$ 149,000	
Special Drainage Structures		None Anticipated		\$ -	
✓	Water	Minor Adjustments	2%	\$ 30,000	
✓	Sewer	Minor Adjustments	2%	\$ 30,000	
✓	Turf and Erosion Control		4%	\$ 59,000	
✓	Landscaping and Irrigation		2%	\$ 30,000	
Miscellaneous:			0%	\$ -	
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$ 774,000	
Paving and Allowance Subtotal:				\$ 2,260,000	
Construction Contingency:				15%	\$ 339,000
Mobilization				8%	\$ 181,000
Prep ROW				4%	\$ 90,000
Construction Cost TOTAL:				\$ 2,900,000	

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 2,900,000
Engineering/Survey/Testing:		16%	\$ 464,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 302,000
Impact Fee Project Cost TOTAL:			\$ 3,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-15
Name:	Red Bud Ln (1)	This project consists of widening existing pavement with half of a 4 lane divided arterial.		
Limits:	Guadalajara St to 160' N of Margarita Loop			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,867			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	13,576	cy	\$ 24.33	\$ 330,000
202	12" Asphalt (Type C)	7,393	ton	\$ 139.92	\$ 1,034,000
302	16" Base	4,979	cy	\$ 66.92	\$ 333,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	12,032	sy	\$ 7.30	\$ 88,000
502	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	2,240	gal	\$ 7.30	\$ 16,000
602	10' Concrete Sidewalk	37,340	sf	\$ 10.95	\$ 409,000
702	Machine Laid Curb & Gutter	7,468	lf	\$ 36.50	\$ 273,000
802	Turn Lanes and Median Openings	1,132	sy	\$ 243.06	\$ 275,000
Paving Construction Cost Subtotal:					\$ 2,758,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	138,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	55,000
✓	Roadway Drainage	Standard Internal System	30%	\$	827,000
✓	Illumination		10%	\$	276,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	55,000
✓	Sewer	Minor Adjustments	2%	\$	55,000
✓	Turf and Erosion Control		4%	\$	110,000
✓	Landscaping and Irrigation		2%	\$	55,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,571,000
Paving and Allowance Subtotal:					\$ 4,329,000
Construction Contingency:			15%	\$	649,000
Mobilization			8%	\$	346,000
Prep ROW			4%	\$	173,000
Construction Cost TOTAL:					\$ 5,500,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 5,500,000
Engineering/Survey/Testing:		16%	\$ 880,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 896,000
Impact Fee Project Cost TOTAL:			\$ 7,300,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-16
Name:	Red Bud Ln (2)	This project consists of widening existing pavement with half of a 4 lane divided arterial.		
Limits:	160' N of Margarita Loop to CR 117			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced (1/2)			
Length (lf):	1,845			
Service Area(s):	D			

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,708	cy	\$ 24.33	\$ 163,000
201	12" Asphalt (Type C)	3,653	ton	\$ 139.92	\$ 511,000
301	16" Base	2,460	cy	\$ 66.92	\$ 165,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	5,945	sy	\$ 7.30	\$ 43,000
501	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,107	gal	\$ 7.30	\$ 8,000
601	10' Concrete Sidewalk	36,901	sf	\$ 10.95	\$ 404,000
701	Machine Laid Curb & Gutter	3,690	lf	\$ 36.50	\$ 135,000
801	Turn Lanes and Median Openings	1,118	sy	\$ 243.06	\$ 272,000
Paving Construction Cost Subtotal:					\$ 1,701,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	85,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	34,000
✓	Roadway Drainage	Standard Internal System	30%	\$	510,000
✓	Illumination		10%	\$	170,000
✓	Special Drainage Structures	Bridge Crossing		\$	500,000
✓	Water	Minor Adjustments	2%	\$	34,000
✓	Sewer	Minor Adjustments	2%	\$	34,000
✓	Turf and Erosion Control		4%	\$	68,000
✓	Landscaping and Irrigation		2%	\$	34,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	1,469,000
Paving and Allowance Subtotal:				\$	3,170,000
Construction Contingency:				15%	\$ 476,000
Mobilization				8%	\$ 254,000
Prep ROW				4%	\$ 127,000
Construction Cost TOTAL:				\$	4,100,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 4,100,000
Engineering/Survey/Testing:		16%	\$ 656,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 886,000
Impact Fee Project Cost TOTAL:			\$ 5,600,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.
Name:	Red Bud Ln (3)	This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.	D-17
Limits:	CR 117 to Old Settlers Blvd		
Impact Fee Class:	4 Lane - Enhanced (1/2)		
Ultimate Class:	4 Lane - Enhanced (1/2)		
Length (lf):	1,788		
Service Area(s):	D		

Roadway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,501	cy	\$ 24.33	\$ 158,000
201	12" Asphalt (Type C)	3,541	ton	\$ 139.92	\$ 495,000
301	16" Base	2,384	cy	\$ 66.92	\$ 160,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	5,762	sy	\$ 7.30	\$ 42,000
501	Surface Treatment (0.2 gal/sy, Prime Coat AE-P)	1,073	gal	\$ 7.30	\$ 8,000
601	10' Concrete Sidewalk	35,763	sf	\$ 10.95	\$ 392,000
701	Machine Laid Curb & Gutter	3,576	lf	\$ 36.50	\$ 131,000
801	Turn Lanes and Median Openings	1,084	sy	\$ 243.06	\$ 263,000
Paving Construction Cost Subtotal:					\$ 1,649,000
Major Construction Component Allowances**:					
Item Description		Notes	Allowance	Item Cost	
✓	Traffic Control	Construction Phase Traffic Control	5%	\$	82,000
✓	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	33,000
✓	Roadway Drainage	Standard Internal System	30%	\$	495,000
✓	Illumination		10%	\$	165,000
	Special Drainage Structures	None Anticipated		\$	-
✓	Water	Minor Adjustments	2%	\$	33,000
✓	Sewer	Minor Adjustments	2%	\$	33,000
✓	Turf and Erosion Control		4%	\$	66,000
✓	Landscaping and Irrigation		2%	\$	33,000
	Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal			Allowance Subtotal:	\$	940,000
Paving and Allowance Subtotal:				\$	2,589,000
Construction Contingency:				15%	\$ 388,000
Mobilization				8%	\$ 207,000
Prep ROW				4%	\$ 104,000
Construction Cost TOTAL:				\$	3,300,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 3,300,000
Engineering/Survey/Testing:		16%	\$ 528,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 858,000
Impact Fee Project Cost TOTAL:			\$ 4,700,000

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-18
Name:	Red Bud Ln (4)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	Old Settlers Blvd to 170' N of Joseph S			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,356			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 6,341,004

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 6,341,004
Engineering/Survey/Testing:		16%	\$ 1,014,561
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,131,000
Overall Project Cost Total:			\$ 8,486,565
City Contribution:			\$ 8,486,565
Impact Fee Project Cost :			\$ 8,486,565

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-19
Name:	Red Bud Ln (5)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	170' N of Joseph St to 160' S of Cover			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	957			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 2,575,495

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 2,575,495
Engineering/Survey/Testing:		16%	\$ 412,079
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 459,000
Overall Project Cost Total:			\$ 3,446,574
City Contribution:			\$ 3,446,574
Impact Fee Project Cost:			\$ 3,446,574

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-20
Name:	Red Bud Ln (6)	This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.		
Limits:	160' S of Covered Wagon Trl to US 79			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,141			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 5,761,356

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 5,761,356
Engineering/Survey/Testing:		16%	\$ 921,817
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,028,000
Overall Project Cost Total:			\$ 7,711,173
City Contribution:			\$ 7,711,173
Impact Fee Project Cost:			\$ 7,711,173

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-21
Name:	CR 122 (1)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	Red Bud Ln to 230' SW of Rosalina Ln			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,583			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 10,716,615

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 10,716,615
Engineering/Survey/Testing:		16%	\$ 1,714,658
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 1,240,000
Overall Project Cost Total:			\$ 13,671,273
City Contribution:			\$ 13,671,273
Impact Fee Project Cost :			\$ 13,671,273

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-22
Name:	CR 122 (2)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	230' SW of Rosalina Loop to 100' S of			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	478			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 1,983,331

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 1,983,331
Engineering/Survey/Testing:		16%	\$ 317,333
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 172,000
Overall Project Cost Total:			\$ 2,472,664
City Contribution:			\$ 2,472,664
Impact Fee Project Cost:			\$ 2,472,664

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-23
Name:	CR 122 (3)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	100' S of Emilia Ln to 100' S of Rosalir			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	214			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 887,505

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 887,505
Engineering/Survey/Testing:		16%	\$ 142,001
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 77,000
Overall Project Cost Total:			\$ 1,106,506
City Contribution:			\$ 1,106,506
Impact Fee Project Cost:			\$ 1,106,506

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City of Round Rock
2023 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-24
Name:	CR 122 (4)	This project consists of the reconstruction of existing pavement to a 3 lane divided arterial.		
Limits:	100' S of Rosalina Loop to 100' S of P			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	663			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 2,751,390

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 2,751,390
Engineering/Survey/Testing:		16%	\$ 440,222
ROW/Easement Acquisition:	Existing Alignment	\$20/s.f.	\$ 239,000
Overall Project Cost Total:			\$ 3,430,613
City Contribution:			\$ 3,430,613
Impact Fee Project Cost (X%):			\$ 3,430,613

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City of Round Rock
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

Project Information:		Description:	Project No.	D-25
Name:	Old Settlers Blvd	This project consists of the construction of a new 4 lane divided asphalt arterial.		
Limits:	Red Bud Ln to CR 110			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,045			
Service Area(s):	D			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	\$ 11,431,000

Impact Fee Project Cost Summary			
Item Description	Notes:	Allowance	Item Cost
Construction:	From City estimate	-	\$ 11,431,000
Engineering/Survey/Testing:	From City estimate	-	\$ 3,870,000
ROW/Easement Acquisition:	New Roadway Alignment	\$10/s.f.	\$ 4,854,000
Overall Project Cost Total:			\$ 20,155,000
City Contribution:			\$ 20,155,000
Impact Fee Project Cost:			\$ 20,155,000

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

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



Appendix B – Roadway Impact Fee CIP Service Units of Supply

City of Round Rock - 2023 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area A

8/3/2023

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 ¹	VEH-MI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY PK-HR VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-1	New Hope Rd (1)	Sam Bass Rd to CR 175	1.10	4	4 Lane - Enhanced (1/2)	129	100%	810	3570	142	3,428	\$ 16,500,000	\$ 16,500,000
A-2	New Hope Rd (2)	240' W of Lagoona Dr to Flowstone Ln	0.55	4	4 Lane - Enhanced (1/2)	n/a	50%	810	891	0	891	\$ 8,200,000	\$ 4,100,000
A-3	New Hope Rd (3)	Flowstone Ln to 1000' E of Wyoming Springs Dr	0.46	4	4 Lane - Proposed	New	50%	810	751	0	751	\$ 11,100,000	\$ 5,550,000
A-4, B-1	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	6	6 Lane - Enhanced	n/a	50%	900	518	0	518	\$ 9,152,896	\$ 4,576,448
A-7	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	6	6 Lane - Enhanced	3177	50%	900	2627	1,546	1,081	\$ 5,180,000	\$ 2,590,000
A-8	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	6	6 Lane - Enhanced	3177	100%	900	4442	2,613	1,829	\$ 5,200,000	\$ 5,200,000
A-9	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	6	6 Lane - Enhanced	3177	50%	900	3618	2,129	1,489	\$ 6,960,000	\$ 3,480,000
A-10	Wyoming Springs Dr (3)	390' N of GoldenOak Cir to Alondra Way	0.13	4	4 Lane - Enhanced (1/2)	487	100%	810	432	65	367	\$ 1,800,000	\$ 1,800,000
A-11	Eagles Nest Dr (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	1.73	4	4 Lane - Proposed	New	100%	810	5609	0	5,609	\$ 41,600,000	\$ 41,600,000
A-12	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.79	4	4 Lane - Enhanced (1/2)	New	100%	810	2555	0	2,555	\$ 13,800,000	\$ 13,800,000
A-13	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.14	4	4 Lane - Proposed	1809	100%	810	469	262	207	\$ 3,500,000	\$ 3,500,000
A-14	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.76	4	4 Lane - Proposed	0	100%	810	2452	0	2,452	\$ 19,400,000	\$ 19,400,000
A-15, B-11	Eagles Nest Dr (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.17	4	4 Lane - Proposed	New	100%	810	557	0	557	\$ 12,216,939	\$ 12,216,939
A-16	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	5	5 Lane - Enhanced	242	100%	770	392	25	367	\$ 2,100,000	\$ 2,100,000
A-17	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	5	5 Lane - Enhanced	639	100%	770	927	154	773	\$ 5,000,000	\$ 5,000,000
A-21	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	3	3 Lane - Enhanced	664	50%	510	269	117	152	\$ 3,900,000	\$ 1,950,000
A-22	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	3	3 Lane - Enhanced	n/a	100%	510	287	0	287	\$ 2,100,000	\$ 2,100,000
A-23	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	0.21	3	3 Lane - Enhanced	664	100%	510	325	141	184	\$ 2,400,000	\$ 2,400,000
A-24	Sam Bass Rd (6)	Hairy Man Rd to Chisholm Trl Rd	1.33	3	3 Lane - Enhanced	n/a	50%	510	1015	0	1,015	\$ 14,800,000	\$ 7,400,000
A-26	Wyoming Springs Dr (4)	Sam Bass Rd to Creek Bend Blvd	0.88	4	4 Lane - Proposed	New	100%	810	2851	0	2,851	\$ 26,379,928	\$ 26,379,928
A-28	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	4	4 Lane - Enhanced	New	100%	810	1303	0	1,303	\$ 11,012,302	\$ 11,012,302
A-29	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	4	4 Lane - Proposed	New	100%	810	1086	0	1,086	\$ 18,900,346	\$ 18,900,346
A-30	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	4	4 Lane - Enhanced	n/a	100%	810	212	0	212	\$ 1,400,000	\$ 1,400,000
A-31, C-1	RM 620	Deepwood Dr to IH 35 SBFR	0.93	6	6 Lane - Enhanced	2985	50%	900	2517	1,392	1,125	\$ 12,560,624	\$ 6,280,312
SUBTOTAL									39,675	8,586	31,089	\$ 255,163,035	\$ 219,236,275
AI-1	Sam Bass Rd and FM 3406	SIGNAL	-	-	Intersection Improvements		100%					\$ 550,000	\$ 550,000
AI-2	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT	-	-			75%					\$ 2,500,000	\$ 1,875,000
AI-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES	-	-			100%					\$ 240,000	\$ 240,000
-	Update ITS and Traffic Managemenet Infrastructure	-	-	-			25%					\$ 20,900,000	\$ 5,225,000
SUBTOTAL												\$ 24,190,000	\$ 7,890,000

2023 Roadway Impact Fee Study Cost Per Service Area \$ 23,750

TOTAL COST IN SERVICE AREA A \$ 227,150,025

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area B

8/3/2023

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 ¹	VEH-MI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY PK-HR VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-4, B-1	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	6	6 Lane - Enhanced	n/a	50%	900	518	0	518	\$ 9,152,896	\$ 4,576,448
B-4	University Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	6	6 Lane - Enhanced	1,719	100%	900	2660	847	1813	\$ 17,220,832	\$ 17,220,832
B-5	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	6	6 Lane - Enhanced	1,751	50%	900	5472	1774	3698	\$ 53,300,000	\$ 26,650,000
B-6	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	4	4 Lane - Enhanced	1,554	100%	810	1180	566	614	\$ 8,200,000	\$ 8,200,000
B-7	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	4	4 Lane - Enhanced	1,554	50%	810	1256	602	654	\$ 17,000,000	\$ 8,500,000
B-8	University Blvd (5)	Lunata Way to Kenney Fort Blvd (Future)	0.16	4	4 Lane - Enhanced	1,554	100%	810	515	247	268	\$ 4,300,000	\$ 4,300,000
B-9	N Mays St (2)	350' S of University Blvd to 2000' S of University Blvd	0.31	4	4 Lane - Enhanced	n/a	100%	810	1015	0	1015	\$ 8,300,000	\$ 8,300,000
A-15, B-11	Eagles Nest (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	4	4 Lane - Proposed	New	50%	810	123	0	123	\$ 12,216,939	\$ 6,108,470
B-12	Eagles Nest (2)	IH 35 NBFR to Cypress Blvd	0.69	4	4 Lane - Proposed	New	100%	810	2236	0	2236	\$ 21,436,451	\$ 21,436,451
B-13	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	4	4 Lane - Enhanced	416	100%	810	861	110	751	\$ 5,500,000	\$ 5,500,000
B-15	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	4	4 Lane - Enhanced (AM)	n/a	100%	810	1754	0	1754	\$ 1,600,000	\$ 1,600,000
B-16	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	4	4 Lane - Enhanced (AM)	1,402	50%	810	484	209	275	\$ 900,000	\$ 450,000
B-17	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	4	4 Lane - Enhanced (AM)	1,402	100%	810	659	285	374	\$ 700,000	\$ 700,000
B-18	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	4	4 Lane - Enhanced (AM)	1,402	50%	810	167	72	95	\$ 300,000	\$ 150,000
B-19	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	4	4 Lane - Enhanced (AM)	1,402	100%	810	1287	557	730	\$ 1,200,000	\$ 1,200,000
B-21	Wallin Bradley (2)	College Park (Future) to A.W. Grimes Blvd	0.37	4	4 Lane - Proposed	0	100%	810	1210	0	1210	\$ 6,600,000	\$ 6,600,000
B-22	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	4	4 Lane - Proposed	New	100%	810	2945	0	2945	\$ 21,700,000	\$ 21,700,000
B-23	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	3	3 Lane - Existing	0	100%	510	695	0	695	\$ 1,795,839	\$ 1,795,839
B-24	Medical Center Pkwy	College Park to Seton Pkwy	0.27	4	4 Lane - Proposed	New	100%	810	867	0	867	\$ 1,058,160	\$ 1,058,160
B-25	Avery Nelson Pkwy (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	4	4 Lane - Enhanced	522	100%	810	2197	354	1843	\$ 14,000,000	\$ 14,000,000
B-26	Avery Nelson Pkwy (2)	3580' E of A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.57	4	4 Lane - Enhanced	n/a	50%	810	924	0	924	\$ 11,800,000	\$ 5,900,000
B-27, D-7	Kenney Fort Blvd (1)	CR 117 to 145' N of Haselwood Ln	0.58	6	6 Lane - Proposed	New	100%	900	3144	0	3144	\$ 15,018,951	\$ 15,018,951
B-28, D-9	CR 117 (1)	CR 112 to San Felipe St	0.00	4	4 Lane - Enhanced	New	50%	810	0	0	0	\$ 9,173,038	\$ 9,173,038
B-31	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	6	6 Lane - Enhanced	n/a	100%	900	6089	0	6089	\$ 14,700,000	\$ 14,700,000
B-32	Old Settlers Blvd (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	0.00	6	6 Lane - Enhanced (1/3)	n/a	100%	900	0	0	0	\$ 31,100,000	\$ 31,100,000
B-34	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	4	4 Lane - Enhanced (AM)	n/a	100%	810	911	0	911	\$ 3,900,000	\$ 3,900,000
B-35	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	6	6 Lane - Enhanced	1,284	100%	900	1888	449	1439	\$ 800,000	\$ 800,000
B-36	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	6	6 Lane - Enhanced	1,888	50%	900	539	189	350	\$ 1,820,000	\$ 1,820,000
B-37	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	6	6 Lane - Enhanced	1,888	100%	900	6749	2360	4389	\$ 1,620,000	\$ 810,000
B-38	Kenney Fort Blvd (4)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	6	6 Lane - Proposed (1/2)	2,168	100%	900	1601	643	958	\$ 6,960,000	\$ 6,960,000
B-39, D-10	Kenney Fort Blvd (5)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	6	6 Lane - Proposed	0	50%	900	496	0	496	\$ 5,000,000	\$ 5,000,000
B-40, D-11	Kenney Fort Blvd (6)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.36	6	6 Lane - Proposed	0	100%	900	1920	0	1920	\$ 4,900,000	\$ 2,450,000
B-41, D-12	Kenney Fort Blvd (7)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	6	6 Lane - Enhanced	New	100%	900	1600	0	1600	\$ 10,700,000	\$ 10,700,000
B-42, D-14	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.00	4	4 Lane - Enhanced	741	100%	810	0	0	0	\$ 9,600,000	\$ 9,600,000
B-46, C-6	US 79 (3)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	6	6 Lane - Enhanced	n/a	50%	900	761	0	761	\$ 16,379,383	\$ 8,189,692
B-47	Joe Dimaggio Blvd Extension	Kenney Fort Blvd to US 79	0.39	3	3 Lane - Proposed	2,936	100%	510	602	1155	-553	\$ 1,600,000	\$ 800,000
B-48	Wallin Bradley (1)	College Park Dr to Avery Nelson Blvd	0.81	3	3 Lane - Proposed	New	100%	510	1238	0	1238	\$ 7,000,000	\$ 7,000,000
B-49	Wallin Bradley (3)	A.W. Grimes Blvd to Kenney Fort Blvd (Future)	1.01	4	4 Lane - Proposed	New	100%	810	3261	0	3261	\$ 9,500,000	\$ 9,500,000
B-50	US 79 (2)	AW Grimes to Red Bud Ln	2.63	6	6 Lane - Enhanced	New	50%	900	7109	0	7109	\$ 18,200,000	\$ 18,200,000
B-51, C-28	Terra Vista Pkwy	Centerbrook Pl to 350' S of Aosta Ln	0.00	4	4 Lane - Existing	n/a	50%	810	0	0	0	\$ 12,760,000	\$ 6,380,000
SUBTOTAL									84,034	10,419	73,615	\$ 413,712,489	\$ 328,047,880
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES	-	-	Intersection		50%					\$ 2,141,000	\$ 1,070,500
-	Update ITS and Traffic Managemet Infrastructure	-	-	-	Improvements		25%					\$ 20,900,000	\$ 5,225,000
SUBTOTAL												\$ 23,041,000	\$ 6,295,500

2023 Roadway Impact Fee Study Cost Per Service Area \$ 23,750

TOTAL COST IN SERVICE AREA B \$ 334,367,130

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

8/3/2023

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 ¹	VEH-MI DEMAND PK-HR ²	EXCESS CAPACITY PK-HR VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA	
A-31, C-1	RM 620	Deepwood Dr to IH 35 SBFR	0.93	6	6 Lane - Enhanced	New	50%	900	2517	0	2,517	\$ 12,560,624	\$ 6,280,312	
C-3	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	4	4 Lane - Enhanced	1624	50%	810	137	68	69	\$ 1,800,000	\$ 900,000	
C-4	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	4	4 Lane - Enhanced (AM)	1577	100%	810	1038	505	533	\$ 900,000	\$ 900,000	
C-5	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	4	4 Lane - Enhanced	233	50%	810	680	49	631	\$ 8,700,000	\$ 4,350,000	
B-46, C-6	US 79 (1)	IH 35 NBFR to 200' E of Red Bud Ln	1.96	6	6 Lane - Enhanced	New	50%	900	5281	0	5281	\$ 16,379,383	\$ 8,189,692	
C-7	McNeil Extension	S Mays St to Georgetown St	0.52	3	3 Lane - Existing	589	100%	510	792	305	487	\$ 4,799,620	\$ 4,799,620	
C-8	S Mays St	Nash St to Gattis School Rd	0.69	4	4 Lane - Enhanced (AM)	1469	100%	810	2244	1017	1227	\$ 2,000,000	\$ 2,000,000	
C-10	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	6	6 Lane - Proposed	New	100%	900	5640	0	5640	\$ 40,800,000	\$ 40,800,000	
C-11	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	4	4 Lane - Enhanced (AM)	1702	50%	810	81	43	38	\$ 200,000	\$ 100,000	
C-12	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	4	4 Lane - Enhanced	1702	100%	810	347	182	165	\$ 2,200,000	\$ 2,200,000	
C-13	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	4	4 Lane - Enhanced	1702	50%	810	170	89	81	\$ 2,200,000	\$ 1,100,000	
C-14	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	4	4 Lane - Enhanced	1702	100%	810	344	181	163	\$ 2,200,000	\$ 2,200,000	
C-15	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	4	4 Lane - Enhanced	1702	50%	810	169	89	80	\$ 2,200,000	\$ 1,100,000	
C-16	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	4	4 Lane - Enhanced	1702	100%	810	180	95	85	\$ 1,200,000	\$ 1,200,000	
C-17	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	4	4 Lane - Enhanced	1702	50%	810	892	469	423	\$ 13,100,000	\$ 6,550,000	
C-18	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	4	4 Lane - Enhanced	1702	100%	810	725	381	344	\$ 4,600,000	\$ 4,600,000	
C-19	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	4	4 Lane - Enhanced	1360	50%	810	1146	481	665	\$ 18,713,810	\$ 9,356,905	
C-20	Gattis School Rd (1)	S Mays St to Windy Park Dr	1.23	6	6 Lane - Enhanced	1675	100%	900	6619	2053	4566	\$ 31,800,000	\$ 31,800,000	
C-21	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	6	6 Lane - Enhanced	2119	100%	900	15243	5981	9262	\$ 81,800,000	\$ 81,800,000	
C-22	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	4	4 Lane - Enhanced (AM)	648	100%	810	4029	806	3223	\$ 3,600,000	\$ 3,600,000	
C-23	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	6	6 Lane - Proposed	0	100%	900	2228	0	2228	\$ 12,400,000	\$ 12,400,000	
C-24	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	6	6 Lane - Enhanced (1/3)	1229	100%	900	10064	2290	7774	\$ 16,468,640	\$ 16,468,640	
C-26	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	4	4 Lane - Enhanced	462	100%	810	4688	669	4019	\$ 1,200,000	\$ 1,200,000	
C-27	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	4	4 Lane - Enhanced	462	50%	810	809	115	694	\$ 10,300,000	\$ 5,150,000	
B-51, C-28	US 79 (2)	AW Grimes to Red Bud Ln	2.63	6	6 Lane - Enhanced	New	50%	900	7110	0	7110	\$ 12,760,000	\$ 6,380,000	
SUBTOTAL									73,499	15,868	57,631	\$ 304,882,077	\$ 255,425,168	
CI-5	Mays St and Liberty Ave	SIGNAL	-	-	Intersection Improvements		100%					\$ 550,000	\$ 550,000	
CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER	-	-			100%						\$ 848,000	\$ 848,000
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES	-	-			50%						\$ 2,141,000	\$ 1,070,500
CI-10	Red Bud Ln and Gattis School Rd	TURN LANES	-	-			100%						\$ 1,773,000	\$ 1,773,000
-	Update ITS and Traffic Managemenet Infrastructure	-	-	-			25%						\$ 20,900,000	\$ 5,225,000
SUBTOTAL												\$ 26,212,000	\$ 9,466,500	

2023 Roadway Impact Fee Study Cost Per Service Area \$ 23,750

TOTAL COST IN SERVICE AREA C \$ 264,915,418

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area D

8/7/2023

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 ¹	VEH-MI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY PK-HR VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
D-1	CR 107	CR 107 to University Blvd	0.34	4	4 Lane - Proposed	New	50%	810	552	0	552	\$ 3,940,000	\$ 1,970,000
D-2	University Blvd (6)	Kenney Fort Blvd to SH 130	2.44	4	4 Lane - Enhanced	n/a	100%	810	7900	0	7900	\$ 8,500,000	\$ 8,500,000
D-3	CR 118	University Blvd to Avery Nelson Pkwy	1.14	4	4 Lane - Proposed	0	100%	810	3703	0	3703	\$ 7,800,000	\$ 7,800,000
D-4	Avery Nelson Pkwy (3)	Kenney Fort Blvd to CR 110	1.11	4	4 Lane - Enhanced	New	100%	810	3597	0	3597	\$ 10,200,000	\$ 10,200,000
D-5	Avery Nelson Pkwy (4)	CR 110 to 5015' E of CR 110	0.95	4	4 Lane - Existing	0	100%	810	3077	0	3077	\$ 12,000,000	\$ 12,000,000
D-6	CR 118	Carmel Creekside Dr to Ed Schmidt Blvd	1.08	4	4 Lane - Proposed	New	100%	810	3484	0	3484	\$ 1,960,000	\$ 1,960,000
B-27, D-7	Kenney Fort Blvd (1)	CR 117 to 125' N of Haselwood Ln	0.58	6	6 Lane - Proposed	New	100%	900	3144	0	3144	\$ 15,018,951	\$ 15,018,951
D-8	Kenney Fort Blvd (6)	125' N of Haselwood Ln to 200' N of Bluffstone Dr	0.12	4	4 Lane - Proposed	New	50%	810	198	0	198	\$ 15,018,951	\$ 7,509,476
B-28, D-9	Kenney Fort Blvd (7)	200' N of Bluffstone Dr to Old Settlers Blvd	0.36	6	6 Lane - Proposed	New	100%	900	1920	0	1920	\$ 9,173,038	\$ 9,173,038
B-39, D-10	Kenney Fort Blvd (2)	Old Settlers Blvd to 2540' S of Old Settler's Blvd	0.30	6	6 Lane - Proposed	0	100%	900	1601	0	1601	\$ 5,000,000	\$ 5,000,000
B-40, D-11	Kenney Fort Blvd (3)	2540' S of Old Settler's Blvd to 4625' N of Chandler Creek Blvd	0.18	6	6 Lane - Proposed (1/2)	0	50%	900	496	0	496	\$ 4,900,000	\$ 2,450,000
B-41, D-12	Kenney Fort Blvd (4)	4625' N of Chandler Creek Blvd to 3115' N of Chandler Creek Blvd	0.36	6	6 Lane - Proposed	0	100%	900	1920	0	1920	\$ 10,700,000	\$ 10,700,000
B-41, D-13	Kenney Fort Blvd (8)	3115' N of Chandler Creek Blvd to Chandler Creek Blvd	0.59	6	6 Lane - Proposed	New	100%	900	3204	0	3204	\$ 3,700,000	\$ 3,700,000
B-42, D-14	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	6	6 Lane - Proposed	741	100%	900	1600	220	1380	\$ 9,600,000	\$ 9,600,000
D-15	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	4	4 Lane - Proposed	1,215	100%	810	1146	430	716	\$ 7,300,000	\$ 7,300,000
D-16	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	4	4 Lane - Enhanced (1/2)	1,215	50%	810	566	212	354	\$ 5,600,000	\$ 2,800,000
D-17	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	4	4 Lane - Enhanced (1/2)	n/a	100%	810	1097	0	1097	\$ 4,700,000	\$ 4,700,000
D-18	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	4	4 Lane - Enhanced	1,525	100%	810	1446	681	765	\$ 8,486,565	\$ 8,486,565
D-19	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	4	4 Lane - Enhanced	1,525	50%	810	294	138	156	\$ 3,446,574	\$ 1,723,287
D-20	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	4	4 Lane - Enhanced	1,525	100%	810	1314	618	696	\$ 7,711,173	\$ 7,711,173
D-21	CR 122 (1)	Red Bud Ln to 230' SW of Rosalina Loop	0.49	4	4 Lane - Enhanced	0	100%	810	1585	0	1585	\$ 13,671,273	\$ 13,671,273
D-22	CR 122 (2)	230' SW of Rosalina Loop to 100' S of Emilia Ln	0.09	3	3 Lane - Proposed	n/a	50%	510	69	0	69	\$ 2,472,664	\$ 1,236,332
D-23	CR 122 (3)	100' S of Emilia Ln to 100' S of Rosalina Loop	0.04	3	3 Lane - Proposed	n/a	100%	510	62	0	62	\$ 1,106,506	\$ 1,106,506
D-24	CR 122 (4)	100' S of Rosalina Loop to 100' S of Penelope Ct	0.13	3	3 Lane - Proposed	0	50%	510	96	0	96	\$ 3,430,613	\$ 1,715,306
D-25	Old Settlers Blvd	Red Bud Ln to CR 110	0.77	4	4 Lane - Proposed	New	100%	810	2482	0	2482	\$ 20,155,000	\$ 20,155,000
SUBTOTAL									46,553	2,299	44,254	195,591,307	176,186,906
-	Update ITS and Traffic Managemenet Infrastructure	-	-	-	Intersection		25%					\$ 20,900,000	\$ 5,225,000
SUBTOTAL												\$ 20,900,000	\$ 5,225,000

2023 Roadway Impact Fee Study Cost Per Service Area \$ 23,750

TOTAL COST IN SERVICE AREA D \$ 181,435,656

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.



Appendix C – Existing Facilities Inventory

City of Round Rock - 2023 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area A

8/3/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL ¹		VEH-MI DEMAND PK-HR TOTAL ²		EXCESS CAPACITY PK-HR VEH-MI ³		EXISTING DEFICIENCIES PK-HR VEH-MI ⁴	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Chisholm Trl Rd	Sam Bass Rd	RM 620	2,364	0.45	1	1	2U	2 Lane - Existing	2U	536	408	100%	410	410	184	184	240	183	-56	1	56	
Hairy Man Rd	Creek Bend Blvd	Sam Bass Rd	2,282	0.43	1	1	2U	2 Lane - Existing	2U	0	0	50%	410	410	89	89	0	0	89	89		
Sam Bass Rd	FM 3406	75' E of Desert Willow Dr	1,853	0.35	1	1	2U	3 Lane - Enhanced	4D	261	403	50%	410	410	72	72	46	71	26	1		
Chisholm Trl Rd	3250' N of Wolle Ln	1980' N of Wolle Ln	1,272	0.24	1	1	2U	5 Lane - Enhanced	4D	334	305	100%	410	410	99	99	80	73	18	25		
CR 173	IH 35 SBFR	3250' N of Wolle Ln	538	0.10	1	1	2U	5 Lane - Enhanced	4D	27	215	100%	410	410	42	42	3	22	39	20		
Sam Bass Rd	Creek Bend Blvd	Hairy Man Rd	1,121	0.21	1	1	2U	3 Lane - Enhanced	4D	261	403	100%	410	410	87	87	55	86	32	1		
Sam Bass Rd	700' E of Hairy Man Rd	Deepwood Dr (Future)	3,112	0.59	1	1	2U	4 Lane - Enhanced	2U	554	554	100%	410	410	242	242	327	327	-85	-85	85	85
Sam Bass Rd	Deepwood Dr (Future)	Wonder Dr	2,608	0.49	1	1	2U	4 Lane - Enhanced	2U	554	554	100%	410	410	203	203	274	274	-71	-71	71	71
Creek Bend Blvd	West End Pl	Camino Del Verdes Pl	4,164	0.79	1	1	2U	4 Lane - Enhanced	4D	842	967	100%	410	410	323	323	664	763	-341	-439	341	439
Wyoming Springs Dr	390' N of GoldenOak Cir	Alondra Way	703	0.13	1	1	2U	4 Lane - Enhanced	4D	263	224	100%	410	410	55	55	35	30	20	25		
Deepwood Dr	350' N of RM 620	RM 620	346	0.07	1	1	2U	4 Lane - Enhanced	4D	n/a	n/a	100%	410	410	27	27						
New Hope Dr	Sam Bass Rd	240' W of Lagoona Dr	5,817	1.10	1	1	2U	4 Lane - Enhanced	4D	73	56	100%	410	410	452	452	80	62	371	390		
Wyoming Springs Dr	300' S of Falcon Dr	RM 620	2,877	0.54	2	2	4D	4 Lane - Existing	4D	636	886	100%	810	810	883	883	347	483	536	400		
Creek Bend Blvd/Bright Wat	Sam Bass Rd	Hairy Man Rd	1,719	0.33	2	2	4D	4 Lane - Existing	4D	717	376	100%	810	810	528	528	233	122	294	405		
Creek Bend Blvd/Bright Wat	FM 3406	Sam Bass Rd	1,998	0.38	2	2	4D	4 Lane - Existing	4D	244	319	100%	810	810	613	613	92	121	521	492		
Sam Bass Rd	Chisholm Trl	IH 35 SBFR	609	0.12	2	2	5U	4 Lane - Existing	5U	n/a	n/a	100%	770	770	178	178						
Westinghouse Rd	IH 35 SBFR	IH 35 NBFR	1,014	0.19	2	3	5U	6 Lane - Enhanced	6U	0	0	50%	770	770	148	222	0	0	148	222		
Wyoming Springs Dr	GoldenOak Cir	FM 3406	3,372	0.64	2	2	4D	4 Lane - Existing	4D	319	186	100%	810	810	1,035	1,035	204	119	831	916		
Creek Bend Blvd/Bright Wat	Camino Del Verdes Pl	FM 3406	688	0.13	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	211	211						
Chisholm Trl Rd	Eagles Nest Dr	CR 173	764	0.14	1	1	2U	4 Lane - Proposed	4D	0	0	100%	410	410	59	59	0	0	59	59		
RM 1431	5195' E of Stone Oak St	1470' W of IH 35 SBFR	5,606	1.06	2	2	4U	6 Lane - Enhanced	6D	1,556	1,621	50%	680	680	722	722	826	861	-104	-139	104	139
RM 1431	1100' W of Mayfield Ranch	850' E of Stone Oak Dr	5,137	0.97	2	2	5U	6 Lane - Enhanced	6D	1,556	1,621	50%	770	770	749	749	757	789	-8	-39	8	39
RM 1431	850' E of Stone Oak Dr	5195' E of Stone Oak St	4,343	0.82	2	2	5U	6 Lane - Enhanced	6D	1,556	1,621	100%	770	770	1,267	1,267	1,280	1,333	-13	-67	13	67
Old Settlers Blvd	IH 35 SBFR	IH 35 NBFR	661	0.13	2	2	5U	6 Lane - Enhanced	6D	0	0	50%	770	770	96	96	0	0	96	96		
RM 620	Deepwood Dr	Chisholm Trl Rd	4,013	0.76	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	585	585	491	643	94	-58		58
FM 620	Chisholm Trl	IH 35 SBFR	910	0.17	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	133	133	111	146	21	-13		13
FM 620	445' S of Smyers Ln	Wyoming Springs Dr	3,198	0.61	3	3	6D	6 Lane - Existing	6D	1,787	1,476	50%	900	900	818	818	541	447	276	371		
FM 620	Wyoming Springs Dr	Deepwood Dr	4,882	0.92	3	3	6D	6 Lane - Existing	6D	n/a	n/a	50%	900	900	1,248	1,248						
US 79	IH 35 SBFR	IH 35 NBFR	541	0.10	2	4	6D	6 Lane - Existing	6D	0	0	50%	900	900	92	184	0	0	92	184		
FM 620	IH 35 SBFR	IH 35 NBFR	416	0.08	3	3	6U	6 Lane - Existing	6U	0	0	100%	770	770	182	182	0	0	182	182		
FM 1431	Chisholm Trl Rd (Future)	IH 35 SBFR	28	0.01	4	2	6U	6 Lane - Existing	6U	0	0	100%	770	770	17	8	0	0	17	8		
New Hope Dr	240' W of Lagoona Dr	Flowstone Lane	2,903	0.55	1	1	2U	4 Lane - Enhanced	4D	n/a	n/a	50%	410	410	113	113						
RM 1431	1470' W of IH 35 SBFR	IH 35 SBFR	1,470	0.28	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	100%	770	770	429	429						
Wyoming Springs Dr	GoldenOak Cir	390' N of GoldenOak Cir	379	0.07	2	2	4D	4 Lane - Enhanced	4D	n/a	n/a	100%	810	810	116	116						
Sam Bass Rd	75' E of Desert Willow Dr	Creek Bend Blvd	991	0.19	1	1	2U	3 Lane - Enhanced	4D	n/a	n/a	100%	410	410	77	77						
Sam Bass Rd	Hairy Man Rd	Chisholm Trl Rd	7,007	1.33	1	1	2U	3 Lane - Enhanced	4D	n/a	n/a	50%	410	410	272	272						
Sam Bass Rd	Wonder Dr	Chisholm Trl	597	0.11	1	2	3U	4 Lane - Enhanced	3U	n/a	n/a	100%	510	510	58	115						
Wyoming Springs Dr	Cloud Peak Ln	300' S of Falcon Dr	776	0.15	2	2	4D	4 Lane - Existing	4D	n/a	n/a	50%	810	810	119	119						
SUBTOTAL			83,080	15.73											12,618	12,834	6,687	6,952	3,084	2,977	678	911
															25,452		13,639	6,061		1,589		

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% in Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area B

8/3/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL ¹		VEH-MI DEMAND PK-HR TOTAL ²		EXCESS CAPACITY PK-HR VEH-MI ³		EXISTING DEFICIENCIES PK-HR VEH-MI ⁴	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Eagles Nest St	Sunrise Rd	Settlement Dr	3,109	0.59	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	483	483						
Settlement Dr	Gulf Way	Old Settlers Blvd	4,819	0.91	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	748	748						
Settlement Dr	Eagles Nest St	Gulf Way	1,438	0.27	2	2	2U	2 Lane - Existing	2U	0	0	100%	410	410	223	223	0	0	223	223		
Eagles Nest St	University Blvd	Settlement Dr	4,508	0.85	2	2	2U	2 Lane - Existing	2U	0	0	100%	410	410	700	700	0	0	700	700		
Bowman Rd	IH 35 NBFR	Onion Creek Village Dr	582	0.11	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	45	45	0	0	45	45		
Bowman Rd	Onion Creek Village Dr	N Mays St	390	0.07	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	30	30						
Bowman Rd	N Mays St	Sunset Dr	6,159	1.17	1	1	3U	2 Lane - Existing	3U	n/a	n/a	100%	510	510	595	595						
Avery Nelson	Settlement Dr	740' E of Cisco Trl	3,411	0.65	2	2	2U	2 Lane - Existing	2U	0	0	100%	410	410	530	530	0	0	530	530		
Spur 379 (N Mays St)	Northwest Dr	US 79	651	0.12	2	2	4D	2 Lane - Existing	4D	475	698	100%	810	810	200	200	59	86	141	114		
Red Bud Ln	160' S of Covered Wagon	US 79	2,141	0.41	1	1	2U	4 Lane - Enhanced	4D	771	754	100%	410	410	166	166	313	306	-146	-139	146	139
Sunrise Rd	Bowman Rd	US 79	4,485	0.85	2	2	4U	4 Lane - Enhanced	4U	469	515	100%	680	680	1,155	1,155	398	437	757	718		
Sunrise Rd	Old Settlers Blvd	Country Aire Dr	1,485	0.28	2	2	5U	4 Lane - Enhanced	4D	630	654	100%	770	770	433	433	177	184	256	249		
Sunrise Rd	545' S of Lake Dr	Old Settlers Blvd	2,098	0.40	2	2	5U	4 Lane - Enhanced	4D	678	724	100%	770	770	612	612	269	288	342	324		
Sunrise Rd	Hidden Valley Dr	Eagles Nest St	2,533	0.48	2	2	5U	4 Lane - Enhanced	4D	n/a	n/a	100%	770	770	739	739						
N Mays St	Old Settlers Blvd	Bowman Rd	3,589	0.68	2	2	5U	4 Lane - Enhanced	4D	n/a	n/a	100%	770	770	1,047	1,047						
N Mays St	Paloma Dr	540' N of Steam Way	1,402	0.27	1	2	3U	4 Lane - Enhanced	4D	173	243	100%	510	510	135	271	46	65	90	206		
Red Bud Ln	CR 117	Old Settlers Blvd	1,788	0.34	1	1	2U	4 Lane - Enhanced	4D	679	536	100%	410	410	139	139	230	182	-91	-43	91	43
N Mays St	Bowman Rd	Northwest Dr	2,112	0.40	2	2	5U	4 Lane - Enhanced	4D	650	1,041	100%	770	770	616	616	260	416	356	200		
College Park	Satellite View	Avery Nelson Blvd	3,948	0.75	1	1	2U	4 Lane - Enhanced	4D	173	275	100%	410	410	307	307	129	206	177	101		
Red Bud Ln	Guadalupe St	160' N of Margarita Loop	1,867	0.35	1	1	2U	4 Lane - Enhanced	4D	679	536	100%	410	410	145	145	240	190	-95	-45	95	45
N Mays St	350' S of University Blvd	2000' S of University Blvd	1,655	0.31	1	1	3U	4 Lane - Enhanced	4D	n/a	n/a	100%	510	510	160	160						
Teravista Pkwy	Oakmont Dr	Centerbrook Pl	1,062	0.20	2	2	4D	4 Lane - Enhanced	4D	n/a	n/a	50%	810	810	163	163						
N Mays St	540' N of Steam Way	Old Settlers Blvd	1,823	0.35	2	2	5U	4 Lane - Enhanced	4D	n/a	n/a	100%	770	770	532	532						
Eagles Nest	Cypress Blvd	Sunrise Rd	1,520	0.29	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	466	466						
Joe Dimaggio Blvd	US 79	Kenney Fort Blvd	1,512	0.29	2	2	5U	4 Lane - Existing	5U	0	0	100%	770	770	441	441	0	0	441	441		
Old Settlers Blvd	Kenney Fort Blvd (Future)	Red Bud Ln	5,795	1.10	2	2	4D	4 Lane - Existing	4D	1,033	582	100%	810	810	1,778	1,778	1,134	639	644	1,139		
N Mays St	Teravista Pkwy	University Blvd	3,301	0.63	2	2	4D	4 Lane - Existing	4D	368	346	100%	810	810	1,013	1,013	230	216	783	797		
Bass Pro Dr	IH 35 NBFR	Oakmont Dr	1,800	0.34	2	2	4D	4 Lane - Existing	4D	448	399	100%	810	810	552	552	153	136	400	416		
Teravista Pkwy	Centerbrook Pl	350' S of Aosta Ln	1,461	0.28	2	2	4U	4 Lane - Existing	4U	630	489	50%	680	680	188	188	87	68	101	120		
Westinghouse Rd	IH 35 SBFR	IH 35 NBFR	1,014	0.19	2	3	5U	6 Lane - Enhanced	6U	0	0	50%	770	770	148	222	0	0	148	222		
College Park	University Blvd	Satellite View	711	0.13	2	2	4D	4 Lane - Existing	4D	173	275	100%	810	810	218	218	23	37	195	181		
Bowman Rd	Sunrise Rd	125' W of Buckeye Ln	2,749	0.52	2	2	4D	4 Lane - Existing	4D	520	388	100%	810	810	843	843	271	202	573	641		
Sunrise Rd	Country Aire Dr	Bowman Rd	1,661	0.31	2	2	4U	4 Lane - Existing	4U	592	674	100%	680	680	428	428	186	212	242	216		
N Mays St	Aterial L (Future)	Paloma Dr	1,950	0.37	1	2	3U	4 Lane - Existing	4D	0	0	100%	510	510	188	377	0	0	188	377		
N Mays St	2000' S of University Blvd	Aterial L (Future)	2,684	0.51	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	824	824						
US 79	1825' W of A.W. Grimes Blvd	Joe DiMaggio Blvd	4,249	0.80	2	2	4D	6 Lane - Enhanced	6D	n/a	n/a	50%	810	810	652	652						
FM 1460 (A.W. Grimes Blvd)	175' S of Lantana Dr	US 79	3,965	0.75	2	2	5U	6 Lane - Enhanced	6D	1,102	1,066	100%	770	770	1,157	1,157	828	801	329	356		
FM 1460 (A.W. Grimes Blvd)	1250' N of Tiger Trl	Tiger Trl	1,252	0.24	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	100%	770	770	365	365						
US 79	N Mays St	Georgetown St	5,294	1.00	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	50%	770	770	772	772						
US 79	Georgetown St	Sunrise Rd	953	0.18	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%	770	770	139	139	170	132	-31	7	31	
FM 3406	Sunrise Rd	Settlement Dr	558	0.11	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	100%	770	770	163	163						
US 79	Sunrise Rd	1685' W of A.W. Grimes Blvd	2,193	0.42	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%	770	770	320	320	391	304	-72	16	72	
University Blvd	Eagles Nest St	College Park Dr	2,846	0.54	2	2	5U	6 Lane - Enhanced	6D	964	787	50%	770	770	415	415	260	212	155	203		
FM 3406	Settlement Dr	1020' W of A.W. Grimes Blvd	4,376	0.83	2	2	5U	6 Lane - Enhanced	6D	1,285	956	100%	770	770	1,276	1,276	1,065	792	211	484		
FM 3406	1020' W of A.W. Grimes Blvd	A.W. Grimes Blvd	1,020	0.19	2	2	5U	6 Lane - Enhanced	6D	1,285	956	100%	770	770	297	297	248	185	49	113		
FM 1460 (A.W. Grimes Blvd)	A.W. Grimes Blvd	Chandler Creek Blvd	1,471	0.28	2	2	5U	6 Lane - Enhanced	6D	849	1,039	100%	770	770	429	429	237	289	193	140		
FM 1460 (A.W. Grimes Blvd)	Avery Nelson Pkwy	3030' S of Avery Nelson Pkwy	3,028	0.57	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	929	929	457	526	472	403		
University Blvd	College Park Dr	A.W. Grimes Blvd	3,222	0.61	2	2	5U	6 Lane - Enhanced	6D	964	787	50%	770	770	470	470	294	240	176	230		
FM 1460 (A.W. Grimes Blvd)	University Blvd	Avery Nelson Pkwy	5,309	1.01	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	1,629	1,629	801	922	828	707		
University Blvd	Sunrise Rd	Teravista Club Dr	3,784	0.72	2	2	5U	6 Lane - Enhanced	6D	902	817	50%	770	770	552	552	323	293	229	259		
University Blvd	Teravista Club Dr	Eagles Nest St	514	0.10	2	2	5U	6 Lane - Enhanced	6D	902	817	50%	770	770	75	75	44	40	31	35		
Kenney Fort Blvd	Chandler Creek Blvd	Joe DiMaggio Blvd	1,565	0.30	1	1	2U	6 Lane - Enhanced	6D	390	351	100%	410	410	121	121	116	104	6	17		
US 79	Joe DiMaggio Blvd	Red Bud Ln	7,831	1.48	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	50%	810	810	1,201	1,201	1,273	904	-72	297	72	
Old Settlers Blvd	IH 35 SBFR	IH 35 NBFR	661	0.13	2	2	5U	6 Lane - Enhanced	6D	0	0	50%	770	770	96	96	0	0	96	96		
Old Settlers Blvd	IH 35 NBFR	N Mays St	682	0.13	2	2	4D	6 Lane - Enhanced	6D	n/a	n/a	100%	810	810	209	209						
Old Settlers Blvd	N Mays St	Sunrise Rd	7,044	1.33	2	2	4D	6 Lane - Enhanced	6D	n/a	n/a	100%	810	810	2,161	2,161						
Avery Nelson Pkwy	3580' E of A.W. Grimes Blvd	CR 117	3																			

Sunrise Rd	Applegate Cir	Lake Dr	1,075	0.20	2	2	5U	4 Lane - Enhanced	4D	678	724	100%	770	770	313	313	138	147	175	166		
Sunrise Rd	325' S of Eagles Nest St	Applegate Cir	1,576	0.30	2	2	5U	4 Lane - Enhanced	4D	678	724	50%	770	770	230	230	101	108	129	122		
Sunrise Rd	Lake Dr	545' S of Lake Dr	543	0.10	2	2	5U	4 Lane - Enhanced	4D	678	724	50%	770	770	79	79	35	37	44	42		
FM 1460 (A.W. Grimes Blvd)	Chandler Creek Blvd	375' S of Chandler Creek Blvd	375	0.07	2	2	5U	6 Lane - Enhanced	6D	1,050	995	100%	770	770	109	109	75	71	35	39		
FM 1460 (A.W. Grimes Blvd)	375' S of Chandler Creek Blvd	1250' N of Tiger Trl	1,055	0.20	2	2	5U	6 Lane - Enhanced	6D	849	1,039	50%	770	770	154	154	85	104	69	50		
FM 1460 (A.W. Grimes Blvd)	Tiger Trl	175' S of Lantana Dr	1,382	0.26	2	2	5U	6 Lane - Enhanced	6D	1,102	1,066	100%	770	770	403	403	288	279	115	124		
FM 1460 (A.W. Grimes Blvd)	440' N of Old Settlers Blvd	Old Settlers Blvd	437	0.08	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	134	134	66	76	68	58		
FM 1460 (A.W. Grimes Blvd)	3030' S of Avery Nelson Pkwy	440' N of Old Settlers Blvd	2,374	0.45	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	728	728	358	412	370	316		
Red Bud Ln	160' N of Margarita Loop	CR 117	1,845	0.35	1	1	2U	4 Lane - Enhanced	4D	679	536	50%	410	410	72	72	119	94	-47	-22	47	22
Red Bud Ln	Old Settlers Blvd	170' N of Joseph St	2,356	0.45	1	1	3U	4 Lane - Enhanced	4D	771	754	100%	510	510	228	228	344	337	-116	-109	116	109
Red Bud Ln	170' N of Joseph St	160' S of Covered Wagon	957	0.18	1	1	2U	4 Lane - Enhanced	4D	771	754	50%	410	410	37	37	70	68	-33	-31	33	31
US 79	200' E of Red Bud Ln	1690' E of Red Bud Ln	1,487	0.28	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	50%	810	810	228	228	242	172	-14	56	14	
US 79	Red Bud Ln	200' E of Red Bud Ln	201	0.04	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	100%	810	810	62	62	65	46	-4	15	4	
Chandler Creek Blvd	165' W of Renaissance Trl	Kenney Fort Blvd	1,776	0.34	1	1	3U	2 Lane - Existing	3U	222	236	100%	510	510	172	172	75	79	97	92		
University Blvd	A.W. Grimes Blvd	1830' E of A.W. Grimes Blvd	1,922	0.36	1	1	2U	6 Lane - Enhanced	6D	853	701	100%	410	410	149	149	311	255	-161	-106	161	106
University Blvd	Lunata Way	Kenney Fort Blvd (Future)	839	0.16	1	1	2U	6 Lane - Enhanced	6D	853	701	100%	410	410	65	65	135	111	-70	-46	70	46
Kenney Fort Blvd	Joe DiMaggio Blvd	US 79	1,046	0.20	3	3	6D	6 Lane - Existing	6D	315	298	100%	900	900	535	535	62	59	473	476		
US 79	1685' W of A.W. Grimes Blvd	A.W. Grimes Blvd	1,685	0.32	2	2	4D	6 Lane - Enhanced	6D	1,885	1,462	50%	810	810	259	259	301	233	-42	25	42	
CR 114/Chandler Rd	IH 35 NBFR	University Oaks Blvd	578	0.11	2	2	5U	6 Lane - Existing	5U	1,163	1,051	100%	770	770	169	169	127	115	41	54		
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Blvd	970	0.18	0	0	3U	6 Lane - Proposed	6D	0	0	50%	510	510	0	0	0	0	0	0		
US 79	A.W. Grimes Blvd	1825' W of A.W. Grimes Blvd	1,824	0.35	2	2	4D	6 Lane - Enhanced	6D	1,801	1,341	50%	810	810	280	280	311	232	-31	48	31	
Seton Pkwy	2400' N of Avery Nelson Blvd	Avery Nelson Blvd	2,397	0.45	0	0	3U	3 Lane - Existing	3U	0	0	100%	510	510	0	0	0	0	0	0		
Medical Center Pkwy	Seton Pkwy	A.W. Grimes Blvd	951	0.18	0	0	4D	4 Lane - Existing	4D	0	0	100%	810	810	0	0	0	0	0	0		
Wallin Bradley	College Park	AW Grimes Blvd	1,971	0.37	2	2	4D	4 Lane - Proposed	4D	0	0	100%	810	810	605	605	0	0	605	605		
SUBTOTAL			196,570	37.23											37,554	38,044	15,514	13,924	11,814	13,894	1,197	654
															75,598		29,438		25,708		1,851	

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area C

8/3/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL ¹		VEH-MI DEMAND PK-HR TOTAL ²		EXCESS CAPACITY PK-HR VEH-MI ³		EXISTING DEFICIENCIES PK-HR VEH-MI ⁴	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Georgetown St	575' S of US 79	Main St	2,315	0.44	1	1	3U	2 Lane - Existing	3U	604	322	100%	510	510	224	224	265	141	-41	82	41	
Brown St	Round Rock Ave	McNeil Dr	1,558	0.30	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	121	121	0	0	121	121		
W Bagdad Ave	Brown St	Mays St	698	0.13	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	54	54	0	0	54	54		
McNeil Rd	W Bagdad Ave	E Bagdad Ave	95	0.02	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	7	7	0	0	7	7		
High Country Blvd	Roundabout Ln	SH 45 WBFR	4,038	0.76	1	1	3U	2 Lane - Existing	3U	838	238	100%	510	510	390	390	641	182	-251	208	251	
McNeil Rd	E Bagdad Ave	Blair St	360	0.07	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	28	28	0	0	28	28		
Georgetown St	Main St	McNeil Extension (Future)	442	0.08	1	1	2U	2 Lane - Existing	2U	604	322	100%	410	410	34	34	51	27	-16	7	16	
CR 168/Gattis School Rd	Short Trl	S Mays St	354	0.07	0	1	2U-Half	2 Lane - Existing	2U-Half	0	0	100%	410	410	0	27	0	0	0	27		
Main St	Mays St	Georgetown St	2,443	0.46	1	1	2U	2 Lane - Existing	2U	539	294	100%	410	410	190	190	249	136	-60	54	60	
Main St	Brown St	Mays St	935	0.18	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	73	73	0	0	73	73		
Deepwood Dr	175' N of Dragon Dr	McNeil Dr	5,179	0.98	1	1	2U	2 Lane - Existing	2U	334	293	100%	410	410	402	402	328	287	75	115		
McNeil Extension	S Mays St	Georgetown St	2,732	0.52	1	1	3U	2 Lane - Existing	3U	374	215	100%	510	510	264	264	193	111	70	153		
S Mays St	Nash St	Gattis School Rd	3,657	0.69	2	2	5U	4 Lane - Enhanced	4D	752	717	100%	770	770	1,066	1,066	521	497	546	570		
Dell Way	S Mays St	Greenlawn Blvd	3,958	0.75	2	2	5U	4 Lane - Enhanced	4D	397	251	100%	770	770	1,154	1,154	298	188	857	966		
Bratton Ln	IH 35 SBFR	1160' S of Michael Angelo	2,215	0.42	1	1	2U	4 Lane - Enhanced	4D	103	130	50%	410	410	86	86	22	27	64	59		
Hesters Crossing Rd	Dry Creek Dr	IH 35 SBFR	1,692	0.32	2	2	5U	4 Lane - Enhanced	4D	866	711	100%	770	770	493	493	277	228	216	266		
S Mays St	Gattis School Rd	Hesters Crossing Rd	1,403	0.27	2	2	5U	4 Lane - Enhanced	4D	1,536	1,049	100%	770	770	409	409	408	279	1	130		
Red Bud Ln	340' S of Forest Creek Dr	Gattis School Rd	3,735	0.71	1	1	2U	4 Lane - Enhanced	4D	703	657	50%	410	410	145	145	249	232	-104	-87	104	87
Red Bud Ln	295' S of Wildflower Trl	840' N of Forest Creek Dr	2,907	0.55	1	1	2U	4 Lane - Enhanced	4D	832	870	50%	410	410	113	113	229	240	-116	-127	116	127
Schultz	SH 45 EBFR	290' S of SH 45 EBFR	291	0.06	1	1	2U	4 Lane - Enhanced	4D	276	186	100%	410	410	23	23	15	10	7	12		
Georgetown St	US 79	575' S of US 79	574	0.11	2	2	4U	4 Lane - Existing	4U	604	322	100%	680	680	148	148	66	35	82	113		
N Mays St	US 79	Main St	3,662	0.69	2	2	5U	4 Lane - Existing	5U	698	527	100%	770	770	1,068	1,068	484	365	584	703		
Double Creek Dr	SH 45 WBFR	SH 45 WBFR	3,226	0.61	2	2	4D	4 Lane - Existing	4D	260	264	100%	810	810	990	990	159	161	831	828		
Doublecreek Blvd	Forest Creek Dr	Gattis School Rd	3,478	0.66	2	2	4D	4 Lane - Existing	4D	536	282	100%	810	810	1,067	1,067	353	186	714	881		
Forest Creek	Doublecreek Dr	Kenney Fort Blvd	2,870	0.54	2	2	4D	4 Lane - Existing	4D	256	384	100%	810	810	881	881	139	209	741	672		
Forest Creek	Kenney Fort Blvd	Red Bud Ln	7,323	1.39	2	2	4D	4 Lane - Existing	4D	473	328	100%	810	810	2,247	2,247	656	455	1,591	1,792		
Red Bud Ln	CR 123	270' N of Forest Ridge Blvd	848	0.16	2	2	4D	4 Lane - Existing	4D	740	738	100%	810	810	260	260	119	119	141	142		
Greenlawn Blvd	Dell Way	SH 45 WBFR	1,020	0.19	2	2	4D	4 Lane - Existing	4D	823	225	100%	810	810	313	313	159	43	154	269		
Greenlawn Blvd	Gattis School Rd	Dell Way	3,977	0.75	2	2	4D	4 Lane - Existing	4D	823	225	100%	810	810	1,220	1,220	620	169	600	1,051		
McNeil Rd	IH 35 NBFR	Blair St	1,782	0.34	2	2	4U	4 Lane - Existing	4U	175	340	100%	680	680	459	459	59	115	400	344		
McNeil Rd	IH 35 NBFR	IH 35 SBFR	355	0.07	2	2	5U	4 Lane - Existing	5U	0	0	100%	770	770	104	104	0	0	104	104		
Deepwood Dr	RM 620	960' N of Dragon Dr	2,415	0.46	2	2	4D	4 Lane - Existing	4D	334	293	50%	810	810	370	370	76	67	294	303		
Hesters Crossing Rd	La Frontera Blvd	Dry Creek Dr	2,460	0.47	2	2	4D	4 Lane - Existing	4D	934	815	100%	810	810	755	755	435	380	320	375		
FM 1325	SH 45 EBFR	810' S of SH 45 EBFR	811	0.15	2	2	4D	4 Lane - Existing	4D	1,066	761	100%	810	810	249	249	167	117	82	132		
Hesters Crossing	IH 35 NBFR	IH 35 SBFR	577	0.11	3	3	7U	4 Lane - Existing	7U	0	0	100%	860	860	282	282	0	0	282	282		
Hesters Crossing	IH 35 NBFR	S Mays St	484	0.09	2	2	4D	4 Lane - Existing	4D	1,324	1,255	100%	810	810	148	148	121	115	27	33		
FM 1325	SH 45 WBFR	SH 45 EBFR	328	0.06	2	2	6U	4 Lane - Existing	6U	0	0	100%	770	770	96	96	0	0	96	96		
La Frontera	Hesters Crossing Rd	SH 45 WBFR	1,845	0.35	2	2	4D	4 Lane - Existing	4D	703	436	100%	810	810	566	566	246	152	320	414		
Round Rock Ave	IH 35 NBFR	N Brown St	1,326	0.25	2	2	4U	4 Lane - Existing	4U	393	404	100%	680	680	342	342	99	101	243	240		
Red Bud Ln	US 70	CR 123	863	0.16	2	2	4D	4 Lane - Existing	4D	740	738	50%	810	810	132	132	60	60	72	72		
Hesters Crossing Rd	CR 172	La Frontera Blvd	1,605	0.30	2	2	4D	4 Lane - Existing	4D	0	0	100%	810	810	492	492	0	0	492	492		
CR 168/Gattis School Rd	Greenlawn Dr	Windy Park Dr	1,489	0.28	2	2	4U	6 Lane - Enhanced	6D	894	781	100%	680	680	384	384	252	220	131	163		
CR 168/Gattis School Rd	South Crossing Dr	Doublecreek Dr	2,091	0.40	2	2	4U	6 Lane - Enhanced	6D	1,248	871	100%	680	680	538	538	494	345	44	194		
CR 168/Gattis School Rd	Doublecreek Dr	Kenney Fort Blvd	4,140	0.78	2	2	4U	6 Lane - Enhanced	6D	983	763	100%	680	680	1,066	1,066	771	598	296	468		
CR 168/Gattis School Rd	Kenney Fort Blvd	Via Sonoma Trl	2,747	0.52	2	2	5U	6 Lane - Enhanced	6D	983	763	100%	770	770	801	801	512	397	290	404		
CR 168/Gattis School Rd	S Mays St	Greenlawn Blvd	2,255	0.43	2	2	4U	6 Lane - Enhanced	6D	894	781	100%	680	680	581	581	382	334	199	247		
Greenlawn Blvd	IH 35 NBFR	Pflugerville Pkwy	3,092	0.59	2	2	4D	6 Lane - Enhanced	6D	876	353	100%	810	810	949	949	513	207	436	742		
McNeil Rd	CR 172	Deepwood Dr	1,102	0.21	2	2	4U	6 Lane - Enhanced	6D	860	591	100%	680	680	284	284	179	123	104	160		
McNeil Rd	1275' S of W Messick Loop	CR 172	3,778	0.72	2	2	4U	6 Lane - Enhanced	6D	894	660	50%	680	680	487	487	320	236	167	250		
McNeil Rd	Deepwood Dr	IH 35 SBFR	5,194	0.98	2	2	4U	6 Lane - Enhanced	6D	825	521	100%	680	680	1,338	1,338	811	512	526	825		
CR 168/Gattis School Rd	High Country Rd	Red Bud Ln	1,148	0.22	0	0	5U	6 Lane - Enhanced	6D	983	763	100%	770	770	0	0	214	166	-214	-166	214	166
Greenlawn Blvd	Pflugerville Pkwy	SH 45 EBFR	2,260	0.43	2	2	4D	6 Lane - Enhanced	6D	876	353	100%	810	810	693	693	375	151	318	542		
A. W. Grimes	US 79	Gattis School Rd	8,205	1.55	3	3	6D	6 Lane - Existing	6D	1,636	1,158	100%	900	900	4,196	4,196	2,542	1,799	1,653	2,396		
A. W. Grimes	Gattis School Rd	SH 45 WBFR	4,834	0.92	3	3	6D	6 Lane - Existing	6D	1,794	862	100%	900	900	2,472	2,472	1,642	789	829	1,683		
Kenney Fort Blvd	US 79	Forest Creek Blvd	5,040	0.95	3	3	6D	6 Lane - Existing	6D	315	298	100%	900	900	2,577	2,577						

High Country Blvd	Gattis School Rd	Roundabout Ln	779	0.15	2	2	4D	2 Lane - Existing	4D	838	238	100%	810	810	239	239	124	35	115	204		
CR 170	SH 45 EBFR	430' S of Glenn Dr	1,848	0.35	2	2	4D	4 Lane - Existing	4D	913	894	100%	810	810	567	567	320	313	247	254		
CR 168/Gattis School Rd	Via Sonoma Trl	High Country Rd	2,108	0.40	2	2	4U	6 Lane - Enhanced	6D	983	763	100%	680	680	543	543	392	305	151	238		
CR 168/Gattis School Rd	A.W. Grimes Blvd	South Crossing Dr	1,414	0.27	2	2	4D	6 Lane - Enhanced	6D	1,248	871	100%	810	810	434	434	334	233	100	201		
CR 168/Gattis School Rd	Windy Park Dr	A.W. Grimes Blvd	1,256	0.24	2	2	4D	6 Lane - Enhanced	6D	894	781	100%	810	810	385	385	213	186	173	200		
CR 168/Gattis School Rd	IH 35 NBFR	Short Trl	240	0.05	1	1	2U	2 Lane - Existing	2U	0	0	100%	410	410	19	19	0	0	19	19		
Schultz	290' S of SH 45 EBFR	255' S of Autumn Sage W	2,637	0.50	1	1	2U	4 Lane - Enhanced	4D	276	186	50%	410	410	102	102	69	46	33	56		
W Pflugerville PKWY	Greenlawn Blvd	1050' E of Greenlawn Blvd	1,047	0.20	2	2	4D	4 Lane - Existing	4D	0	0	100%	810	810	321	321	0	0	321	321		
CR 172	Hesters Crossing Rd	445' N of Hesters Crossing	445	0.08	2	2	4U	4 Lane - Enhanced	4D	1,056	568	50%	680	680	57	57	45	24	13	33		
Deepwood Dr	960' N of Dragon Dr	175' N of Dragon Dr	783	0.15	2	2	4D	4 Lane - Existing	4D	334	293	100%	810	810	240	240	50	43	191	197		
S Mays St	McNeil Rd	Nash St	1,450	0.27	2	2	4U	4 Lane - Enhanced	4U	752	717	100%	680	680	374	374	207	197	167	177		
S Mays St	Hesters Crossing Rd	Dell Way	1,205	0.23	2	2	5U	4 Lane - Enhanced	4D	835	418	100%	770	770	351	351	191	95	161	256		
FM 1325	Greenlawn Blvd	1050' E of Greenlawn Blvd	488	0.09	2	2	4D	4 Lane - Enhanced	4D	0	0	100%	810	810	150	150	0	0	150	150		
N Mays St	McNeil Dr	Lynda Sue St	491	0.09	2	2	4U	4 Lane - Existing	4D	1,056	568	50%	680	680	63	63	49	26	14	37		
CR 168/Gattis School Rd	960' N of Dragon Dr	175' N of Dragon Dr	2,728	0.52	2	2	4D	6 Lane - Enhanced	4D	334	293	100%	810	810	837	837	173	151	664	686		
S Mays St	McNeil Rd	Nash St	2,076	0.39	2	2	4U	4 Lane - Enhanced	4U	752	717	100%	680	680	535	535	296	282	239	253		
S Mays St	Hesters Crossing Rd	Dell Way	4,229	0.80	2	2	5U	4 Lane - Enhanced	4D	835	418	100%	770	770	1,233	1,233	669	335	565	899		
SUBTOTAL			162,499	30.78											41,055	41,081	20,728	14,417	20,327	26,664	1,056	653
																82,136	35,145		46,991		1,709	

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2023 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area D

8/3/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL ¹		VEH-MI DEMAND PK-HR TOTAL ²		EXCESS CAPACITY PK-HR VEH-MI ³		EXISTING DEFICIENCIES PK-HR VEH-MI ⁴			
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB				
Avery Nelson Pkwy	Kenney Fort Blvd	Ed Schmidt Blvd	5,015	0.95	2	2	4D	4 Lane - Existing	4D	0	0	100%	810	810	1,539	1,539	0	0	1,539	1,539				
CR 118	University Blvd	Avery Nelson Pkwy	6,035	1.14	1	1	2U	4 Lane - Existing	2U	0	0	100%	410	410	469	469	0	0	469	469				
CR 122	Red Bud Ln	CR 110	2,583	0.49	1	1	2U	3 Lane - Proposed	2U	0	0	100%	410	410	201	201	0	0	201	201				
Red Bud Ln	160' S of Covered Wagon	US 79	2,141	0.41	1	1	3U	4 Lane - Enhanced	4D	771	754	100%	510	510	207	207	313	306	-106	-99	106	99		
Red Bud Ln	CR 117	Old Settlers Blvd	1,788	0.34	1	1	2U	4 Lane - Enhanced	4D	n/a	n/a	100%	410	410	139	139								
CR 110/Southwestern Blvd	CR 107	CR 112	4,730	0.90	1	1	3U	4 Lane - Enhanced	4D	0	0	100%	510	510	457	457	0	0	457	457				
CR 110/Southwestern Blvd	CR 164	US 79	3,017	0.57	1	1	3U	4 Lane - Enhanced	4D	0	0	50%	510	510	146	146	0	0	146	146				
Red Bud Ln	Guadalajara St	160' N of Margarita Loop	1,867	0.35	1	1	2U	4 Lane - Enhanced	4D	679	536	100%	410	410	145	145	240	190	-95	-45	95	45		
Kenney Fort Blvd	Chandler Creek Blvd	Joe DiMaggio Blvd	1,565	0.30	1	1	2U	6 Lane - Enhanced	6D	390	351	100%	410	410	121	121	116	104	6	17				
University Blvd	Kenney Fort Blvd (Future)	CR 118	7,803	1.48	1	1	2U	4 Lane - Enhanced	6D	n/a	n/a	100%	410	410	606	606								
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Blvd	1,566	0.30	0	0	3U	6 Lane - Proposed	6D	0	0	100%	510	510	0	0	0	0	0	0				
Red Bud Ln	160' N of Margarita Loop	CR 117	1,845	0.35	1	1	2U	4 Lane - Enhanced	4D	679	536	50%	410	410	72	72	119	94	-47	-22	47	22		
Red Bud Ln	Old Settlers Blvd	170' N of Joseph St	2,356	0.45	1	1	3U	4 Lane - Enhanced	4D	771	754	100%	510	510	228	228	344	337	-116	-109	116	109		
Red Bud Ln	170' N of Joseph St	160' S of Covered Wagon	957	0.18	1	1	2U	4 Lane - Enhanced	4D	771	754	50%	410	410	37	37	70	68	-33	-31	33	31		
Kenney Fort Blvd	2540' S of Old Settlers Blvd	4415' S of Old Settlers Blvd	1,877	0.36	1	1	3U	6 Lane - Proposed	6D	0	0	100%	510	510	181	181	0	0	181	181				
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Blvd	970	0.18	1	1	3U	6 Lane - Proposed	6D	0	0	50%	510	510	47	47	0	0	47	47				
CR 122	Red Bud Ln	CR 110	663	0.13	1	1	2U	3 Lane - Proposed	2U	0	0	50%	410	410	26	26	0	0	26	26				
CR 122	Red Bud Ln	CR 110	214	0.04	1	1	2U	3 Lane - Proposed	2U	n/a	n/a	100%	410	410	17	17								
CR 122	Red Bud Ln	CR 110	478	0.09	1	1	2U	3 Lane - Proposed	2U	n/a	n/a	50%	410	410	19	19								
University Blvd	Kenney Fort Blvd (Future)	CR 118	4,678	0.89	1	1	2U	4 Lane - Enhanced	6D	731	619	100%	410	410	363	363	648	548	-284	-185	284	185		
University Blvd	Kenney Fort Blvd (Future)	CR 118	394	0.07	1	1	2U	4 Lane - Enhanced	6D	731	619	50%	410	410	15	15	27	23	-12	-8	12	8		
CR 107	CR 110	350' North of University Blvd	7,723	1.46	1	1	2U	2 Lane - Enhanced	2U	0	0	100%	410	410	600	600	0	0	600	600				
SUBTOTAL			60,265	11.41											5,632	5,632	1,876	1,669	2,976	3,183	693	499		
																11,264	3,545		6,160		1,192			

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

2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]

3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.



Appendix D – Plan for Awarding the Roadway Impact Fee Credit Summary *(as prepared by NewGen Strategies.)*

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area A

Recoverable Impact Fee CIP Costs	\$ 98,527,707	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(1,403,982)	Page 4 of Appendix E - Service Area A
Financing Costs	25,351,267	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area A
Interest Earnings	(19,167,248)	Page 5 of Appendix E - Service Area A
Pre Credit Recoverable Cost for Impact Fee	\$ 103,307,744	Sum of Above
Credit for Ad Valorem Revenues	(3,196,329)	Page 8 of Appendix E - Service Area A
Maximum Recoverable Cost for Impact Fee	\$ 100,111,415	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees.
Reference is Service Area A column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area A

Financing Costs:

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

New Annual Debt Service	\$ 70,502,014	(Page 3 of Appendix E - Service Area A)
Existing Annual Debt Service	5,085,250	(Page 3 of Appendix E - Service Area A)
Principal Component	(50,235,997)	(Page 4 of Appendix E - Service Area A)
Financing Costs	<u>\$ 25,351,267</u>	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 3.40% annual interest rate based on the 12-month average rate for TexPool. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area A.

Pre Credit Recoverable Cost for Impact Fee

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

Credit for Ad Valorem Revenues:

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

Maximum Recoverable Cost for Impact Fee:

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

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area B

Recoverable Impact Fee CIP Costs	\$ 71,208,321	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(238,268)	Page 4 of Appendix E - Service Area B
Financing Costs	17,880,121	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area B
Interest Earnings	(14,107,526)	Page 5 of Appendix E - Service Area B
Pre Credit Recoverable Cost for Impact Fee	\$ 74,742,647	Sum of Above
Credit for Ad Valorem Revenues	(1,925,151)	Page 8 of Appendix E - Service Area E
Maximum Recoverable Cost for Impact Fee	\$ 72,817,496	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees.
Reference is Service Area B column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area B

Financing Costs:

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

New Annual Debt Service	\$ 53,013,631	(Page 3 of Appendix E - Service Area B)
Existing Annual Debt Service	348,370	(Page 3 of Appendix E - Service Area B)
Principal Component	(35,481,881)	(Page 4 of Appendix E - Service Area B)
Financing Costs	<u>\$ 17,880,121</u>	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 3.40% annual interest rate based on the 12-month average rate for TexPool. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area B.

Pre Credit Recoverable Cost for Impact Fee

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

Credit for Ad Valorem Revenues:

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

Maximum Recoverable Cost for Impact Fee:

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

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area C

Recoverable Impact Fee CIP Costs	\$ 119,393,812	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	-	Page 4 of Appendix E - Service Area C
Financing Costs	23,280,687	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area C
Interest Earnings	(22,623,260)	Page 5 of Appendix E - Service Area C
Pre Credit Recoverable Cost for Impact Fee	\$ 120,051,240	Sum of Above
Credit for Ad Valorem Revenues	(5,273,827)	Page 8 of Appendix E - Service Area C
Maximum Recoverable Cost for Impact Fee	\$ 114,777,413	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees.
Reference is Service Area C column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area C

Financing Costs:

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

New Annual Debt Service	\$ 77,351,625	(Page 3 of Appendix E - Service Area C)
Existing Annual Debt Service	9,070,691	(Page 3 of Appendix E - Service Area C)
Principal Component	(63,141,628)	(Page 4 of Appendix E - Service Area C)
Financing Costs	\$ 23,280,687	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 3.40% annual interest rate based on the 12-month average rate for TexPool. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area C.

Pre Credit Recoverable Cost for Impact Fee

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

Credit for Ad Valorem Revenues:

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

Maximum Recoverable Cost for Impact Fee:

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

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area D

Recoverable Impact Fee CIP Costs	\$ 28,918,566	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs	(31,026)	Page 4 of Appendix E - Service Area D
Financing Costs	7,264,890	See Detail Below
Existing Fund Balance	-	Page 1 of Appendix E - Service Area D
Interest Earnings	(5,785,589)	Page 5 of Appendix E - Service Area D
Pre Credit Recoverable Cost for Impact Fee	\$ 30,366,842	Sum of Above
Credit for Ad Valorem Revenues	(399,023)	Page 8 of Appendix E - Service Area D
Maximum Recoverable Cost for Impact Fee	\$ 29,967,819	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees.
Reference is Service Area D column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area D

Financing Costs:

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

New Annual Debt Service	\$ 21,678,575	(Page 3 of Appendix E - Service Area D)
Existing Annual Debt Service	39,961	(Page 3 of Appendix E - Service Area D)
Principal Component	(14,453,645)	(Page 4 of Appendix E - Service Area D)
Financing Costs	\$ 7,264,890	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 3.40% annual interest rate based on the 12-month average rate for TexPool. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area D.

Pre Credit Recoverable Cost for Impact Fee

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

Credit for Ad Valorem Revenues:

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

Maximum Recoverable Cost for Impact Fee:

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



Appendix E – Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits *(as prepared by NewGen Strategies.)*

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	3.40%
Annual Service Unit Growth ⁽²⁾	1,744
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 4,776,001
Non-debt Funded New Project Cost ⁽⁵⁾	46,887,728
New Project Cost Funded Through New Debt ⁽⁶⁾	46,863,978
Total Recoverable Project Cost ⁽⁷⁾	\$ 98,527,707

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 4,686,398	4.25%	20
2	4,686,398	4.25%	20
3	4,686,398	4.25%	20
4	4,686,398	4.25%	20
5	4,686,398	4.25%	20
6	4,686,398	4.25%	20
7	4,686,398	4.25%	20
8	4,686,398	4.25%	20
9	4,686,398	4.25%	20
10	4,686,398	4.25%	20
Total	\$ 46,863,978		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 7,031,378
2	9,375,171
3	9,375,171
4	9,375,171
5	9,375,171
6	9,375,171
7	9,375,171
8	9,375,171
9	9,375,171
10	11,718,963
Total	\$ 93,751,706

(1) TexPool 12-Month Average Rate as of June 28, 2023

(2) Derived from the 10-year Growth Projections Report, Table 7

(3) Existing fund balances are already encumbered

(4) Provided by City Staff

(5) Assumes 50% of new project costs funded through sources other than debt

(6) Assumes 50% of new project costs funded through new debt issues

(7) Line 16 of the Max Fee Table Report

(8) Assumes new debt issued in equal annual amounts

(9) Estimated interest cost provided by City Staff

(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

I. New Debt Service Detail

<u>Year</u>	<u>Series 1</u>	<u>Series 2</u>	<u>Series 3</u>	<u>Series 4</u>	<u>Series 5</u>	<u>Series 6</u>	<u>Series 7</u>	<u>Series 8</u>	<u>Series 9</u>	<u>Series 10</u>	<u>Total Annual New Debt Service</u>
1	\$ 352,510	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 352,510
2	352,510	352,510	-	-	-	-	-	-	-	-	705,020
3	352,510	352,510	352,510	-	-	-	-	-	-	-	1,057,530
4	352,510	352,510	352,510	352,510	-	-	-	-	-	-	1,410,040
5	352,510	352,510	352,510	352,510	352,510	-	-	-	-	-	1,762,550
6	352,510	352,510	352,510	352,510	352,510	352,510	-	-	-	-	2,115,060
7	352,510	352,510	352,510	352,510	352,510	352,510	352,510	-	-	-	2,467,570
8	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	-	-	2,820,081
9	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	-	3,172,591
10	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
11	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
12	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
13	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
14	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
15	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
16	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
17	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
18	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
19	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
20	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,525,101
21	-	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	3,172,591
22	-	-	352,510	352,510	352,510	352,510	352,510	352,510	352,510	352,510	2,820,081
23	-	-	-	352,510	352,510	352,510	352,510	352,510	352,510	352,510	2,467,570
24	-	-	-	-	352,510	352,510	352,510	352,510	352,510	352,510	2,115,060
25	-	-	-	-	-	352,510	352,510	352,510	352,510	352,510	1,762,550
26	-	-	-	-	-	-	352,510	352,510	352,510	352,510	1,410,040
27	-	-	-	-	-	-	-	352,510	352,510	352,510	1,057,530
28	-	-	-	-	-	-	-	-	352,510	352,510	705,020
29	-	-	-	-	-	-	-	-	-	352,510	352,510
	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 7,050,201	\$ 70,502,014

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 352,510	\$ 7,031,378	\$ (4,686,398)	\$ 331,407	\$ (16,626)	\$ 3,012,271
2	705,020	9,375,171	(4,686,398)	335,520	(49,391)	5,679,922
3	1,057,530	9,375,171	(4,686,398)	320,872	(95,868)	5,971,307
4	1,410,040	9,375,171	(4,686,398)	322,787	(157,050)	6,264,550
5	1,762,550	9,375,171	(4,686,398)	325,738	(231,340)	6,545,721
6	2,115,060	9,375,171	(4,686,398)	299,050	(313,966)	6,788,917
7	2,467,570	9,375,171	(4,686,398)	300,670	(411,114)	7,045,899
8	2,820,081	9,375,171	(4,686,398)	303,538	(519,148)	7,293,243
9	3,172,591	9,375,171	(4,686,398)	305,596	(637,101)	7,529,858
10	3,525,101	11,718,963	(4,686,398)	308,811	(764,725)	10,101,752
11	3,525,101	-	-	265,412	-	3,790,513
12	3,525,101	-	-	268,971	-	3,794,072
13	3,525,101	-	-	272,088	-	3,797,189
14	3,525,101	-	-	275,733	-	3,800,833
15	3,525,101	-	-	279,249	-	3,804,350
16	3,525,101	-	-	283,281	-	3,808,382
17	3,525,101	-	-	286,529	-	3,811,629
18	3,525,101	-	-	-	-	3,525,101
19	3,525,101	-	-	-	-	3,525,101
20	3,525,101	-	-	-	-	3,525,101
21	3,172,591	-	-	-	-	3,172,591
22	2,820,081	-	-	-	-	2,820,081
23	2,467,570	-	-	-	-	2,467,570
24	2,115,060	-	-	-	-	2,115,060
25	1,762,550	-	-	-	-	1,762,550
26	1,410,040	-	-	-	-	1,410,040
27	1,057,530	-	-	-	-	1,057,530
28	705,020	-	-	-	-	705,020
29	352,510	-	-	-	-	352,510
	\$ 70,502,014	\$ 93,751,706	\$ (46,863,978)	\$ 5,085,250	\$ (3,196,329)	\$ 119,278,663

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

III. Summary of Principal Paid to Date for Existing Debt⁽³⁾

	<u>GO 2002</u>	<u>GO 2004</u>	<u>GO 2007</u>	<u>CO 2014</u>	<u>TOTAL</u>
2004	1,203				1,203
2005	3,281	1,475			4,755
2006	14,489	8,795			23,284
2007	18,863	-			18,863
2008	7,381	14,009			21,390
2009	7,819	7,953	15,839		31,610
2010	8,037	8,216	16,515		32,768
2011	11,919	8,637	17,288		37,844
2012	12,575	8,953	18,157		39,686
2013	13,286	9,427	18,930		41,643
2014	13,997	9,901	19,896		43,794
2015	14,762	10,270	20,765		45,797
2016	15,583	10,691	21,731	22,566	70,570
2017	16,403	11,113	22,793	100,578	150,886
2018	17,332	11,639	23,759	102,512	155,242
2019	18,262	12,271	24,918	105,091	160,542
2020	19,300	12,851	26,077	108,959	167,187
2021	20,339	13,535	27,236	113,473	174,583
2022	21,487	14,273	28,588	117,986	182,333
	\$ 256,319	\$ 174,009	\$ 302,490	\$ 671,164	\$ 1,403,982

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	4,776,001
-Less Principal PTD	1,403,982
Outstanding Debt Principal	3,372,019
New Project Costs Debt Principal ⁽⁵⁾	46,863,978
Principal Component	\$ 50,235,997

(1) Appendix E - Service Area A, Page 2

(2) Appendix E - Service Area A, Page 1

(3) Existing debt funded project costs from details provided by staff.

(4) Appendix E - Service Area A, Page 8

(5) Appendix E - Service Area A, Page 1

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 5,740	1,744	\$ 10,011,142	\$ 3,012,271	\$ 6,998,871	118,911	7,117,782
2	5,740	1,744	10,011,142	5,679,922	4,331,220	315,450	11,764,451
3	5,740	1,744	10,011,142	5,971,307	4,039,834	468,393	16,272,678
4	5,740	1,744	10,011,142	6,264,550	3,746,591	616,600	20,635,870
5	5,740	1,744	10,011,142	6,545,721	3,465,421	760,084	24,861,375
6	5,740	1,744	10,011,142	6,788,917	3,222,224	899,535	28,983,134
7	5,740	1,744	10,011,142	7,045,899	2,965,242	1,035,226	32,983,603
8	5,740	1,744	10,011,142	7,293,243	2,717,898	1,166,960	36,868,461
9	5,740	1,744	10,011,142	7,529,858	2,481,283	1,294,947	40,644,692
10	5,740	1,744	10,011,142	10,101,752	(90,611)	1,379,567	41,933,648
11	-	-	-	3,790,513	(3,790,513)	1,360,505	39,503,640
12	-	-	-	3,794,072	(3,794,072)	1,277,872	36,987,441
13	-	-	-	3,797,189	(3,797,189)	1,192,319	34,382,571
14	-	-	-	3,800,833	(3,800,833)	1,103,744	31,685,481
15	-	-	-	3,804,350	(3,804,350)	1,012,037	28,893,169
16	-	-	-	3,808,382	(3,808,382)	917,085	26,001,872
17	-	-	-	3,811,629	(3,811,629)	818,784	23,009,027
18	-	-	-	3,525,101	(3,525,101)	721,955	20,205,881
19	-	-	-	3,525,101	(3,525,101)	626,704	17,307,485
20	-	-	-	3,525,101	(3,525,101)	528,217	14,310,601
21	-	-	-	3,172,591	(3,172,591)	432,372	11,570,383
22	-	-	-	2,820,081	(2,820,081)	345,248	9,095,550
23	-	-	-	2,467,570	(2,467,570)	267,143	6,895,123
24	-	-	-	2,115,060	(2,115,060)	198,361	4,978,424
25	-	-	-	1,762,550	(1,762,550)	139,221	3,355,095
26	-	-	-	1,410,040	(1,410,040)	90,050	2,035,104
27	-	-	-	1,057,530	(1,057,530)	51,185	1,028,759
28	-	-	-	705,020	(705,020)	22,979	346,718
29	-	-	-	352,510	(352,510)	5,792	-
			100,111,415	119,278,663		19,167,248	

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	2.5921	1.0000	1,744	4,521	\$ 3,012,271	\$ 7,808,193
2	28	2.5069	1.0000	1,744	4,372	5,679,922	14,239,238
3	27	2.4246	1.0000	1,744	4,228	5,971,307	14,477,771
4	26	2.3449	1.0000	1,744	4,090	6,264,550	14,689,603
5	25	2.2678	1.0000	1,744	3,955	6,545,721	14,844,497
6	24	2.1933	1.0000	1,744	3,825	6,788,917	14,890,057
7	23	2.1212	1.0000	1,744	3,699	7,045,899	14,945,834
8	22	2.0515	1.0000	1,744	3,578	7,293,243	14,962,091
9	21	1.9841	1.0000	1,744	3,460	7,529,858	14,939,850
10	20	1.9189	1.0000	1,744	3,347	10,101,752	19,384,028
11	19	1.8558	1.0000	-	-	3,790,513	7,034,498
12	18	1.7948	1.0000	-	-	3,794,072	6,809,709
13	17	1.7358	1.0000	-	-	3,797,189	6,591,330
14	16	1.6788	1.0000	-	-	3,800,833	6,380,836
15	15	1.6236	1.0000	-	-	3,804,350	6,176,850
16	14	1.5703	1.0000	-	-	3,808,382	5,980,190
17	13	1.5187	1.0000	-	-	3,811,629	5,788,593
18	12	1.4688	1.0000	-	-	3,525,101	5,177,519
19	11	1.4205	1.0000	-	-	3,525,101	5,007,369
20	10	1.3738	1.0000	-	-	3,525,101	4,842,810
21	9	1.3287	1.0000	-	-	3,172,591	4,215,294
22	8	1.2850	1.0000	-	-	2,820,081	3,623,791
23	7	1.2428	1.0000	-	-	2,467,570	3,066,614
24	6	1.2019	1.0000	-	-	2,115,060	2,542,144
25	5	1.1624	1.0000	-	-	1,762,550	2,048,834
26	4	1.1242	1.0000	-	-	1,410,040	1,585,202
27	3	1.0873	1.0000	-	-	1,057,530	1,149,830
28	2	1.0515	1.0000	-	-	705,020	741,362
29	1	1.0170	1.0000	-	-	352,510	358,499
					39,075	119,278,663	224,302,437

Total Escalated Expense for Entire Period	\$ 224,302,437
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 224,302,437
Total Escalated Service Units	39,075
Impact Fee for Service Area A	\$ 5,740

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Total Project Cost ⁽¹⁾	Percent in Service Area ⁽¹⁾	Cost in Service Area ⁽¹⁾	Impact Fee Recoverable Cost ⁽²⁾	Debt Funded ⁽³⁾		Non-Debt Funded ⁽³⁾	Impact Fee Recoverable Cost
						Existing	Proposed		
New Hope Rd (1)	A-1	\$ 16,500,000	100%	\$ 16,500,000	\$ 7,155,999	\$ -	\$ 3,577,999	\$ 3,577,999	\$ 7,155,999
New Hope Rd (2)	A-2	8,200,000	50%	4,100,000	1,778,157	-	889,079	889,079	1,778,157
New Hope Rd (3)	A-3	11,100,000	50%	5,550,000	2,407,018	-	1,203,509	1,203,509	2,407,018
Westinghouse Rd	A-4, B-1	9,152,896	50%	4,576,448	1,984,791	-	992,396	992,396	1,984,791
RM 1431 (1)	A-7	5,180,000	50%	2,590,000	1,123,275	-	561,637	561,637	1,123,275
RM 1431 (2)	A-8	5,200,000	100%	5,200,000	2,255,224	-	1,127,612	1,127,612	2,255,224
RM 1431 (3)	A-9	6,960,000	50%	3,480,000	1,509,265	-	754,633	754,633	1,509,265
Wyoming Springs Dr (3)	A-10	1,800,000	100%	1,800,000	780,654	-	390,327	390,327	780,654
Eagles Nest Dr (1)	A-11	41,600,000	100%	41,600,000	18,041,790	-	9,020,895	9,020,895	18,041,790
Creek Bend Blvd (1)	A-12	13,800,000	100%	13,800,000	5,985,017	-	2,992,508	2,992,508	5,985,017
Creek Bend Blvd (2)	A-13	3,500,000	100%	3,500,000	1,517,939	-	758,970	758,970	1,517,939
Chisholm Trl Rd (1)	A-14	19,400,000	100%	19,400,000	8,413,719	-	4,206,860	4,206,860	8,413,719
Eagles Nest Dr (2)	A-15, B-11	12,216,939	100%	12,216,939	5,298,448	-	2,649,224	2,649,224	5,298,448
CR 173	A-16	2,100,000	100%	2,100,000	910,763	-	455,382	455,382	910,763
Chisholm Trl Rd (2)	A-17	5,000,000	100%	5,000,000	2,168,484	-	1,084,242	1,084,242	2,168,484
Sam Bass Rd (3)	A-21	3,900,000	50%	1,950,000	845,709	-	422,854	422,854	845,709
Sam Bass Rd (4)	A-22	2,100,000	100%	2,100,000	910,763	-	455,382	455,382	910,763
Sam Bass Rd (5)	A-23	2,400,000	100%	2,400,000	1,040,873	-	520,436	520,436	1,040,873
Sam Bass Rd (6)	A-24	14,800,000	50%	7,400,000	3,209,357	-	1,604,678	1,604,678	3,209,357
Wyoming Springs Dr (4)	A-26	26,379,928	100%	26,379,928	11,440,892	-	5,720,446	5,720,446	11,440,892
Creek Bend Blvd (3)	A-28	11,012,302	100%	11,012,302	4,776,001	4,776,001	-	-	4,776,001
Deepwood Dr (1)	A-29	18,900,346	100%	18,900,346	8,197,021	-	4,098,511	4,098,511	8,197,021
Deepwood Dr (2)	A-30	1,400,000	100%	1,400,000	607,176	-	303,588	303,588	607,176
RM 620	A-31, C-1	12,560,624	50%	6,280,312	2,723,752	-	1,361,876	1,361,876	2,723,752
Sam Bass Rd and FM 3406	AI-1	550,000	100%	550,000	238,533	-	119,267	119,267	238,533
Sam Bass Rd and Hairy Man Rd	AI-2	2,500,000	75%	1,875,000	813,182	-	406,591	406,591	813,182
Sam Bass Rd and Chisholm Trl Rd	AI-3	240,000	100%	240,000	104,087	-	52,044	52,044	104,087
Update ITS and Traffic Managmenet Infrastructure	-	20,900,000	25%	5,225,000	2,266,066	-	1,133,033	1,133,033	2,266,066
Roadway Impact Fee Project		23,750	100%	23,750	23,750	-	-	23,750	23,750
Total		\$ 279,376,785		\$ 227,150,025	\$ 98,527,707	\$ 4,776,001	\$ 46,863,978	\$ 46,887,728	\$ 98,527,707

(1) 2023 Transportation Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

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

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area A

2023 Vehicle Miles (All Service Areas)	69,995
Ten Year Growth in Vehicle Miles (Service Area A) ⁽¹⁾	17,440
Annual Growth in Vehicle Miles	<u>10 years</u> 1,744

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 683,917	\$ 1,040,540	\$ 1,378,402	\$ 1,732,827	\$ 2,088,288	\$ 2,414,110	\$ 2,768,241	\$ 3,123,619	\$ 3,478,187	\$ 3,833,911	\$ 22,542,042
2023 Vehicle Miles plus Service Area A Growth	71,739	73,483	75,227	76,972	78,716	80,460	82,204	83,948	85,692	87,436	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 9.53	\$ 14.16	\$ 18.32	\$ 22.51	\$ 26.53	\$ 30.00	\$ 33.68	\$ 37.21	\$ 40.59	\$ 43.85	
Annual Growth in Service Area A Vehicle Miles (Cumulative)	1,744	3,488	5,232	6,976	8,720	10,464	12,208	13,952	15,696	17,440	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 16,626	\$ 49,391	\$ 95,868	\$ 157,050	\$ 231,340	\$ 313,966	\$ 411,114	\$ 519,148	\$ 637,101	\$ 764,725	\$ 3,196,329
Credit Amount	\$ 3,196,329										

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	3.40%
Annual Service Unit Growth ⁽²⁾	1,528
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 481,019
Non-debt Funded New Project Cost ⁽⁵⁾	35,488,172
New Project Cost Funded Through New Debt ⁽⁶⁾	35,239,130
Total Recoverable Project Cost ⁽⁷⁾	\$ 71,208,321

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 3,523,913	4.25%	20
2	3,523,913	4.25%	20
3	3,523,913	4.25%	20
4	3,523,913	4.25%	20
5	3,523,913	4.25%	20
6	3,523,913	4.25%	20
7	3,523,913	4.25%	20
8	3,523,913	4.25%	20
9	3,523,913	4.25%	20
10	3,523,913	4.25%	20
Total	\$ 35,239,130		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 5,304,548
2	7,072,730
3	7,072,730
4	7,072,730
5	7,072,730
6	7,072,730
7	7,072,730
8	7,072,730
9	7,072,730
10	8,840,913
Total	\$ 70,727,302

(1) TexPool 12-Month Average Rate as of June 28, 2023

(2) Derived from the 10-year Growth Projections Report, Table 7

(3) Existing fund balances are already encumbered

(4) Provided by City Staff

(5) Assumes 50% of new project costs funded through sources other than debt

(6) Assumes 50% of new project costs funded through new debt issues

(7) Line 16 of the Max Fee Table Report

(8) Assumes new debt issued in equal annual amounts

(9) Estimated interest cost provided by City Staff

(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

I. New Debt Service Detail

<u>Year</u>	<u>Series</u> <u>1</u>	<u>Series</u> <u>2</u>	<u>Series</u> <u>3</u>	<u>Series</u> <u>4</u>	<u>Series</u> <u>5</u>	<u>Series</u> <u>6</u>	<u>Series</u> <u>7</u>	<u>Series</u> <u>8</u>	<u>Series</u> <u>9</u>	<u>Series</u> <u>10</u>	<u>Total</u> <u>Annual</u> <u>New Debt</u> <u>Service</u>
1	\$ 265,068	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 265,068
2	265,068	265,068	-	-	-	-	-	-	-	-	530,136
3	265,068	265,068	265,068	-	-	-	-	-	-	-	795,204
4	265,068	265,068	265,068	265,068	-	-	-	-	-	-	1,060,273
5	265,068	265,068	265,068	265,068	265,068	-	-	-	-	-	1,325,341
6	265,068	265,068	265,068	265,068	265,068	265,068	-	-	-	-	1,590,409
7	265,068	265,068	265,068	265,068	265,068	265,068	265,068	-	-	-	1,855,477
8	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	-	-	2,120,545
9	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	-	2,385,613
10	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
11	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
12	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
13	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
14	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
15	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
16	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
17	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
18	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
19	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
20	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,650,682
21	-	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,385,613
22	-	-	265,068	265,068	265,068	265,068	265,068	265,068	265,068	265,068	2,120,545
23	-	-	-	265,068	265,068	265,068	265,068	265,068	265,068	265,068	1,855,477
24	-	-	-	-	265,068	265,068	265,068	265,068	265,068	265,068	1,590,409
25	-	-	-	-	-	265,068	265,068	265,068	265,068	265,068	1,325,341
26	-	-	-	-	-	-	265,068	265,068	265,068	265,068	1,060,273
27	-	-	-	-	-	-	-	265,068	265,068	265,068	795,204
28	-	-	-	-	-	-	-	-	265,068	265,068	530,136
29	-	-	-	-	-	-	-	-	-	265,068	265,068
	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 5,301,363	\$ 53,013,631

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 265,068	\$ 5,304,548	\$ (3,523,913)	\$ 35,500	\$ (6,422)	\$ 2,074,781
2	530,136	7,072,730	(3,523,913)	35,762	(23,677)	4,091,038
3	795,204	7,072,730	(3,523,913)	28,690	(50,649)	4,322,064
4	1,060,273	7,072,730	(3,523,913)	28,818	(87,476)	4,550,431
5	1,325,341	7,072,730	(3,523,913)	28,977	(133,297)	4,769,838
6	1,590,409	7,072,730	(3,523,913)	14,948	(185,946)	4,968,228
7	1,855,477	7,072,730	(3,523,913)	15,045	(247,983)	5,171,357
8	2,120,545	7,072,730	(3,523,913)	15,214	(317,581)	5,366,996
9	2,385,613	7,072,730	(3,523,913)	15,335	(394,311)	5,555,454
10	2,650,682	8,840,913	(3,523,913)	15,524	(477,809)	7,505,397
11	2,650,682	-	-	15,743	-	2,666,425
12	2,650,682	-	-	15,955	-	2,666,636
13	2,650,682	-	-	16,139	-	2,666,821
14	2,650,682	-	-	16,356	-	2,667,037
15	2,650,682	-	-	16,564	-	2,667,246
16	2,650,682	-	-	16,803	-	2,667,485
17	2,650,682	-	-	16,996	-	2,667,678
18	2,650,682	-	-	-	-	2,650,682
19	2,650,682	-	-	-	-	2,650,682
20	2,650,682	-	-	-	-	2,650,682
21	2,385,613	-	-	-	-	2,385,613
22	2,120,545	-	-	-	-	2,120,545
23	1,855,477	-	-	-	-	1,855,477
24	1,590,409	-	-	-	-	1,590,409
25	1,325,341	-	-	-	-	1,325,341
26	1,060,273	-	-	-	-	1,060,273
27	795,204	-	-	-	-	795,204
28	530,136	-	-	-	-	530,136
29	265,068	-	-	-	-	265,068
	\$ 53,013,631	\$ 70,727,302	\$ (35,239,130)	\$ 348,370	\$ (1,925,151)	\$ 86,925,022

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

III. Summary of Principal Paid to Date for Existing Debt⁽³⁾

	<u>GO 2002</u>	<u>GO 2004</u>	<u>CO 2014</u>	<u>TOTAL</u>
2004	577			577
2005	1,575	639		2,214
2006	6,954	3,813		10,767
2007	9,054	-		9,054
2008	3,543	6,073		9,616
2009	3,753	3,448		7,200
2010	3,858	3,562		7,419
2011	5,721	3,744		9,465
2012	6,036	3,881		9,917
2013	6,377	4,087		10,464
2014	6,718	4,292		11,010
2015	7,085	4,452		11,537
2016	7,479	4,635	1,339	13,452
2017	7,873	4,817	5,966	18,656
2018	8,319	5,046	6,081	19,445
2019	8,765	5,320	6,234	20,318
2020	9,263	5,571	6,463	21,297
2021	9,762	5,868	6,731	22,360
2022	10,313	6,187	6,999	23,499
	<u>\$ 123,023</u>	<u>\$ 75,434</u>	<u>\$ 39,811</u>	<u>\$ 238,268</u>

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	481,019
-Less Principal PTD	238,268
Outstanding Debt Principal	242,750
New Project Costs Debt Principal ⁽⁵⁾	35,239,130
Principal Component	\$ 35,481,881

(1) Appendix E - Service Area B, Page 2

(2) Appendix E - Service Area B, Page 1

(3) Existing debt funded project costs from details provided by staff.

(4) Appendix E - Service Area B, Page 8

(5) Appendix E - Service Area B, Page 1

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 4,765	1,528	\$ 7,281,750	\$ 2,074,781	\$ 5,206,969	88,466	5,295,435
2	4,765	1,528	7,281,750	4,091,038	3,190,712	234,149	8,720,296
3	4,765	1,528	7,281,750	4,322,064	2,959,686	346,601	12,026,583
4	4,765	1,528	7,281,750	4,550,431	2,731,318	455,068	15,212,970
5	4,765	1,528	7,281,750	4,769,838	2,511,911	559,614	18,284,495
6	4,765	1,528	7,281,750	4,968,228	2,313,521	660,614	21,258,630
7	4,765	1,528	7,281,750	5,171,357	2,110,393	758,224	24,127,247
8	4,765	1,528	7,281,750	5,366,996	1,914,754	852,376	26,894,376
9	4,765	1,528	7,281,750	5,555,454	1,726,295	943,201	29,563,872
10	4,765	1,528	7,281,750	7,505,397	(223,647)	1,000,781	30,341,006
11	-	-	-	2,666,425	(2,666,425)	985,685	28,660,266
12	-	-	-	2,666,636	(2,666,636)	928,570	26,922,199
13	-	-	-	2,666,821	(2,666,821)	869,507	25,124,885
14	-	-	-	2,667,037	(2,667,037)	808,431	23,266,279
15	-	-	-	2,667,246	(2,667,246)	745,272	21,344,305
16	-	-	-	2,667,485	(2,667,485)	679,959	19,356,779
17	-	-	-	2,667,678	(2,667,678)	612,420	17,301,521
18	-	-	-	2,650,682	(2,650,682)	542,871	15,193,710
19	-	-	-	2,650,682	(2,650,682)	471,247	13,014,276
20	-	-	-	2,650,682	(2,650,682)	397,190	10,760,784
21	-	-	-	2,385,613	(2,385,613)	325,120	8,700,290
22	-	-	-	2,120,545	(2,120,545)	259,608	6,839,353
23	-	-	-	1,855,477	(1,855,477)	200,877	5,184,753
24	-	-	-	1,590,409	(1,590,409)	149,157	3,743,500
25	-	-	-	1,325,341	(1,325,341)	104,687	2,522,846
26	-	-	-	1,060,273	(1,060,273)	67,712	1,530,286
27	-	-	-	795,204	(795,204)	38,489	773,570
28	-	-	-	530,136	(530,136)	17,279	260,713
29	-	-	-	265,068	(265,068)	4,356	-
			72,817,496	86,925,022		14,107,526	

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	2.5921	1.0000	1,528	3,961	\$ 2,074,781	\$ 5,378,098
2	28	2.5069	1.0000	1,528	3,831	4,091,038	10,255,997
3	27	2.4246	1.0000	1,528	3,705	4,322,064	10,479,087
4	26	2.3449	1.0000	1,528	3,584	4,550,431	10,670,204
5	25	2.2678	1.0000	1,528	3,466	4,769,838	10,817,120
6	24	2.1933	1.0000	1,528	3,352	4,968,228	10,896,761
7	23	2.1212	1.0000	1,528	3,242	5,171,357	10,969,535
8	22	2.0515	1.0000	1,528	3,135	5,366,996	11,010,394
9	21	1.9841	1.0000	1,528	3,032	5,555,454	11,022,473
10	20	1.9189	1.0000	1,528	2,933	7,505,397	14,401,939
11	19	1.8558	1.0000	-	-	2,666,425	4,948,397
12	18	1.7948	1.0000	-	-	2,666,636	4,786,155
13	17	1.7358	1.0000	-	-	2,666,821	4,629,187
14	16	1.6788	1.0000	-	-	2,667,037	4,477,420
15	15	1.6236	1.0000	-	-	2,667,246	4,330,616
16	14	1.5703	1.0000	-	-	2,667,485	4,188,673
17	13	1.5187	1.0000	-	-	2,667,678	4,051,312
18	12	1.4688	1.0000	-	-	2,650,682	3,893,209
19	11	1.4205	1.0000	-	-	2,650,682	3,765,266
20	10	1.3738	1.0000	-	-	2,650,682	3,641,527
21	9	1.3287	1.0000	-	-	2,385,613	3,169,669
22	8	1.2850	1.0000	-	-	2,120,545	2,724,891
23	7	1.2428	1.0000	-	-	1,855,477	2,305,925
24	6	1.2019	1.0000	-	-	1,590,409	1,911,552
25	5	1.1624	1.0000	-	-	1,325,341	1,540,610
26	4	1.1242	1.0000	-	-	1,060,273	1,191,985
27	3	1.0873	1.0000	-	-	795,204	864,609
28	2	1.0515	1.0000	-	-	530,136	557,463
29	1	1.0170	1.0000	-	-	265,068	269,572
					34,241	86,925,022	163,149,644

Total Escalated Expense for Entire Period	\$ 163,149,644
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 163,149,644
Total Escalated Service Units	34,241
Impact Fee for Service Area B	\$ 4,765

City of Round Rock - 2023 Roadway Impact Fee Study
Capital Improvement Plan for Impact Fees
Appendix E - Impact Fee Calculation Assumptions
Service Area B

Impact Fee Project Name⁽¹⁾	Impact Fee Project No.⁽¹⁾	Total Project Cost⁽¹⁾	Percent in Service Area⁽¹⁾	Cost in Service Area⁽¹⁾	Impact Fee Recoverable Cost⁽²⁾	Debt Funded⁽³⁾		Non-Debt Funded⁽³⁾	Impact Fee Recoverable Cost
						Existing	Proposed		
Westinghouse Rd (1)	A-4, B-1	\$ 9,152,896	50%	\$ 4,576,448	\$ 974,365	\$ -	\$ 487,182	\$ 487,182	\$ 974,365
University Blvd (1)	B-4	17,220,832	100%	17,220,832	3,666,463	-	1,833,231	1,833,231	3,666,463
University Blvd (2)	B-5	53,300,000	50%	26,650,000	5,674,013	-	2,837,007	2,837,007	5,674,013
University Blvd (3)	B-6	8,200,000	100%	8,200,000	1,745,850	-	872,925	872,925	1,745,850
University Blvd (4)	B-7	17,000,000	50%	8,500,000	1,809,723	-	904,861	904,861	1,809,723
University Blvd (5)	B-8	4,300,000	100%	4,300,000	915,507	-	457,753	457,753	915,507
N Mays St (2)	B-9	8,300,000	100%	8,300,000	1,767,141	-	883,571	883,571	1,767,141
Eagles Nest (1)	A-15, B-11	12,216,939	50%	6,108,470	1,300,545	-	650,273	650,273	1,300,545
Eagles Nest (2)	B-12	21,436,451	100%	21,436,451	4,564,004	-	2,282,002	2,282,002	4,564,004
N Mays St (4)	B-13	5,500,000	100%	5,500,000	1,170,997	-	585,499	585,499	1,170,997
Sunrise Rd (2)	B-15	1,600,000	100%	1,600,000	340,654	-	170,327	170,327	340,654
Sunrise Rd (3)	B-16	900,000	50%	450,000	95,809	-	47,904	47,904	95,809
Sunrise Rd (4)	B-17	700,000	100%	700,000	149,036	-	74,518	74,518	149,036
Sunrise Rd (5)	B-18	300,000	50%	150,000	31,936	-	15,968	15,968	31,936
Sunrise Rd (6)	B-19	1,200,000	100%	1,200,000	255,490	-	127,745	127,745	255,490
Wallin Bradley (2)	B-21	6,600,000	100%	6,600,000	1,405,197	-	702,598	702,598	1,405,197
College Park (2)	B-22	21,700,000	100%	21,700,000	4,620,116	-	2,310,058	2,310,058	4,620,116
Seton Pkwy	B-23	1,795,839	100%	1,795,839	382,350	382,350	-	-	382,350
Medical Center Pkwy	B-24	1,058,160	100%	1,058,160	225,291	-	-	225,291	225,291
Avery Nelson Pkwy (1)	B-25	14,000,000	100%	14,000,000	2,980,720	-	1,490,360	1,490,360	2,980,720
Avery Nelson Pkwy (2)	B-26	11,800,000	50%	5,900,000	1,256,161	-	628,080	628,080	1,256,161
Kenney Fort Blvd (1)	B-27, D-7	15,018,951	100%	15,018,951	3,197,663	-	1,598,832	1,598,832	3,197,663
Kenney Fort Blvd (3)	B-28, D-9	9,173,038	100%	9,173,038	1,953,018	-	976,509	976,509	1,953,018
Old Settlers Blvd (1)	B-31	14,700,000	100%	14,700,000	3,129,756	-	1,564,878	1,564,878	3,129,756
Old Settlers Blvd (2)	B-32	31,100,000	100%	31,100,000	6,621,456	-	3,310,728	3,310,728	6,621,456
N Mays St	B-34	3,900,000	100%	3,900,000	830,343	-	415,172	415,172	830,343
Sunrise Rd (7)	B-35	800,000	100%	800,000	170,327	-	85,163	85,163	170,327
FM 1460 (A.W. Grimes Blvd) (1)	B-36	1,820,000	100%	1,820,000	387,494	-	193,747	193,747	387,494
FM 1460 (A.W. Grimes Blvd) (2)	B-37	1,620,000	50%	810,000	172,456	-	86,228	86,228	172,456
FM 1460 (A.W. Grimes Blvd) (3)	B-38	6,960,000	100%	6,960,000	1,481,844	-	740,922	740,922	1,481,844
Kenney Fort Blvd (4)	B-39, D-10	5,000,000	100%	5,000,000	1,064,543	17,778	523,382	523,382	1,064,543
Kenney Fort Blvd (5)	B-40, D-11	4,900,000	50%	2,450,000	521,626	8,711	256,457	256,457	521,626
Kenney Fort Blvd (6)	B-41, D-12	10,700,000	100%	10,700,000	2,278,122	38,045	1,120,038	1,120,038	2,278,122
Kenney Fort Blvd (7)	B-42, D-14	9,600,000	100%	9,600,000	2,043,922	34,134	1,004,894	1,004,894	2,043,922
US 79 (1)	B-46, C-6	16,379,383	50%	8,189,692	1,743,655	-	871,828	871,828	1,743,655
US 79 (3)	B-47	1,600,000	50%	800,000	170,327	-	85,163	85,163	170,327
Joe Dimaggio Blvd Extension	B-48	7,000,000	100%	7,000,000	1,490,360	-	745,180	745,180	1,490,360
Wallin Bradley (1)	B-49	9,500,000	100%	9,500,000	2,022,631	-	1,011,316	1,011,316	2,022,631
Wallin Bradley (3)	B-50	18,200,000	100%	18,200,000	3,874,936	-	1,937,468	1,937,468	3,874,936
US 79 (2)	B-51, C-28	12,760,000	50%	6,380,000	1,358,357	-	679,178	679,178	1,358,357
A.W. Grimes Blvd and Palm Valley Blvd	BI-4, CI-8	2,141,000	50%	1,070,500	227,919	-	113,959	113,959	227,919
Update ITS and Traffic Managemenet Infrastructure	-	20,900,000	25%	5,225,000	1,112,447	-	556,224	556,224	1,112,447
Transportation Impact Fee Project		23,750	100%	23,750	23,750	-	-	23,750	23,750
Total		\$ 422,077,239		\$ 334,367,130	\$ 71,208,321	\$ 481,019	\$ 35,239,130	\$ 35,488,172	\$ 71,208,321

(1) 2023 Transportation Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

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

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area B

2023 Vehicle Miles (All Service Areas)	69,995
Ten Year Growth in Vehicle Miles (Service Area B) ⁽¹⁾	15,283
	<u>10 years</u>
Annual Growth in Vehicle Miles	1,528

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 300,568	\$ 565,898	\$ 823,895	\$ 1,089,090	\$ 1,354,318	\$ 1,605,357	\$ 1,870,522	\$ 2,135,760	\$ 2,400,948	\$ 2,666,205	\$ 14,812,562
2023 Vehicle Miles plus Service Area B Growth	71,524	73,052	74,580	76,108	77,637	79,165	80,693	82,222	83,750	85,278	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 4.20	\$ 7.75	\$ 11.05	\$ 14.31	\$ 17.44	\$ 20.28	\$ 23.18	\$ 25.98	\$ 28.67	\$ 31.26	
Annual Growth in Service Area B Vehicle Miles (Cumulative)	1,528	3,057	4,585	6,113	7,641	9,170	10,698	12,226	13,754	15,283	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 6,422	\$ 23,677	\$ 50,649	\$ 87,476	\$ 133,297	\$ 185,946	\$ 247,983	\$ 317,581	\$ 394,311	\$ 477,809	\$ 1,925,151
Credit Amount	\$ 1,925,151										

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	3.40%
Annual Service Unit Growth ⁽²⁾	3,006
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 11,724,588
Non-debt Funded New Project Cost ⁽⁵⁾	56,252,184
New Project Cost Funded Through New Debt ⁽⁶⁾	51,417,040
Total Recoverable Project Cost ⁽⁷⁾	\$ 119,393,812

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 5,141,704	4.25%	20
2	5,141,704	4.25%	20
3	5,141,704	4.25%	20
4	5,141,704	4.25%	20
5	5,141,704	4.25%	20
6	5,141,704	4.25%	20
7	5,141,704	4.25%	20
8	5,141,704	4.25%	20
9	5,141,704	4.25%	20
10	5,141,704	4.25%	20
Total	\$ 51,417,040		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 8,075,192
2	10,766,922
3	10,766,922
4	10,766,922
5	10,766,922
6	10,766,922
7	10,766,922
8	10,766,922
9	10,766,922
10	13,458,653
Total	\$ 107,669,224

(1) TexPool 12-Month Average Rate as of June 28, 2023

(2) Derived from the 10-year Growth Projections Report, Table 7

(3) Existing fund balances are already encumbered

(4) Provided by City Staff

(5) Assumes 50% of new project costs funded through sources other than debt

(6) Assumes 50% of new project costs funded through new debt issues

(7) Line 16 of the Max Fee Table Report

(8) Assumes new debt issued in equal annual amounts

(9) Estimated interest cost provided by City Staff

(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

I. New Debt Service Detail

<u>Year</u>	<u>Series</u> <u>1</u>	<u>Series</u> <u>2</u>	<u>Series</u> <u>3</u>	<u>Series</u> <u>4</u>	<u>Series</u> <u>5</u>	<u>Series</u> <u>6</u>	<u>Series</u> <u>7</u>	<u>Series</u> <u>8</u>	<u>Series</u> <u>9</u>	<u>Series</u> <u>10</u>	<u>Total</u> <u>Annual</u> <u>New Debt</u> <u>Service</u>
1	\$ 386,758	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 386,758
2	386,758	386,758	-	-	-	-	-	-	-	-	773,516
3	386,758	386,758	386,758	-	-	-	-	-	-	-	1,160,274
4	386,758	386,758	386,758	386,758	-	-	-	-	-	-	1,547,032
5	386,758	386,758	386,758	386,758	386,758	-	-	-	-	-	1,933,791
6	386,758	386,758	386,758	386,758	386,758	386,758	-	-	-	-	2,320,549
7	386,758	386,758	386,758	386,758	386,758	386,758	386,758	-	-	-	2,707,307
8	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	-	-	3,094,065
9	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	-	3,480,823
10	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
11	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
12	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
13	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
14	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
15	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
16	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
17	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
18	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
19	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
20	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,867,581
21	-	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,480,823
22	-	-	386,758	386,758	386,758	386,758	386,758	386,758	386,758	386,758	3,094,065
23	-	-	-	386,758	386,758	386,758	386,758	386,758	386,758	386,758	2,707,307
24	-	-	-	-	386,758	386,758	386,758	386,758	386,758	386,758	2,320,549
25	-	-	-	-	-	386,758	386,758	386,758	386,758	386,758	1,933,791
26	-	-	-	-	-	-	386,758	386,758	386,758	386,758	1,547,032
27	-	-	-	-	-	-	-	386,758	386,758	386,758	1,160,274
28	-	-	-	-	-	-	-	-	386,758	386,758	773,516
29	-	-	-	-	-	-	-	-	-	386,758	386,758
	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 7,735,162	\$ 77,351,625

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

II. Summary of Annual Expenses

Year	New Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Existing Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
1	\$ 386,758	\$ 8,075,192	\$ (5,141,704)	\$ -	\$ (15,927)	\$ 3,304,319
2	773,516	10,766,922	(5,141,704)	-	(61,188)	6,337,546
3	1,160,274	10,766,922	(5,141,704)	-	(132,435)	6,653,057
4	1,547,032	10,766,922	(5,141,704)	-	(226,811)	6,945,440
5	1,933,791	10,766,922	(5,141,704)	-	(341,862)	7,217,147
6	2,320,549	10,766,922	(5,141,704)	-	(475,471)	7,470,296
7	2,707,307	10,766,922	(5,141,704)	-	(625,798)	7,706,727
8	3,094,065	10,766,922	(5,141,704)	-	(791,241)	7,928,043
9	3,480,823	10,766,922	(5,141,704)	797,326	(1,192,675)	8,710,693
10	3,867,581	13,458,653	(5,141,704)	826,740	(1,410,418)	11,600,852
11	3,867,581	-	-	827,320	-	4,694,901
12	3,867,581	-	-	827,626	-	4,695,207
13	3,867,581	-	-	827,658	-	4,695,239
14	3,867,581	-	-	827,417	-	4,694,998
15	3,867,581	-	-	826,903	-	4,694,484
16	3,867,581	-	-	828,286	-	4,695,867
17	3,867,581	-	-	827,178	-	4,694,760
18	3,867,581	-	-	827,969	-	4,695,550
19	3,867,581	-	-	826,269	-	4,693,850
20	3,867,581	-	-	-	-	3,867,581
21	3,480,823	-	-	-	-	3,480,823
22	3,094,065	-	-	-	-	3,094,065
23	2,707,307	-	-	-	-	2,707,307
24	2,320,549	-	-	-	-	2,320,549
25	1,933,791	-	-	-	-	1,933,791
26	1,547,032	-	-	-	-	1,547,032
27	1,160,274	-	-	-	-	1,160,274
28	773,516	-	-	-	-	773,516
29	386,758	-	-	-	-	386,758
	\$ 77,351,625	\$ 107,669,224	\$ (51,417,040)	\$ 9,070,691	\$ (5,273,827)	\$ 137,400,673

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

III. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	11,724,588
-Less Principal PTD	-
Outstanding Debt Principal	11,724,588
New Project Costs Debt Principal ⁽⁵⁾	51,417,040
Principal Component	\$ 63,141,628

(1) Appendix E - Service Area C, Page 2

(2) Appendix E - Service Area C, Page 1

(3) Existing debt funded project costs from details provided by staff.

(4) Appendix E - Service Area C, Page 8

(5) Appendix E - Service Area C, Page 1

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 3,818	3,006	\$ 11,477,741	\$ 3,304,319	\$ 8,173,422	138,866	8,312,289
2	3,818	3,006	11,477,741	6,337,546	5,140,195	369,783	13,822,267
3	3,818	3,006	11,477,741	6,653,057	4,824,684	551,652	19,198,603
4	3,818	3,006	11,477,741	6,945,440	4,532,302	729,372	24,460,277
5	3,818	3,006	11,477,741	7,217,147	4,260,595	903,548	29,624,419
6	3,818	3,006	11,477,741	7,470,296	4,007,445	1,074,724	34,706,589
7	3,818	3,006	11,477,741	7,706,727	3,771,014	1,243,399	39,721,002
8	3,818	3,006	11,477,741	7,928,043	3,549,698	1,410,029	44,680,729
9	3,818	3,006	11,477,741	8,710,693	2,767,049	1,565,263	49,013,041
10	3,818	3,006	11,477,741	11,600,852	(123,110)	1,663,372	50,553,303
11	-	-	-	4,694,901	(4,694,901)	1,638,035	47,496,437
12	-	-	-	4,695,207	(4,695,207)	1,534,157	44,335,387
13	-	-	-	4,695,239	(4,695,239)	1,426,744	41,066,892
14	-	-	-	4,694,998	(4,694,998)	1,315,685	37,687,579
15	-	-	-	4,694,484	(4,694,484)	1,200,865	34,193,959
16	-	-	-	4,695,867	(4,695,867)	1,082,128	30,580,220
17	-	-	-	4,694,760	(4,694,760)	959,352	26,844,813
18	-	-	-	4,695,550	(4,695,550)	832,409	22,981,672
19	-	-	-	4,693,850	(4,693,850)	701,169	18,988,991
20	-	-	-	3,867,581	(3,867,581)	579,536	15,700,945
21	-	-	-	3,480,823	(3,480,823)	474,379	12,694,501
22	-	-	-	3,094,065	(3,094,065)	378,791	9,979,227
23	-	-	-	2,707,307	(2,707,307)	293,097	7,565,017
24	-	-	-	2,320,549	(2,320,549)	217,633	5,462,102
25	-	-	-	1,933,791	(1,933,791)	152,747	3,681,058
26	-	-	-	1,547,032	(1,547,032)	98,798	2,232,824
27	-	-	-	1,160,274	(1,160,274)	56,158	1,128,708
28	-	-	-	773,516	(773,516)	25,211	380,403
29	-	-	-	386,758	(386,758)	6,355	-
			114,777,413	137,400,673		22,623,260	

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	2.5921	1.0000	3,006	7,793	\$ 3,304,319	\$ 8,565,220
2	28	2.5069	1.0000	3,006	7,537	6,337,546	15,887,866
3	27	2.4246	1.0000	3,006	7,289	6,653,057	16,130,712
4	26	2.3449	1.0000	3,006	7,049	6,945,440	16,286,205
5	25	2.2678	1.0000	3,006	6,818	7,217,147	16,367,168
6	24	2.1933	1.0000	3,006	6,594	7,470,296	16,384,519
7	23	2.1212	1.0000	3,006	6,377	7,706,727	16,347,590
8	22	2.0515	1.0000	3,006	6,167	7,928,043	16,264,382
9	21	1.9841	1.0000	3,006	5,965	8,710,693	17,282,722
10	20	1.9189	1.0000	3,006	5,769	11,600,852	22,260,616
11	19	1.8558	1.0000	-	-	4,694,901	8,712,877
12	18	1.7948	1.0000	-	-	4,695,207	8,427,093
13	17	1.7358	1.0000	-	-	4,695,239	8,150,207
14	16	1.6788	1.0000	-	-	4,694,998	7,881,960
15	15	1.6236	1.0000	-	-	4,694,484	7,622,097
16	14	1.5703	1.0000	-	-	4,695,867	7,373,782
17	13	1.5187	1.0000	-	-	4,694,760	7,129,773
18	12	1.4688	1.0000	-	-	4,695,550	6,896,626
19	11	1.4205	1.0000	-	-	4,693,850	6,667,565
20	10	1.3738	1.0000	-	-	3,867,581	5,313,313
21	9	1.3287	1.0000	-	-	3,480,823	4,624,830
22	8	1.2850	1.0000	-	-	3,094,065	3,975,860
23	7	1.2428	1.0000	-	-	2,707,307	3,364,550
24	6	1.2019	1.0000	-	-	2,320,549	2,789,126
25	5	1.1624	1.0000	-	-	1,933,791	2,247,888
26	4	1.1242	1.0000	-	-	1,547,032	1,739,212
27	3	1.0873	1.0000	-	-	1,160,274	1,261,542
28	2	1.0515	1.0000	-	-	773,516	813,389
29	1	1.0170	1.0000	-	-	386,758	393,329
					67,356	137,400,673	257,162,018

Total Escalated Expense for Entire Period	\$ 257,162,018
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 257,162,018
Total Escalated Service Units	67,356
Impact Fee for Service Area C	\$ 3,818

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Total	Percent in	Cost in	Impact Fee	Debt Funded ⁽³⁾		Non-Debt	Impact Fee
		Project Cost ⁽¹⁾	Service Area ⁽¹⁾	Service Area ⁽¹⁾	Recoverable Cost ⁽²⁾	Existing	Proposed	Funded ⁽³⁾	Recoverable Cost
RM 620	A-31, C-1	\$ 12,560,624	50%	\$ 6,280,312	\$ 2,727,188	\$ -	\$ -	\$ 2,727,188	\$ 2,727,188
CR 172 (2)	C-3	1,800,000	50%	900,000	390,820	-	195,410	195,410	390,820
Hesters Crossing Rd	C-4	900,000	100%	900,000	390,820	-	195,410	195,410	390,820
Bratton Ln	C-5	8,700,000	50%	4,350,000	1,888,961	-	944,481	944,481	1,888,961
US 79 (1)	B-46, C-6	16,379,383	50%	8,189,692	3,556,325	-	1,778,162	1,778,162	3,556,325
McNeil Extension	C-7	4,799,620	100%	4,799,620	2,084,206	-	-	2,084,206	2,084,206
S Mays St	C-8	2,000,000	100%	2,000,000	868,488	-	434,244	434,244	868,488
Kenney Fort Blvd (2)	C-10	40,800,000	100%	40,800,000	17,717,156	-	8,858,578	8,858,578	17,717,156
Red Bud Ln (1)	C-11	200,000	50%	100,000	43,424	-	21,712	21,712	43,424
Red Bud Ln (2)	C-12	2,200,000	100%	2,200,000	955,337	-	477,668	477,668	955,337
Red Bud Ln (3)	C-13	2,200,000	50%	1,100,000	477,668	-	238,834	238,834	477,668
Red Bud Ln (4)	C-14	2,200,000	100%	2,200,000	955,337	-	477,668	477,668	955,337
Red Bud Ln (5)	C-15	2,200,000	50%	1,100,000	477,668	-	238,834	238,834	477,668
Red Bud Ln (6)	C-16	1,200,000	100%	1,200,000	521,093	-	260,546	260,546	521,093
Red Bud Ln (7)	C-17	13,100,000	50%	6,550,000	2,844,298	-	1,422,149	1,422,149	2,844,298
Red Bud Ln (8)	C-18	4,600,000	100%	4,600,000	1,997,522	-	998,761	998,761	1,997,522
Red Bud Ln (9)	C-19	18,713,810	50%	9,356,905	4,063,180	-	2,031,590	2,031,590	4,063,180
Gattis School Rd (1)	C-20	31,800,000	100%	31,800,000	13,808,960	-	6,904,480	6,904,480	13,808,960
Gattis School Rd (2)	C-21	81,800,000	100%	81,800,000	35,521,160	11,724,588	11,898,286	11,898,286	35,521,160
S Mays St / Dell Way	C-22	3,600,000	100%	3,600,000	1,563,278	-	781,639	781,639	1,563,278
Kenney Fort Blvd (3)	C-23	12,400,000	100%	12,400,000	5,384,626	-	2,692,313	2,692,313	5,384,626
Greenlawn Blvd	C-24	16,468,640	100%	16,468,640	7,151,408	-	3,575,704	3,575,704	7,151,408
Schultz (1)	C-26	1,200,000	100%	1,200,000	521,093	-	260,546	260,546	521,093
Schultz (2)	C-27	10,300,000	50%	5,150,000	2,236,357	-	1,118,178	1,118,178	2,236,357
US 79 (2)	B-51, C-28	12,760,000	50%	6,380,000	2,770,477	-	1,385,238	1,385,238	2,770,477
Mays St and Liberty Ave	CI-5	550,000	100%	550,000	238,834	-	119,417	119,417	238,834
Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	CI-7	848,000	100%	848,000	368,239	-	184,119	184,119	368,239
A.W. Grimes Blvd and Palm Valley Blvd	BI-4, CI-8	2,141,000	50%	1,070,500	464,858	-	232,429	232,429	464,858
Red Bud Ln and Gattis School Rd	CI-10	1,773,000	100%	1,773,000	769,915	-	384,957	384,957	769,915
E McNeil Rd and Oakridge Dr	CI-11	10,000,000	100%	10,000,000	4,342,440	-	2,171,220	2,171,220	4,342,440
Update ITS and Traffic Managemenet Infrastructure	-	20,900,000	25%	5,225,000	2,268,925	-	1,134,462	1,134,462	2,268,925
Transportation Impact Fee Project		23,750	100%	23,750	23,750	-	-	23,750	23,750
Total		\$ 341,117,827		\$ 274,915,418	\$ 119,393,812	\$ 11,724,588	\$ 51,417,040	\$ 56,252,184	\$ 119,393,812

(1) 2023 Transportation Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

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

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area C

2023 Vehicle Miles (All Service Areas)	69,995
Ten Year Growth in Vehicle Miles (Service Area C) ⁽¹⁾	30,063
Annual Growth in Vehicle Miles	<u>10</u> years 3,006

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 386,758	\$ 773,516	\$ 1,160,274	\$ 1,547,032	\$ 1,933,791	\$ 2,320,549	\$ 2,707,307	\$ 3,094,065	\$ 4,278,149	\$ 4,694,321	\$ 22,895,763
2023 Vehicle Miles plus Service Area C Growth	73,002	76,008	79,014	82,021	85,027	88,033	91,039	94,046	97,052	100,058	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 5.30	\$ 10.18	\$ 14.68	\$ 18.86	\$ 22.74	\$ 26.36	\$ 29.74	\$ 32.90	\$ 44.08	\$ 46.92	
Annual Growth in Service Area C Vehicle Miles (Cumulative)	3,006	6,013	9,019	12,025	15,031	18,038	21,044	24,050	27,056	30,063	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 15,927	\$ 61,188	\$ 132,435	\$ 226,811	\$ 341,862	\$ 475,471	\$ 625,798	\$ 791,241	\$ 1,192,675	\$ 1,410,418	\$ 5,273,827
Credit Amount	\$ 5,273,827										

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	3.40%
Annual Service Unit Growth ⁽²⁾	721
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 74,526
Non-debt Funded New Project Cost ⁽⁵⁾	14,433,895
New Project Cost Funded Through New Debt ⁽⁶⁾	14,410,145
Total Recoverable Project Cost ⁽⁷⁾	\$ 28,918,566

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal⁽⁸⁾</u>	<u>Interest⁽⁹⁾</u>	<u>Term</u>
1	\$ 1,441,015	4.25%	20
2	1,441,015	4.25%	20
3	1,441,015	4.25%	20
4	1,441,015	4.25%	20
5	1,441,015	4.25%	20
6	1,441,015	4.25%	20
7	1,441,015	4.25%	20
8	1,441,015	4.25%	20
9	1,441,015	4.25%	20
10	1,441,015	4.25%	20
Total	\$ 14,410,145		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures⁽¹⁰⁾</u>
1	\$ 2,163,303
2	2,884,404
3	2,884,404
4	2,884,404
5	2,884,404
6	2,884,404
7	2,884,404
8	2,884,404
9	2,884,404
10	3,605,505
Total	\$ 28,844,040

(1) TexPool 12-Month Average Rate as of June 28, 2023

(2) Derived from the 10-year Growth Projections Report, Table 7

(3) Existing fund balances are already encumbered

(4) Provided by City Staff

(5) Assumes 50% of new project costs funded through sources other than debt

(6) Assumes 50% of new project costs funded through new debt issues

(7) Line 16 of the Max Fee Table Report

(8) Assumes new debt issued in equal annual amounts

(9) Estimated interest cost provided by City Staff

(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

I. New Debt Service Detail

<u>Year</u>	<u>Series</u> <u>1</u>	<u>Series</u> <u>2</u>	<u>Series</u> <u>3</u>	<u>Series</u> <u>4</u>	<u>Series</u> <u>5</u>	<u>Series</u> <u>6</u>	<u>Series</u> <u>7</u>	<u>Series</u> <u>8</u>	<u>Series</u> <u>9</u>	<u>Series</u> <u>10</u>	<u>Total</u> <u>Annual</u> <u>New Debt</u> <u>Service</u>
1	\$ 108,393	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108,393
2	108,393	108,393	-	-	-	-	-	-	-	-	216,786
3	108,393	108,393	108,393	-	-	-	-	-	-	-	325,179
4	108,393	108,393	108,393	108,393	-	-	-	-	-	-	433,571
5	108,393	108,393	108,393	108,393	108,393	-	-	-	-	-	541,964
6	108,393	108,393	108,393	108,393	108,393	108,393	-	-	-	-	650,357
7	108,393	108,393	108,393	108,393	108,393	108,393	108,393	-	-	-	758,750
8	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	-	-	867,143
9	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	-	975,536
10	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
11	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
12	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
13	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
14	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
15	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
16	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
17	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
18	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
19	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
20	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	1,083,929
21	-	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	975,536
22	-	-	108,393	108,393	108,393	108,393	108,393	108,393	108,393	108,393	867,143
23	-	-	-	108,393	108,393	108,393	108,393	108,393	108,393	108,393	758,750
24	-	-	-	-	108,393	108,393	108,393	108,393	108,393	108,393	650,357
25	-	-	-	-	-	108,393	108,393	108,393	108,393	108,393	541,964
26	-	-	-	-	-	-	108,393	108,393	108,393	108,393	433,571
27	-	-	-	-	-	-	-	108,393	108,393	108,393	325,179
28	-	-	-	-	-	-	-	-	108,393	108,393	216,786
29	-	-	-	-	-	-	-	-	-	108,393	108,393
	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 2,167,857	\$ 21,678,575

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

II. Summary of Annual Expenses

Year	New Annual Debt <u>Service⁽¹⁾</u>	Annual Capital <u>Expenditures⁽²⁾</u>	Annual Bond <u>Proceeds⁽²⁾</u>	Existing Annual Debt <u>Service⁽³⁾</u>	Annual <u>Credit⁽⁴⁾</u>	Total <u>Expense</u>
1	\$ 108,393	\$ 2,163,303	\$ (1,441,015)	\$ 8,897	\$ (1,196)	\$ 838,383
2	216,786	2,884,404	(1,441,015)	8,684	(4,551)	1,664,308
3	325,179	2,884,404	(1,441,015)	5,843	(9,923)	1,764,488
4	433,571	2,884,404	(1,441,015)	5,624	(17,380)	1,865,205
5	541,964	2,884,404	(1,441,015)	4,980	(26,790)	1,963,545
6	650,357	2,884,404	(1,441,015)	829	(37,903)	2,056,673
7	758,750	2,884,404	(1,441,015)	803	(51,084)	2,151,859
8	867,143	2,884,404	(1,441,015)	777	(66,076)	2,245,234
9	975,536	2,884,404	(1,441,015)	749	(82,828)	2,336,846
10	1,083,929	3,605,505	(1,441,015)	726	(101,292)	3,147,852
11	1,083,929	-	-	704	-	1,084,633
12	1,083,929	-	-	683	-	1,084,612
13	1,083,929	-	-	661	-	1,084,590
14	1,083,929	-	-	-	-	1,083,929
15	1,083,929	-	-	-	-	1,083,929
16	1,083,929	-	-	-	-	1,083,929
17	1,083,929	-	-	-	-	1,083,929
18	1,083,929	-	-	-	-	1,083,929
19	1,083,929	-	-	-	-	1,083,929
20	1,083,929	-	-	-	-	1,083,929
21	975,536	-	-	-	-	975,536
22	867,143	-	-	-	-	867,143
23	758,750	-	-	-	-	758,750
24	650,357	-	-	-	-	650,357
25	541,964	-	-	-	-	541,964
26	433,571	-	-	-	-	433,571
27	325,179	-	-	-	-	325,179
28	216,786	-	-	-	-	216,786
29	108,393	-	-	-	-	108,393
	\$ 21,678,575	\$ 28,844,040	\$ (14,410,145)	\$ 39,961	\$ (399,023)	\$ 35,753,408

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

III. Summary of Principal Paid to Date for Existing Debt⁽³⁾

	<u>GO 2002</u>	<u>GO 2004</u>	<u>TOTAL</u>
2004	16		16
2005	45	233	278
2006	199	1,391	1,589
2007	259	-	259
2008	101	2,215	2,316
2009	107	1,257	1,365
2010	110	1,299	1,409
2011	163	1,366	1,529
2012	172	1,416	1,588
2013	182	1,490	1,673
2014	192	1,565	1,757
2015	202	1,624	1,826
2016	214	1,690	1,904
2017	225	1,757	1,982
2018	238	1,840	2,078
2019	250	1,940	2,190
2020	265	2,032	2,296
2021	279	2,140	2,419
2022	295	2,257	2,551
	<u>\$ 3,514</u>	<u>\$ 27,511</u>	<u>\$ 31,026</u>

IV. Summary of Debt Financing

Existing Debt Funded Project Costs ⁽⁵⁾	74,526
-Less Principal PTD	31,026
Outstanding Debt Principal	43,500
New Project Costs Debt Principal ⁽⁵⁾	14,410,145
Principal Component	\$ 14,453,645

(1) Appendix E - Service Area D, Page 2

(2) Appendix E - Service Area D, Page 1

(3) Existing debt funded project costs from details provided by staff.

(4) Appendix E - Service Area D, Page 8

(5) Appendix E - Service Area D, Page 1

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 4,156	721	\$ 2,996,782	\$ 838,383	\$ 2,158,399	36,671	2,195,070
2	4,156	721	2,996,782	1,664,308	1,332,474	97,227	3,624,772
3	4,156	721	2,996,782	1,764,488	1,232,294	144,106	5,001,172
4	4,156	721	2,996,782	1,865,205	1,131,577	189,165	6,321,914
5	4,156	721	2,996,782	1,963,545	1,033,237	232,373	7,587,525
6	4,156	721	2,996,782	2,056,673	940,109	273,797	8,801,430
7	4,156	721	2,996,782	2,151,859	844,923	313,428	9,959,781
8	4,156	721	2,996,782	2,245,234	751,548	351,202	11,062,531
9	4,156	721	2,996,782	2,336,846	659,936	387,117	12,109,584
10	4,156	721	2,996,782	3,147,852	(151,071)	408,917	12,367,430
11	-	-	-	1,084,633	(1,084,633)	401,817	11,684,615
12	-	-	-	1,084,612	(1,084,612)	378,616	10,978,619
13	-	-	-	1,084,590	(1,084,590)	354,626	10,248,655
14	-	-	-	1,083,929	(1,083,929)	329,833	9,494,560
15	-	-	-	1,083,929	(1,083,929)	304,209	8,714,840
16	-	-	-	1,083,929	(1,083,929)	277,714	7,908,626
17	-	-	-	1,083,929	(1,083,929)	250,319	7,075,016
18	-	-	-	1,083,929	(1,083,929)	221,993	6,213,081
19	-	-	-	1,083,929	(1,083,929)	192,705	5,321,857
20	-	-	-	1,083,929	(1,083,929)	162,421	4,400,349
21	-	-	-	975,536	(975,536)	132,949	3,557,762
22	-	-	-	867,143	(867,143)	106,160	2,796,779
23	-	-	-	758,750	(758,750)	82,143	2,120,173
24	-	-	-	650,357	(650,357)	60,994	1,530,809
25	-	-	-	541,964	(541,964)	42,809	1,031,654
26	-	-	-	433,571	(433,571)	27,689	625,771
27	-	-	-	325,179	(325,179)	15,739	316,332
28	-	-	-	216,786	(216,786)	7,066	106,612
29	-	-	-	108,393	(108,393)	1,781	-
			29,967,819	35,753,408		5,785,589	

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	29	2.5921	1.0000	721	1,869	\$ 838,383	\$ 2,173,196
2	28	2.5069	1.0000	721	1,807	1,664,308	4,172,325
3	27	2.4246	1.0000	721	1,748	1,764,488	4,278,101
4	26	2.3449	1.0000	721	1,691	1,865,205	4,373,677
5	25	2.2678	1.0000	721	1,635	1,963,545	4,452,960
6	24	2.1933	1.0000	721	1,581	2,056,673	4,510,878
7	23	2.1212	1.0000	721	1,529	2,151,859	4,564,546
8	22	2.0515	1.0000	721	1,479	2,245,234	4,606,098
9	21	1.9841	1.0000	721	1,431	2,336,846	4,636,492
10	20	1.9189	1.0000	721	1,384	3,147,852	6,040,344
11	19	1.8558	1.0000	-	-	1,084,633	2,012,881
12	18	1.7948	1.0000	-	-	1,084,612	1,946,692
13	17	1.7358	1.0000	-	-	1,084,590	1,882,679
14	16	1.6788	1.0000	-	-	1,083,929	1,819,699
15	15	1.6236	1.0000	-	-	1,083,929	1,759,897
16	14	1.5703	1.0000	-	-	1,083,929	1,702,061
17	13	1.5187	1.0000	-	-	1,083,929	1,646,126
18	12	1.4688	1.0000	-	-	1,083,929	1,592,029
19	11	1.4205	1.0000	-	-	1,083,929	1,539,710
20	10	1.3738	1.0000	-	-	1,083,929	1,489,110
21	9	1.3287	1.0000	-	-	975,536	1,296,155
22	8	1.2850	1.0000	-	-	867,143	1,114,275
23	7	1.2428	1.0000	-	-	758,750	942,949
24	6	1.2019	1.0000	-	-	650,357	781,681
25	5	1.1624	1.0000	-	-	541,964	629,993
26	4	1.1242	1.0000	-	-	433,571	487,432
27	3	1.0873	1.0000	-	-	325,179	353,560
28	2	1.0515	1.0000	-	-	216,786	227,960
29	1	1.0170	1.0000	-	-	108,393	110,234
					16,154	35,753,408	67,143,741

Total Escalated Expense for Entire Period	\$ 67,143,741
Less Future Value of Initial Fund Balance	-
Net Escalated Expense for Entire Period	\$ 67,143,741
Total Escalated Service Units	16,154
Impact Fee for Service Area D	\$ 4,156

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area D

Impact Fee Project Name ⁽¹⁾	Impact Fee Project No. ⁽¹⁾	Total	Percent in	Cost in	Impact Fee	Debt Funded ⁽³⁾		Non-Debt	Impact Fee
		Project Cost ⁽¹⁾	Service Area ⁽¹⁾	Service Area ⁽¹⁾	Recoverable Cost ⁽²⁾	Existing	Proposed	Funded ⁽³⁾	Recoverable Cost
CR 107	D-1	\$ 3,940,000	50%	\$ 1,970,000	\$ 313,776	\$ -	\$ 156,888	\$ 156,888	\$ 313,776
University Blvd (6)	D-2	8,500,000	100%	8,500,000	1,353,858	-	676,929	676,929	1,353,858
CR 118	D-3	7,800,000	100%	7,800,000	1,242,364	-	621,182	621,182	1,242,364
Avery Nelson Pkwy (3)	D-4	10,200,000	100%	10,200,000	1,624,629	-	812,315	812,315	1,624,629
Avery Nelson Pkwy (4)	D-5	12,000,000	100%	12,000,000	1,911,329	-	955,664	955,664	1,911,329
Avery Nelson Pkwy (5)	D-6	1,960,000	100%	1,960,000	312,184	-	156,092	156,092	312,184
Kenney Fort Blvd (1)	B-27, D-7	15,018,951	100%	15,018,951	2,392,179	-	1,196,090	1,196,090	2,392,179
Kenney Fort Blvd (6)	D-8	15,018,951	50%	7,509,476	1,196,090	-	598,045	598,045	1,196,090
Kenney Fort Blvd (7)	B-28, D-9	9,173,038	100%	9,173,038	1,461,058	-	730,529	730,529	1,461,058
Kenney Fort Blvd (2)	B-39, D-10	5,000,000	100%	5,000,000	796,387	11,848	392,269	392,269	796,387
Kenney Fort Blvd (3)	B-40, D-11	4,900,000	50%	2,450,000	390,230	5,806	192,212	192,212	390,230
Kenney Fort Blvd (4)	B-41, D-12	10,700,000	100%	10,700,000	1,704,268	25,355	839,456	839,456	1,704,268
Kenney Fort Blvd (8)	B-41, D-13	3,700,000	100%	3,700,000	589,326	8,768	290,279	290,279	589,326
Kenney Fort Blvd (5)	B-42, D-14	9,600,000	100%	9,600,000	1,529,063	22,749	753,157	753,157	1,529,063
Red Bud Ln (1)	D-15	7,300,000	100%	7,300,000	1,162,725	-	581,362	581,362	1,162,725
Red Bud Ln (2)	D-16	5,600,000	50%	2,800,000	445,977	-	222,988	222,988	445,977
Red Bud Ln (3)	D-17	4,700,000	100%	4,700,000	748,604	-	374,302	374,302	748,604
Red Bud Ln (4)	D-18	8,486,565	100%	8,486,565	1,351,718	-	675,859	675,859	1,351,718
Red Bud Ln (5)	D-19	3,446,574	50%	1,723,287	274,481	-	137,240	137,240	274,481
Red Bud Ln (6)	D-20	7,711,173	100%	7,711,173	1,228,216	-	614,108	614,108	1,228,216
CR 122 (1)	D-21	13,671,273	100%	13,671,273	2,177,525	-	1,088,762	1,088,762	2,177,525
CR 122 (2)	D-22	2,472,664	50%	1,236,332	196,920	-	98,460	98,460	196,920
CR 122 (3)	D-23	1,106,506	100%	1,106,506	176,241	-	88,121	88,121	176,241
CR 122 (4)	D-24	3,430,613	50%	1,715,306	273,210	-	136,605	136,605	273,210
Old Settlers Blvd	D-25	20,155,000	100%	20,155,000	3,210,236	-	1,605,118	1,605,118	3,210,236
Update ITS and Traffic Managemenet Infrastructure	-	20,900,000	25%	5,225,000	832,224	-	416,112	416,112	832,224
Transportation Impact Fee Project		23,750	100%	23,750	23,750	-	-	23,750	23,750
Total		\$ 216,515,057		\$ 181,435,656	\$ 28,918,566	\$ 74,526	\$ 14,410,145	\$ 14,433,895	\$ 28,918,566

(1) 2023 Transportation Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

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

City of Round Rock - 2023 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees Appendix E - Impact Fee Calculation Assumptions Service Area D

2023 Vehicle Miles (All Service Areas)	69,995
Ten Year Growth in Vehicle Miles (Service Area D) ⁽¹⁾	7,210
Annual Growth in Vehicle Miles	<u>10 years</u> 721

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	\$ 117,290	\$ 225,470	\$ 331,021	\$ 439,195	\$ 546,945	\$ 651,187	\$ 759,553	\$ 867,920	\$ 976,285	\$ 1,084,654	\$ 5,999,521
2023 Vehicle Miles plus Service Area D Growth	70,716	71,437	72,158	72,879	73,600	74,321	75,042	75,763	76,484	77,205	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	\$ 1.66	\$ 3.16	\$ 4.59	\$ 6.03	\$ 7.43	\$ 8.76	\$ 10.12	\$ 11.46	\$ 12.76	\$ 14.05	
Annual Growth in Service Area D Vehicle Miles (Cumulative)	721	1,442	2,163	2,884	3,605	4,326	5,047	5,768	6,489	7,210	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	\$ 1,196	\$ 4,551	\$ 9,923	\$ 17,380	\$ 26,790	\$ 37,903	\$ 51,084	\$ 66,076	\$ 82,828	\$ 101,292	\$ 399,023
Credit Amount	\$ 399,023										

(1) Line 8 of the Max Fee Table Report