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MEMORANDUM

To: Capital Improvements Advisory Committee

From: Gary Hudder, Director of Transportation

RE: Roadway Impact Fee Study

Date: January 30, 2019

This purpose of this agenda item is to consider a presentation, provide comments and consider a recommendation to Council regarding proposed roadway maximum impact fee.

According to Chapter 395.058 of the Texas Local Government Code, the Capital Improvements Advisory Committee (CIAC) will serve as the advisory committee for the Roadway Impact Fee study. The purpose of the February 6, 2019 meeting will be for the CIAC to consider a presentation, provide comments and consider a recommendation to Council regarding the proposed roadway maximum impact fee. The background land use assumptions and 10-year roadway capital improvements plan were reviewed by the CIAC in January and was approved by Council on January 24, 2019.

The maximum proposed roadway impact fee per service unit as follows:

Service Area A: \$2,678 / vehicle mile

Service Area B: \$2,933 / vehicle mile

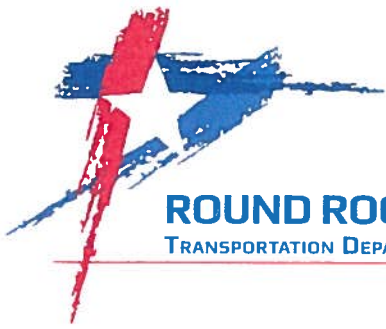
Service Area C: \$2,511 / vehicle mile

The Round Rock City Council may implement a different fee than shown above, but the fee cannot exceed the maximum proposed fee.

Background:

On January 11, 2018, the Round Rock City Council approved a contract with Kimley-Horn & Associates, Inc. to evaluate, develop and create an implementation plan for Roadway Impact Fees.

According to the 2017 Transportation Master Plan, over \$1 billion in new roadway capacity is needed to accommodate future growth in the City of Round Rock. Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. Impact fees are meant to recover the incremental cost of the impact of each new unit of development.



ROUND ROCK TEXAS

TRANSPORTATION DEPARTMENT

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In the case of Roadway Impact Fees, the infrastructure need is the increased capacity on arterial and collector roadways that serve the overall transportation system.

The 2018 Roadway Impact Fee Study determined the maximum impact fee per unit of new development chargeable in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code. 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. However, the study can be updated at any time to accommodate significant changes in any of the key variables of the impact fee equation.

Roadway Impact Fee Schedule

| | Grace Period | |
|--|-----------------------------------|-----------------|
| Final Plat Date (Assessment Date) | | |
| Building Permit Application Date (Collection Date) | Before 01/01/21 | |
| <i>Fees for all service areas</i> | Land Use Type | |
| | Residential | Non-Residential |
| Fee | <i>No roadway impact fees due</i> | |
| Base Service Unit \$2,511 | Percent of Base Service Unit: | |

| Phase 1 | | Phase 2 | | Phase 3 | |
|-----------------|-----------------|---------------------|-----------------|----------------------|-----------------|
| before 01/01/22 | | 01/01/22 - 12/31/23 | | On or after 01/01/24 | |
| | | | | | |
| Land Use Type | | Land Use Type | | Land Use Type | |
| Residential | Non-Residential | Residential | Non-Residential | Residential | Non-Residential |
| \$753 | \$502 | \$1,130 | \$628 | \$1,507 | \$753 |
| 30% | 20% | 45% | 25% | 60% | 30% |

GRACE PERIOD

Building Permits issued **before 01/01/21** will have **NO** impact fee due

PHASE 1

Final Plat for Residential land use issued **before 01/01/22** will be assessed **\$753 per service unit** due at time of building permit application

Final Plat for Non-residential land use issued **before 01/01/22** will be assessed **\$502 per service unit** due at time of building permit application

PHASE 2

Final Plat for Residential land use issued **on or between 01/01/22 - 12/31/23** will be assessed **\$1,130 per service unit** due at time of building permit application

Final Plat for Non-residential land use issued **on or between 01/01/22 - 12/31/23** will be assessed **\$628 per service unit** due at time of building permit application

PHASE 3

Final Plat for Residential land use issued **on or after 01/01/24** will be assessed **\$1,507 per service unit** due at time of building permit application

Final Plat for Non-residential land use issued **on or after 01/01/24** will be assessed **\$753 per service unit** due at time of building permit application

CITY OF ROUND ROCK, TEXAS ROADWAY IMPACT FEE STUDY FINAL DRAFT



November
2018

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 the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs. In the case of Roadway Impact Fees, the infrastructure need is the increased capacity on arterial and collector roadways that serve the overall transportation system. The purpose of the 2018 Roadway Impact Fee Study is to identify the fee per unit of new development necessary to fund these improvements in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code.

Impact Fees are a mathematical calculation that determines a maximum impact fee that would be equivalent for growth paying for growth. The Maximum Roadway Impact Fee per Service Unit for Roadway Facilities is considered an appropriate measure of the impacts generated by a new unit of development on the City's Roadway System. An impact fee program is anticipated to be designed so that it is predictable for both the development community and City. An impact fee program is equitable since similar developments pay a similar fee regardless if they are the first or last to develop. An impact fee program is transparent. This report describes in detail how the fee is calculated and how a 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 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 2018 Roadway Impact Fee Study is to determine the maximum impact fee per unit of new development chargeable as allowed by the state law. This determination is not a recommendation; the actual fee amount ultimately assessed is at the discretion of the 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. However, the study can be updated at any time to accommodate significant changes in any of the key variables of the impact fee equation.

Service Areas

A Service Area is a geographic area within which a unique maximum impact fee is determined. All fees collected within the Service Area must be spent on eligible improvements within the same Service Area. For Roadway Impact Fees, the Service Area may not exceed 6 miles. In Round Rock, this restriction necessitated the creation of 3 separate Service Areas. A map of the Service Areas can be found on Page 14.

In defining the Service Area boundaries, the project team considered the corporate boundary (including full and limited purpose jurisdiction), required size limit, adjacent land uses, highway facilities, and topography. Since each Service Area has a unique maximum impact fee, the per-unit maximum fee for an identical land use will vary from one Service Area to the next. For this reason, the team avoided drawing a Service Area boundary through uniform land uses where possible.

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 2018-2028. 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 February 1, 2018.

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 adopted in 2017.

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 those capacity improvements included in the City's Transportation Master Plan are included in the RIF CIP. Capacity improvements may include the addition of lanes, intersection improvements, or the extension of a new road. Resurfacing or other maintenance activities do not qualify as capacity improvements under impact fee law in Texas and cannot be funding with Roadway Impact Fees.

The cost of the RIF CIP is one of the fundamental factors in the calculation of the per-unit maximum impact fee. The RIF CIP's cost was calculated through systematic evaluation of each eligible project. The project team visited each project site to determine the project scope, the presence of any special conditions (such as the need for significant drainage improvements 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, Wyoming Springs Drive has a portion with half of a 4-lane divided built from Blue Ridge Drive to the future alignment of New Hope Drive, while the remainder south to RM 1431 is a new alignment. These were split as two 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 3.A – 3.C and maps of the RIF CIP by service area in Exhibits 4.A – 4.C. Finally, detailed cost projections by project can be found in



Appendix A. It should be noted that these cost projections are based on conceptual level planning, and are subject to refinement upon final design.

Only those projects listed in the RIF CIP are eligible to utilize impact fee funds. In order to optimize future flexibility, all capacity improvements included in the Transportation Master Plan are included in the RIF CIP and will be eligible to utilize impact fee funds. In some cases, an interim project designation was used due to the ultimate build out not being needed in the 10-year window. An example of this is 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 2018 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile. A vehicle-mile is the capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.



Impact Fee Calculation

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

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is calculated in Table 8. A detailed discussion of the calculation precedes Table 8, found on Page 40.

Collection and Use of Roadway Impact Fees

Roadway Impact fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. An existing plat would be assessed at the adoption of the ordinance and would be exempt from impact fees for one year. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the 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. The City Council then conducts a public hearing on the Land Use Assumptions, RIF CIP and Impact Fee Ordinance. Two



public hearings are required for the 2018 Roadway Impact Fee study, one for Land Use Assumptions and RIF CIP, and another for the Impact Fee Calculation and Ordinance.

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

2018 Roadway Impact Fee Study Results

Below is the listing of the 2018 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

| Service Area | Maximum Fee Per Service Unit (per Vehicle-Mile) |
|--------------|---|
| A | \$2,678 |
| B | \$2,933 |
| C | \$2,511 |



I. INTRODUCTION

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

The City has retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2018 Roadway Impact Fee Study. This report includes details of the Roadway Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the Roadway Impact Fee 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. 9)
- 2) Roadway Impact Fee Capital Improvements Plan (RIF CIP) (Pg. 16)

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

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

- 1) Methodology for Roadway Impact Fees (Pg. 23)
- 2) Roadway Impact Fee Calculation (Pg. 39)
- 3) Plan for Financing and the Ad Valorem Tax Credit (Pg. 42)



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

- Service Areas (Pg. 24)
- Service Units (Pg. 24)
- Cost Per Service Unit (Pg. 26)
- RIF CIP Costing Methodology (Pg. 26)
- Summary of RIF CIP Costs (Pg. 30)
- Service Unit Calculation (Pg. 34)

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit (Pg. 40)
- Service Unit Demand Per Unit of Development (Pg. 48)

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 (2018 – 2028).

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

- Transportation Master Plan 2017 Update
- CAMPO 2040 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 (2018 – 2028).
- 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. 50).



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 (2018)
- Step 2: Determine 10-Year Growth Projections

Step 1: Determine Base Year (2018)

Traffic Analysis Zone (TAZ) data obtained from the CAMPO 2040 model was used to determine the 2018 residential units and employment square footage.

Residential units and basic, retail, and service employment data were interpolated to the year 2018 based on the 2010 base year and 2040 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 based on historical data from 2013 to 2017 in the City of Round Rock.



Step 2: Determine 10-Year Growth Projections

The CAMPO 2040 model was also used to determine carrying capacity using the same methodology as the 2018 base year. Growth rates for 2010 to 2040 were applied to the 2018 base year to determine growth for the City of Round Rock over the next 10 years to 2028. 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 2018 base year estimates and projected 10 years into the future to 2028. Finally, the 2028 projections were compared to historical building permit data from 2011 to 2017 to calibrate growth projections from the CAMPO 2040 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 2018 to 2028) and the CAMPO 2040 Model were used to determine growth projections. Finally, planned large projects were also added to the average of the CAMPO 2040 Model and historical trends to further calibrate the Land Use Assumptions shown in Table 1.

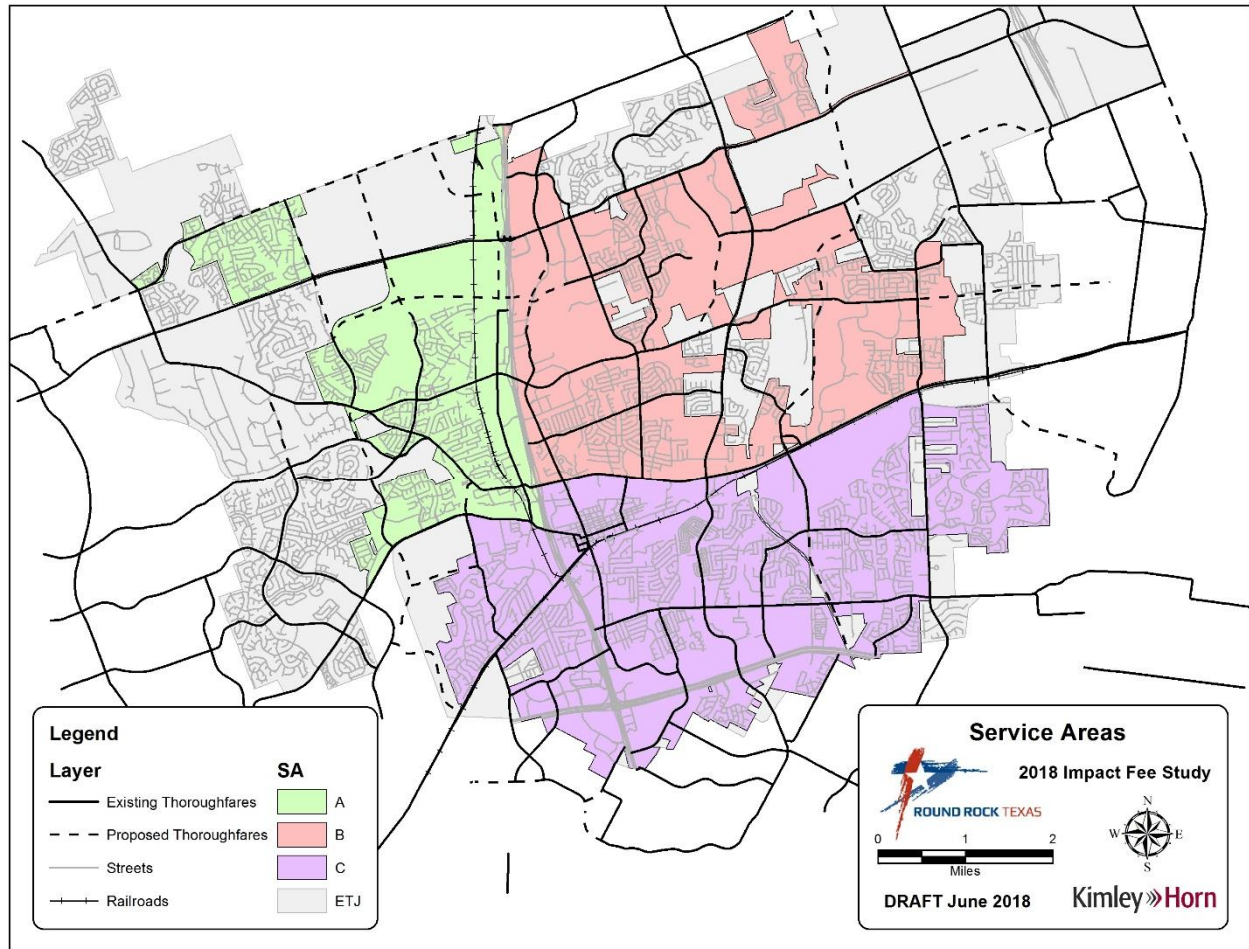


C. Roadway Impact Fee Service Areas

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

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

Exhibit 1 – Proposed Service Areas





D. Land Use Assumptions Summary

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

Table 1. Residential and Employment 10-Year Projections

| Service Area | Year | Residential (Units) | | Employment (Sq. Ft.) | | | |
|--------------|-----------|---------------------|--------------|----------------------|-----------|-----------|------------|
| | | Single Family | Multi-Family | Basic | Service | Retail | Total |
| A | 2018-2028 | 621 | 932 | 1,300,000 | 600,000 | 500,000 | 2,400,000 |
| B | | 1,826 | 2,739 | 600,000 | 2,300,000 | 900,000 | 3,800,000 |
| C | | 1,720 | 3,485 | 2,200,000 | 2,600,000 | 1,500,000 | 6,300,000 |
| Total | | 4,167 | 7,156 | 4,100,000 | 5,500,000 | 2,900,000 | 12,500,000 |



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 three (3) 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.C and mapped in Exhibits 2.A – 2.C. The tables show the length of each project as well as the facility's typology. The RIF CIP was developed in conjunction with input from City of 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 240' W of Lagoon Dr | 1.10 | 100% |
| | A-2 | 4 Lane - Enhanced (1/2) | New Hope Rd (2) | 240' W of Lagoon Dr to Mayfield Ranch Blvd | 0.23 | 50% |
| | A-3 | 4 Lane - Proposed | New Hope Rd (3) | Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr | 0.93 | 50% |
| | A-4, B-1 | 6 Lane - Enhanced | Westinghouse Rd | IH 35 SBFR to IH 35 NBFR | 0.19 | 50% |
| | A-5 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (1) | New Hope Dr (Future) to Blue Ridge Dr | 0.23 | 100% |
| | A-6 | 4 Lane - Proposed | Wyoming Springs Dr (2) | Blue Ridge Dr to RM 1431 | 0.72 | 100% |
| | 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 | 100% |
| | A-10 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (3) | 390' N of Golden Oak Cir to Alondra Way | 0.13 | 100% |
| | A-11 | 4 Lane - Proposed | Arterial L (1) | Wyoming Springs Dr to Chisholm Trl Rd (Future) | 2.15 | 100% |
| | A-12 | 4 Lane - Proposed | Creek Bend Blvd (1) | RM 1431 to West End Pl | 0.80 | 100% |
| | A-13 | 4 Lane - Enhanced (1/2) | Creek Bend Blvd (2) | West End Pl to Camino Del Verdes Pl | 0.79 | 100% |
| | A-14 | 4 Lane - Proposed | Chisholm Trl Rd (1) | RM 1431 to CR 173 | 0.80 | 100% |
| | A-15, B-11 | 4 Lane - Proposed | Chisholm Trl Rd (Future) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 50% |
| | A-16 | 4 Lane - Enhanced | CR 173 | IH 35 SBFR to 3250' N of Wolle Ln | 0.10 | 100% |
| | A-17 | 4 Lane - Enhanced | Chisholm Trl Rd (2) | 3250' N of Wolle Ln to 1980' N of Wolle Ln | 0.24 | 100% |
| | A-18 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (3) | 1980' N of Wolle Ln to FM 3406 | 0.48 | 100% |
| | A-19 | 6 Lane - Enhanced | Sam Bass Rd (1) | 230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr | 0.23 | 50% |
| | A-20 | 6 Lane - Enhanced | Sam Bass Rd (2) | 390' W of Wyoming Springs Dr to FM 3406 | 0.30 | 100% |
| | A-21 | 4 Lane - Enhanced | Sam Bass Rd (3) | FM 3406 to Desert Willow Dr | 0.35 | 50% |
| | A-22 | 4 Lane - Enhanced | Sam Bass Rd (4) | Desert Willow Dr to Creek Bend Blvd | 0.19 | 100% |
| | A-23 | 4 Lane - Enhanced | Sam Bass Rd (5) | Creek Bend Blvd to Hairy Man Dr | 1.86 | 100% |
| | A-24 | 4 Lane - Enhanced | Sam Bass Rd (6) | Hairy Man Rd to 700' E of Hairy Man Rd | 0.21 | 50% |
| | A-25 | 6 Lane - Enhanced | FM 3406 | Sam Bass Rd to IH 35 SBFR | 1.65 | 100% |
| | A-26 | 4 Lane - Proposed | Wyoming Springs Dr (4) | Sam Bass Rd to Brushy Creek | 0.39 | 100% |
| | A-27 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (4) | FM 3406 to Sam Bass Rd | 1.33 | 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% |
| | AI-4, CI-1 | | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% |
| | AI-5, CI-2 | | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% |
| | - | | Update ITS and Traffic Management Infrastructure | - | | 33% |

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

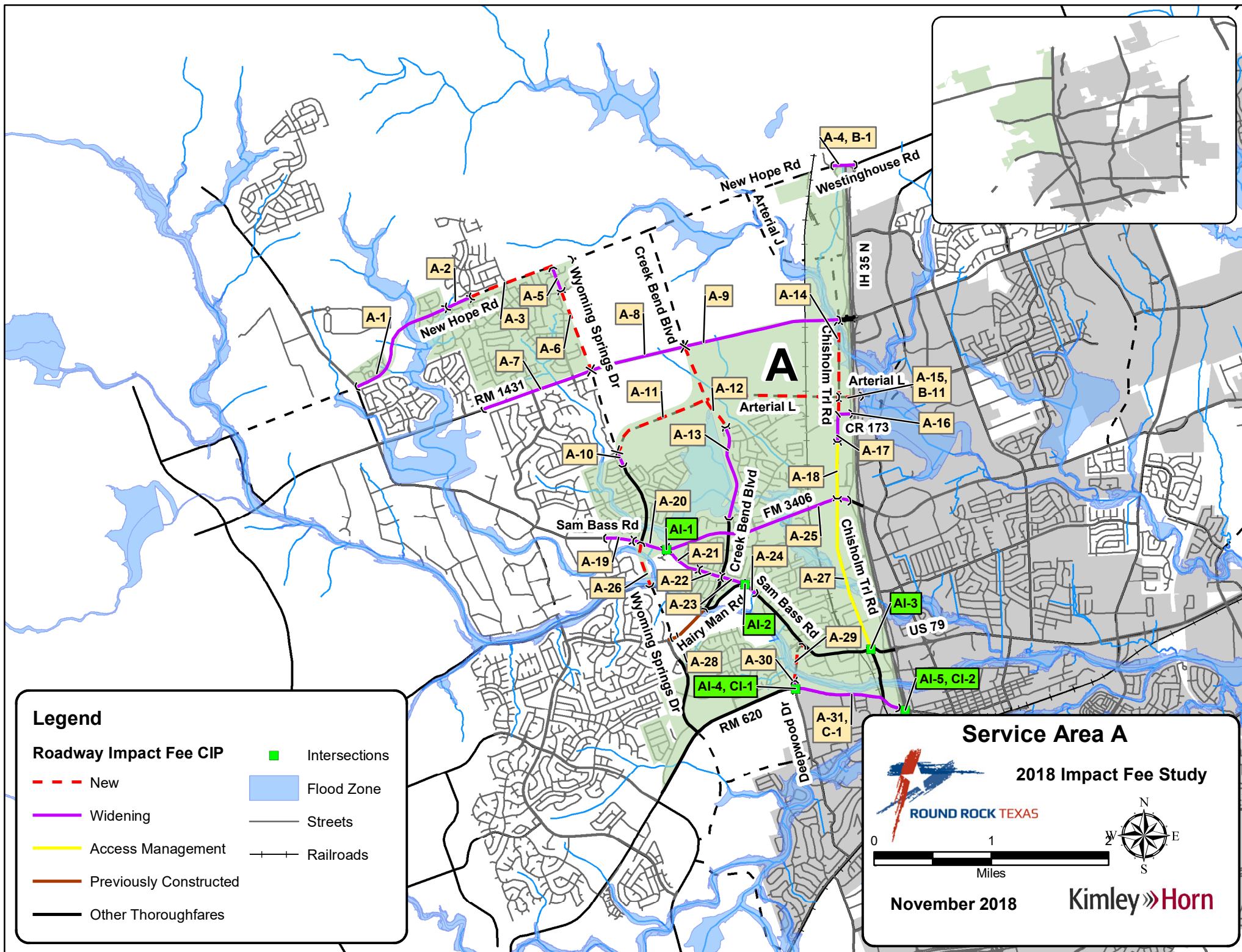
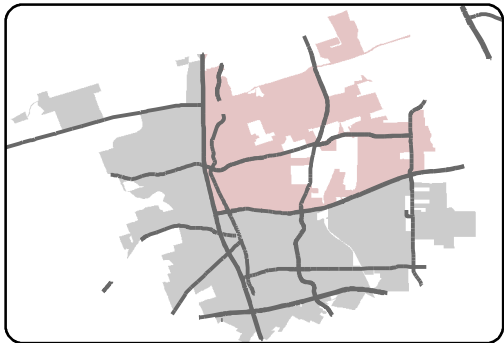




Table 2.B. Roadway Impact Fee Capital Improvements Plan – Service Area B

| 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-2 | 4 Lane - Enhanced | Westinghouse Rd (2) | 3895' E of A.W. Grimes to 6350' W of A.W. Grimes | 0.47 | 50% |
| | B-3 | 4 Lane - Existing | N Mays St (1) | 1777' N of Teravista Pkwy to Teravista Pkwy | 0.34 | 100% |
| | 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 SH 130 SBFR | 2.47 | 100% |
| | B-9 | 4 Lane - Enhanced | N Mays St (2) | University Blvd to 2000' S of University Blvd | 0.38 | 100% |
| | B-10 | 4 Lane - Proposed | N Mays St (3) | 2000' S of University Blvd to Paloma Dr | 0.88 | 100% |
| | A-15, B-11 | 4 Lane - Proposed | Arterial L (1) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 50% |
| | B-12 | 4 Lane - Proposed | Arterial L (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-14 | 4 Lane - Existing | Sunrise Rd (1) | University Blvd to Hidden Valley Dr | 0.23 | 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-20 | 4 Lane - Enhanced (1/2) | College Park (1) | Satellite View to Avery Nelson Blvd | 0.75 | 100% |
| | B-21 | 3 Lane - Proposed | Avery Nelson | Gulf Way to College Park | 0.41 | 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 - Existing | Medical Center Pkwy | Seton Pkwy to A.W. Grimes Blvd | 0.18 | 100% |
| | B-25 | 4 Lane - Enhanced | CR 112 (1) | A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd | 0.68 | 100% |
| | B-26 | 4 Lane - Enhanced | CR 112 (2) | 3580' E of A.W. Grimes Blvd to CR 117 | 0.43 | 50% |
| | B-27 | 4 Lane - Proposed | Kenney Fort Blvd (1) | CR 117 to Old Settlers Blvd | 1.06 | 100% |
| | B-28 | 4 Lane - Enhanced (1/2) | Red Bud Ln (1) | Guadalajara St to 160' N of Margarita Loop | 0.35 | 100% |
| | B-29 | 4 Lane - Enhanced (1/2) | Red Bud Ln (2) | 160' N of Margarita Loop to CR 117 | 0.35 | 50% |
| | B-30 | 4 Lane - Enhanced | Red Bud Ln (3) | CR 117 to Old Settlers Blvd | 0.34 | 100% |
| | B-31 | 6 Lane - Enhanced (1/3) | Old Settlers Blvd (1) | N Mays St to Sunrise Rd | 1.33 | 100% |
| | B-32 | 6 Lane - Enhanced | Old Settlers Blvd (2) | Sunrise Rd to A.W. Grimes Blvd | 1.13 | 100% |
| | B-33 | 4 Lane - Proposed | Old Settlers Blvd (3) | Red Bud Ln to CR 110 | 0.46 | 100% |
| | B-34 | 4 Lane - Enhanced (AM) | Spur 379 (N Mays St) | 540' N of Steam Way to Northwest Dr | 1.43 | 100% |
| | B-35 | 4 Lane - Enhanced (AM) | Sunrise Rd (7) | Old Settlers Blvd to Country Aire Dr | 0.28 | 100% |
| | B-36 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (1) | Old Settlers Blvd to 375' S of Chandler Creek Blvd | 0.35 | 100% |
| | B-37 | 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-38 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (3) | 1250' N of Tiger Trl to US 79 | 1.25 | 100% |
| | B-39 | 6 Lane - Proposed (1/2) | Kenney Fort Blvd (2) | Old Settler's Blvd to 2540' S of Old Settler's Blvd | 0.30 | 100% |
| | B-40 | 6 Lane - Proposed | Kenney Fort Blvd (3) | Old Settler's Blvd to 2540' S of Old Settler's Blvd | 0.18 | 50% |
| | B-41 | 6 Lane - Proposed | Kenney Fort Blvd (4) | 2540' S of Old Settlers Blvd to Chandler Creek Blvd | 0.95 | 100% |
| | B-42 | 6 Lane - Enhanced | Kenney Fort Blvd (5) | Chandler Creek Blvd to Joe DiMaggio Blvd | 0.30 | 100% |
| | B-43 | 4 Lane - Enhanced | Red Bud Ln (4) | Old Settlers Blvd to 170' N of Joseph St | 0.45 | 100% |
| | B-44 | 4 Lane - Enhanced | Red Bud Ln (5) | 170' N of Joseph St to 160' S of Covered Wagon Trl | 0.18 | 50% |
| | B-45 | 4 Lane - Enhanced | Red Bud Ln (6) | 160' S of Covered Wagon Trl to US 79 | 0.41 | 100% |
| | B-46, C-6 | 6 Lane - Enhanced | US 79 (1) | N Mays St to 200' E of Red Bud Ln | 4.32 | 50% |
| | B-47 | 6 Lane - Enhanced | US 79 (2) | 200' E of Red Bud Ln to 1690' E of Red Bud Ln | 0.28 | 50% |
| | | Intersection Improvements | Location | Improvement(s) | | % In Service Area |
| | BI-1 | | N Mays St and University Blvd | TURN LANES | | 100% |
| | BI-2 | | Sunrise Rd and University Blvd | TURN LANES | | 100% |
| | BI-3 | | N Mays St and Steam Way | TURN LANES | | 100% |
| | BI-4, CI-8 | | A.W. Grimes Blvd and Palm Valley Blvd | OTHER & TURN LANES | | 50% |
| | - | | Update ITS and Traffic Management Infrastructure | - | | 33% |

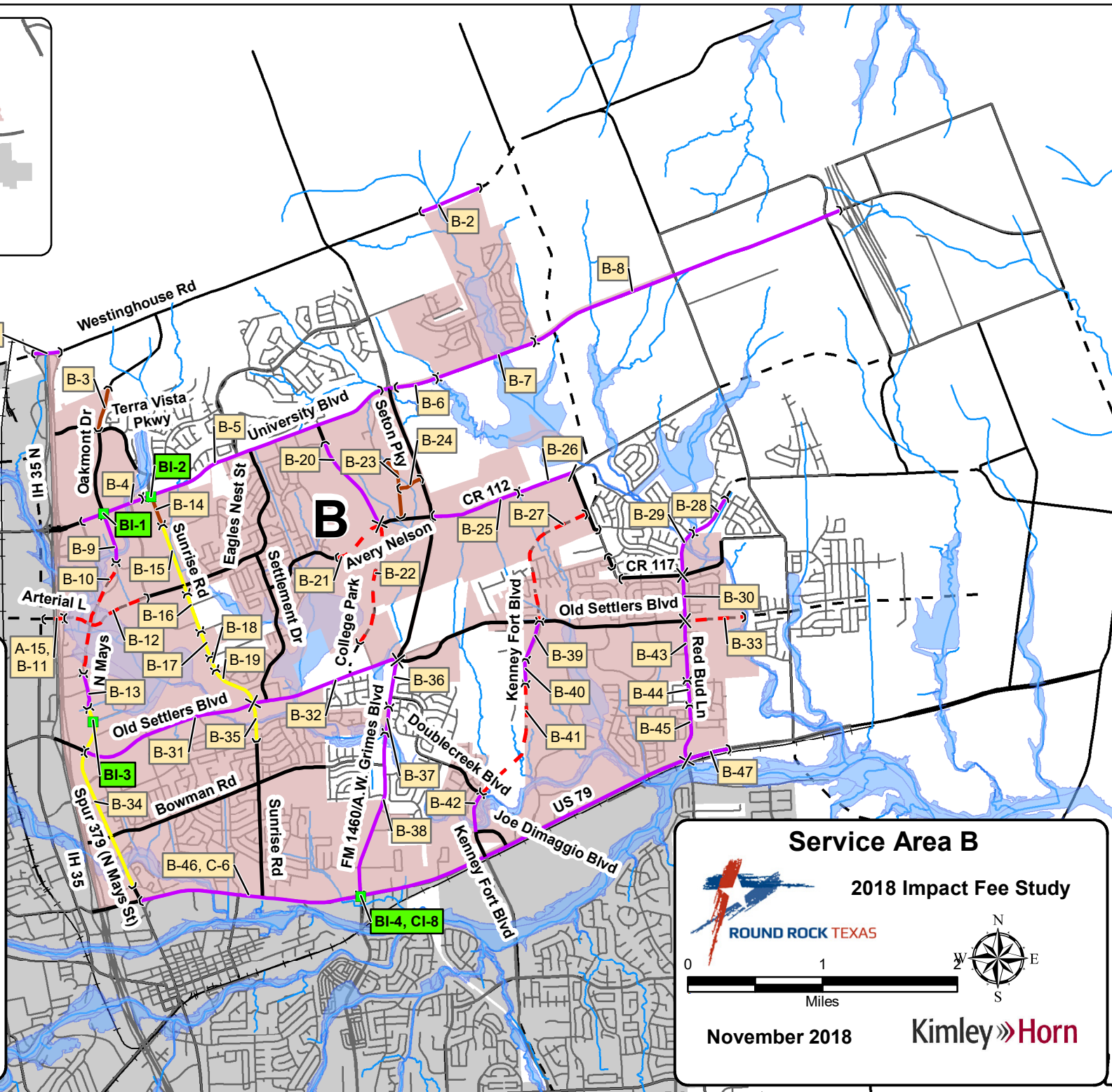
Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.



Legend

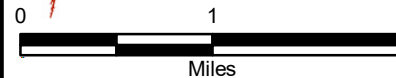
Roadway Impact Fee CIP

- New
- Widening
- Access Management
- Previously Constructed
- Other Thoroughfares
- Intersections
- Flood Zone
- Streets
- Railroads



Service Area B

2018 Impact Fee Study



November 2018

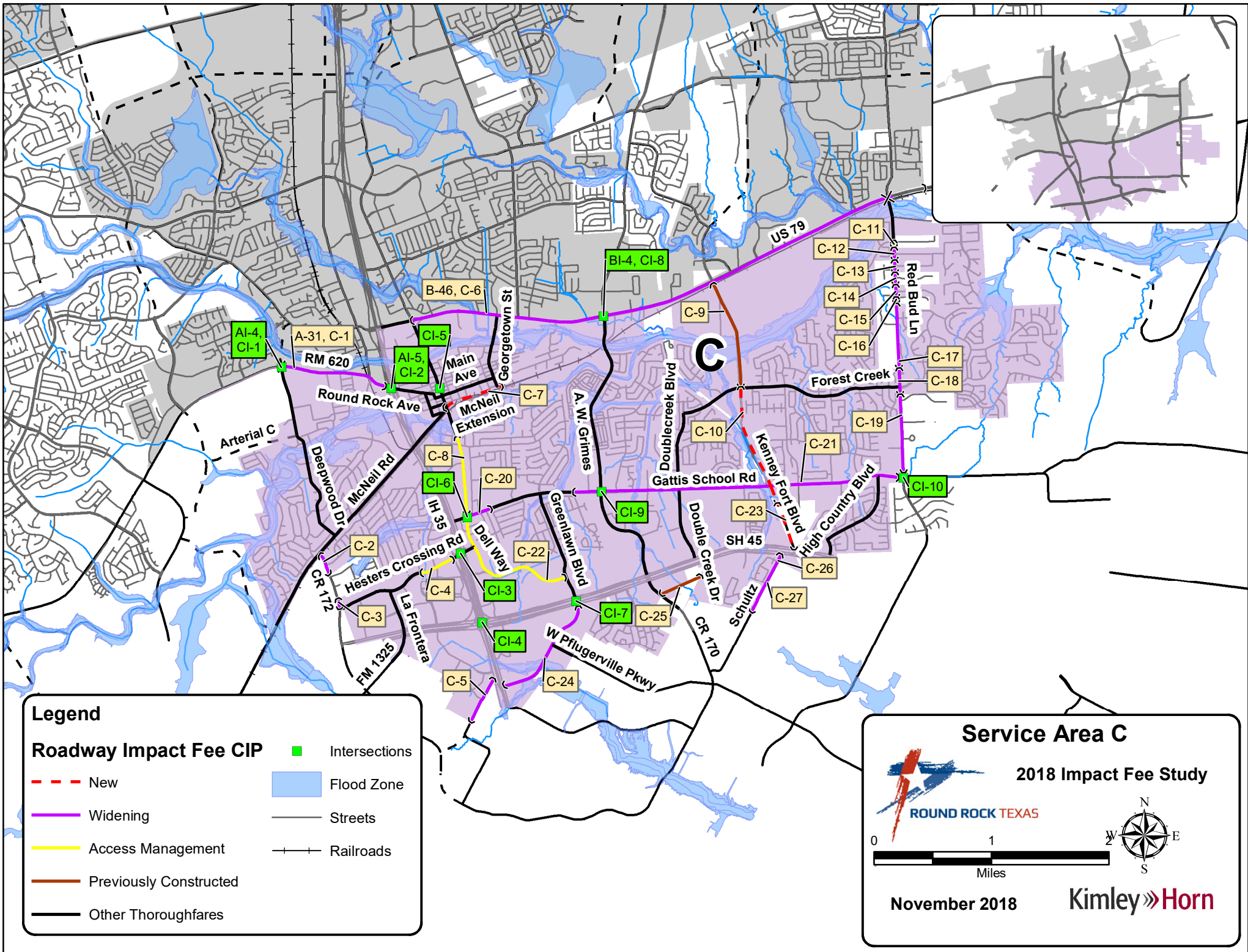
Kimley»Horn



Table 2.C. 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-2 | 4 Lane - Enhanced | CR 172 (1) | McNeil Dr to Lynda Sue St | 0.20 | 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) | N Mays St to 200' E of Red Bud Ln | 4.32 | 50% |
| | C-7 | 3 Lane - Proposed | 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-9 | 6 Lane - Existing | Kenney Fort Blvd (1) | US 79 to Forest Creek Blvd | 0.95 | 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 | 4 Lane - Enhanced | Gattis School Rd (1) | S Mays St to Surrey Dr | 0.65 | 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 | 50% |
| | C-24 | 6 Lane - Enhanced (1/3) | Greenlawn Blvd | IH 35 NBFR to SH 45 EBFR | 1.86 | 100% |
| | C-25 | 3 Lane - Proposed | Roundville Ln | A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd | 0.21 | 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% |
| | | | Location | Improvement(s) | | % In Service Area |
| | AI-4, CI-1 | Intersection Improvements | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% |
| | AI-5, CI-2 | | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% |
| | CI-3 | | IH 35 and Hesters Crossing Rd | TURN LANES | | 100% |
| | CI-4 | | IH 35 and Louis Henna Blvd (SH 45 FR) | TURN LANES & SIGNAL | | 100% |
| | CI-5 | | Mays St and Liberty Ave | SIGNAL | | 100% |
| | CI-6 | | Mays St and Gattis School Rd | TURN LANES | | 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-9 | | A.W. Grimes Blvd and Gattis School Rd | TURN LANES | | 100% |
| | CI-10 | | Red Bud Ln and Gattis School Rd | TURN LANES | | 100% |
| | - | | Update ITS and Traffic Managemenet Infrastructure | - | | 33% |

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





IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. Service Areas

The three (3) service areas used in the 2018 Roadway Impact Fee Study are shown in the previously referenced Exhibit 1. 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.” The service areas in the 2018 Roadway Impact Fee Study are consistent with the specification of Chapter 395 of the Texas Local Government Code.

B. Service Units

The “service unit” is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2018 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile.

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

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

Total Vehicle-Miles of Demand: Based on the 10-year growth projections (Pg. 38). The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2018 Roadway Impact Fee Study 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

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

Kimley-Horn and Associates, Inc.
updated: 4/30/2018

Project Information

| 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: | University Blvd to 2000' S of University Blvd | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 2,002 | | |
| Service Area(s): | B | | |

Construction Pay Items

| Roadway Construction Cost Projection | | | | | |
|--------------------------------------|---|----------|------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 14,558 | cy | \$ 15.00 | \$ 218,000 |
| 203 | 12" Asphalt (Type C) | 7,928 | ton | \$ 72.00 | \$ 571,000 |
| 303 | 18" Base | 5,339 | cy | \$ 55.00 | \$ 294,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 12,902 | sy | \$ 6.00 | \$ 77,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,402 | gal | \$ 6.00 | \$ 14,000 |
| 603 | 10' Concrete Sidewalk | 40,040 | sf | \$ 5.50 | \$ 220,000 |
| 703 | Machine Laid Curb & Gutter | 8,008 | lf | \$ 16.00 | \$ 128,000 |
| 803 | Turn Lanes and Median Openings | 1,213 | sy | \$ 134.62 | \$ 163,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,685,000 |

Construction Component Allowances

| Major Construction Component Allowances**: | | | | | |
|--|--|-----------|----|-----------|----------------------------------|
| Item Description | Notes | Allowance | | Item Cost | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 84,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 34,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 506,000 | |
| ✓ Illumination | | 10% | \$ | 169,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 800,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 34,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 34,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 67,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 34,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 1,762,000 |
| Paving and Allowance Subtotal: | | | | | \$ 3,447,000 |
| Construction Contingency: | | | | | 15% \$ 517,000 |
| Mobilization | | | | | 8% \$ 276,000 |
| Prep ROW | | | | | 4% \$ 138,000 |
| Construction Cost TOTAL: | | | | | \$ 4,400,000 |

Summary of Costs and Allowances

| 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: | Existing Alignment | 15% | \$ | 660,000 |
| Impact Fee Project Cost TOTAL: \$ 5,800,000 | | | | |

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.



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 2018 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. Percentages are also allotted ROW/easement acquisition in the amount of ten percent (10%) for TxDOT roadways and access management projects, fifteen percent (15%) for existing roadway alignments with widening, and thirty percent (30%) 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.C are the 10-Year RIF CIP project lists for each service area with planning level project costs. Individual project cost worksheets can be seen in Appendix A, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted.

The 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 240' W of Lagoon Dr | 1.10 | 100% | \$ 7,800,000 | \$ 7,800,000 |
| | A-2 | 4 Lane - Enhanced (1/2) | New Hope Rd (2) | 240' W of Lagoon Dr to Mayfield Ranch Blvd | 0.23 | 50% | \$ 1,900,000 | \$ 950,000 |
| | A-3 | 4 Lane - Proposed | New Hope Rd (3) | Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr | 0.93 | 50% | \$ 9,300,000 | \$ 4,650,000 |
| | A-4, B-1 | 6 Lane - Enhanced | Westinghouse Rd | IH 35 SBFR to IH 35 NBFR | 0.19 | 50% | \$ 9,031,296 | \$ 4,515,648 |
| | A-5 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (1) | New Hope Dr (Future) to Blue Ridge Dr | 0.23 | 100% | \$ 1,700,000 | \$ 1,700,000 |
| | A-6 | 4 Lane - Proposed | Wyoming Springs Dr (2) | Blue Ridge Dr to RM 1431 | 0.72 | 100% | \$ 9,100,000 | \$ 9,100,000 |
| | A-7 | 6 Lane - Enhanced | RM 1431 (1) | 1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr | 0.97 | 50% | \$ 2,880,000 | \$ 1,440,000 |
| | A-8 | 6 Lane - Enhanced | RM 1431 (2) | 850' E of Stone Oak Dr to 5195' E of Stone Oak St | 0.82 | 100% | \$ 3,020,000 | \$ 3,020,000 |
| | A-9 | 6 Lane - Enhanced | RM 1431 (3) | 5195' E of Stone Oak St to IH 35 SBFR | 1.34 | 100% | \$ 3,840,000 | \$ 3,840,000 |
| | A-10 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (3) | 390' N of GoldenOak Cir to Alondra Way | 0.13 | 100% | \$ 1,000,000 | \$ 1,000,000 |
| | A-11 | 4 Lane - Proposed | Arterial L (1) | Wyoming Springs Dr to Chisholm Trl Rd (Future) | 2.15 | 100% | \$ 27,400,000 | \$ 27,400,000 |
| | A-12 | 4 Lane - Proposed | Creek Bend Blvd (1) | RM 1431 to West End Pl | 0.80 | 100% | \$ 10,500,000 | \$ 10,500,000 |
| | A-13 | 4 Lane - Enhanced (1/2) | Creek Bend Blvd (2) | West End Pl to Camino Del Verdes Pl | 0.79 | 100% | \$ 5,900,000 | \$ 5,900,000 |
| | A-14 | 4 Lane - Proposed | Chisholm Trl Rd (1) | RM 1431 to CR 173 | 0.80 | 100% | \$ 11,200,000 | \$ 11,200,000 |
| | A-15, B-11 | 4 Lane - Proposed | Arterial L (2) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 50% | \$ 5,700,000 | \$ 2,850,000 |
| | A-16 | 4 Lane - Enhanced | CR 173 | IH 35 SBFR to 3250' N of Walle Ln | 0.10 | 100% | \$ 1,300,000 | \$ 1,300,000 |
| | A-17 | 4 Lane - Enhanced | Chisholm Trl Rd (2) | 3250' N of Walle Ln to 1980' N of Walle Ln | 0.24 | 100% | \$ 2,900,000 | \$ 2,900,000 |
| | A-18 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (3) | 1980' N of Walle Ln to FM 3406 | 0.48 | 100% | \$ 900,000 | \$ 900,000 |
| | A-19 | 6 Lane - Enhanced | Sam Bass Rd (1) | 230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr | 0.23 | 50% | \$ 3,500,000 | \$ 1,750,000 |
| | A-20 | 6 Lane - Enhanced | Sam Bass Rd (2) | 390' W of Wyoming Springs Dr to FM 3406 | 0.30 | 100% | \$ 4,500,000 | \$ 4,500,000 |
| | A-21 | 4 Lane - Enhanced | Sam Bass Rd (3) | FM 3406 to Desert Willow Dr | 0.35 | 50% | \$ 4,200,000 | \$ 2,100,000 |
| | A-22 | 4 Lane - Enhanced | Sam Bass Rd (4) | Desert Willow Dr to Creek Bend Blvd | 0.19 | 100% | \$ 2,200,000 | \$ 2,200,000 |
| | A-23 | 4 Lane - Enhanced | Sam Bass Rd (5) | Creek Bend Blvd to Hairy Man Dr | 1.86 | 100% | \$ 2,500,000 | \$ 2,500,000 |
| | A-24 | 4 Lane - Enhanced | Sam Bass Rd (6) | Hairy Man Rd to 700' E of Hairy Man Rd | 0.21 | 50% | \$ 1,600,000 | \$ 800,000 |
| | A-25 | 6 Lane - Enhanced | FM 3406 | Sam Bass Rd to IH 35 SBFR | 1.65 | 100% | \$ 6,980,000 | \$ 6,980,000 |
| | A-26 | 4 Lane - Proposed | Wyoming Springs Dr (4) | Sam Bass Rd to Brushy Creek | 0.39 | 100% | \$ 8,500,000 | \$ 8,500,000 |
| | A-27 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (4) | FM 3406 to Sam Bass Rd | 1.33 | 100% | \$ 2,600,000 | \$ 2,600,000 |
| | 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% | \$ 6,000,000 | \$ 6,000,000 |
| | A-30 | 4 Lane - Enhanced | Deepwood Dr (2) | 345' N of RM 620 to RM 620 | 0.07 | 100% | \$ 800,000 | \$ 800,000 |
| | 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. # | Location | Improvement(s) | | % In Service Area | Total Project Cost | Cost in Service Area |
| | | AI-1 | Sam Bass Rd and FM 3406 | SIGNAL | | 100% | \$ 295,000 | \$ 295,000 |
| | | AI-2 | Sam Bass Rd and Hairy Man Rd | INTERSECTION IMPROVEMENT | | 75% | \$ 2,000,000 | \$ 1,500,000 |
| | | AI-3 | Sam Bass Rd and Chisholm Trl Rd | TURN LANES | | 100% | \$ 139,000 | \$ 139,000 |
| | | AI-4, CI-1 | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 392,000 | \$ 196,000 |
| | | AI-5, CI-2 | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 588,000 | \$ 294,000 |
| | | - | Update ITS and Traffic Managemnet Infrastructure | - | | 33% | \$ 20,900,000 | \$ 6,967,000 |
| | Service Area Roadway Project Cost Subtotal | | | | | | | \$ 156,988,262 |
| | Service Area Intersection Project Cost Subtotal | | | | | | | \$ 9,391,000 |
| | 2018 Roadway Impact Fee Study Cost Per Service Area | | | | | | | \$ 34,673 |
| | Total Cost in SERVICE AREA A | | | | | | | \$ 166,413,935 |

- 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.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% | \$ 9,031,296 | \$ 4,515,648 |
| | B-2 | 4 Lane - Enhanced | Westinghouse Rd (2) | 3895' E of A.W. Grimes to 6350' W of A.W. Grimes | 0.47 | 50% | \$ 5,500,000 | \$ 2,750,000 |
| | B-3 | 4 Lane - Existing | N Mays St (1) | 1777' N of Teravista Pkwy to Teravista Pkwy | 0.34 | 100% | \$ 1,889,219 | \$ 1,889,219 |
| | B-4 | 6 Lane - Enhanced | University Blvd (1) | University Oaks Blvd to 335' W of Sunrise Dr | 0.49 | 100% | \$ 8,900,000 | \$ 8,900,000 |
| | B-5 | 6 Lane - Enhanced | University Blvd (2) | 335' W of Sunrise Dr to A.W. Grimes Blvd | 2.03 | 50% | \$ 30,700,000 | \$ 15,350,000 |
| | B-6 | 4 Lane - Enhanced | University Blvd (3) | A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd | 0.36 | 100% | \$ 4,800,000 | \$ 4,800,000 |
| | B-7 | 4 Lane - Enhanced | University Blvd (4) | 1830' E of A.W. Grimes Blvd to Lunata Way | 0.78 | 50% | \$ 9,700,000 | \$ 4,850,000 |
| | B-8 | 4 Lane - Enhanced | University Blvd (5) | Lunata Way to SH 130 SBFR | 2.47 | 100% | \$ 29,300,000 | \$ 29,300,000 |
| | B-9 | 4 Lane - Enhanced | N Mays St (2) | University Blvd to 2000' S of University Blvd | 0.38 | 100% | \$ 5,800,000 | \$ 5,800,000 |
| | B-10 | 4 Lane - Proposed | N Mays St (3) | 2000' S of University Blvd to Paloma Dr | 0.88 | 100% | \$ 24,800,000 | \$ 24,800,000 |
| | A-15, B-11 | 4 Lane - Proposed | Arterial L (1) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 50% | \$ 5,700,000 | \$ 2,850,000 |
| | B-12 | 4 Lane - Proposed | Arterial L (2) | IH 35 NBFR to Cypress Blvd | 0.69 | 100% | \$ 21,200,000 | \$ 21,200,000 |
| | B-13 | 4 Lane - Enhanced | N Mays St (4) | Paloma Dr to 540' N of Steam Way | 0.27 | 100% | \$ 3,100,000 | \$ 3,100,000 |
| | B-14 | 4 Lane - Existing | Sunrise Rd (1) | University Blvd to Hidden Valley Dr | 0.23 | 100% | \$ 979,190 | \$ 979,190 |
| | B-15 | 4 Lane - Enhanced (AM) | Sunrise Rd (2) | Hidden Valley Dr to 325' S of Eagles Nest St | 0.54 | 100% | \$ 1,000,000 | \$ 1,000,000 |
| | B-16 | 4 Lane - Enhanced (AM) | Sunrise Rd (3) | 325' S of Eagles Nest St to Applegate Cir | 0.30 | 50% | \$ 600,000 | \$ 300,000 |
| | B-17 | 4 Lane - Enhanced (AM) | Sunrise Rd (4) | Applegate Cir to Lake Dr | 0.20 | 100% | \$ 500,000 | \$ 500,000 |
| | B-18 | 4 Lane - Enhanced (AM) | Sunrise Rd (5) | Lake Dr to 545' S of Lake Dr | 0.10 | 50% | \$ 200,000 | \$ 100,000 |
| | B-19 | 4 Lane - Enhanced (AM) | Sunrise Rd (6) | 545' S of Lake Dr to Old Settlers Blvd | 0.40 | 100% | \$ 800,000 | \$ 800,000 |
| | B-20 | 4 Lane - Enhanced (1/2) | College Park (1) | Satellite View to Avery Nelson Blvd | 0.75 | 100% | \$ 5,400,000 | \$ 5,400,000 |
| | B-21 | 3 Lane - Proposed | Avery Nelson | Gulf Way to College Park | 0.41 | 100% | \$ 2,800,000 | \$ 2,800,000 |
| | B-22 | 4 Lane - Proposed | College Park (2) | Avery Nelson Rd to 1355' N of Old Settlers Blvd | 0.91 | 100% | \$ 11,500,000 | \$ 11,500,000 |
| | B-23 | 3 Lane - Existing | Seton Pkwy | 2400' N of Avery Nelson Blvd to Avery Nelson Blvd | 0.45 | 100% | \$ 2,043,320 | \$ 2,043,320 |
| | B-24 | 4 Lane - Existing | Medical Center Pkwy | Seton Pkwy to A.W. Grimes Blvd | 0.18 | 100% | \$ 810,679 | \$ 810,679 |
| | B-25 | 4 Lane - Enhanced | CR 112 (1) | A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd | 0.68 | 100% | \$ 8,000,000 | \$ 8,000,000 |
| | B-26 | 4 Lane - Enhanced | CR 112 (2) | 3580' E of A.W. Grimes Blvd to CR 117 | 0.43 | 50% | \$ 5,000,000 | \$ 2,500,000 |
| | B-27 | 4 Lane - Proposed | Kenney Fort Blvd (1) | CR 117 to Old Settlers Blvd | 1.06 | 100% | \$ 13,700,000 | \$ 13,700,000 |
| | B-28 | 4 Lane - Enhanced (1/2) | Red Bud Ln (1) | Guadalupe St to 160' N of Margarita Loop | 0.35 | 100% | \$ 2,600,000 | \$ 2,600,000 |
| | B-29 | 4 Lane - Enhanced (1/2) | Red Bud Ln (2) | 160' N of Margarita Loop to CR 117 | 0.35 | 50% | \$ 3,000,000 | \$ 1,500,000 |
| | B-30 | 4 Lane - Enhanced | Red Bud Ln (3) | CR 117 to Old Settlers Blvd | 0.34 | 100% | \$ 4,100,000 | \$ 4,100,000 |
| | B-31 | 6 Lane - Enhanced (1/3) | Old Settlers Blvd (1) | N Mays St to Sunrise Rd | 1.33 | 100% | \$ 6,800,000 | \$ 6,800,000 |
| | B-32 | 6 Lane - Enhanced | Old Settlers Blvd (2) | Sunrise Rd to A.W. Grimes Blvd | 1.13 | 100% | \$ 18,100,000 | \$ 18,100,000 |
| | B-33 | 4 Lane - Proposed | Old Settlers Blvd (3) | Red Bud Ln to CR 110 | 0.46 | 100% | \$ 5,800,000 | \$ 5,800,000 |
| | B-34 | 4 Lane - Enhanced (AM) | Spur 379 (N Mays St) | 540' N of Steam Way to Northwest Dr | 1.43 | 100% | \$ 2,700,000 | \$ 2,700,000 |
| | B-35 | 4 Lane - Enhanced (AM) | Sunrise Rd (7) | Old Settlers Blvd to Country Aire Dr | 0.28 | 100% | \$ 600,000 | \$ 600,000 |
| | B-36 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (1) | Old Settlers Blvd to 375' S of Chandler Creek Blvd | 0.35 | 100% | \$ 1,000,000 | \$ 1,000,000 |
| | B-37 | 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% | \$ 1,000,000 | \$ 500,000 |
| | B-38 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (3) | 1250' N of Tiger Trl to US 79 | 1.25 | 100% | \$ 3,940,000 | \$ 3,940,000 |
| | B-39 | 6 Lane - Proposed (1/2) | Kenney Fort Blvd (2) | Old Settlers Blvd to 2540' S of Old Settlers Blvd | 0.30 | 100% | \$ 2,600,000 | \$ 2,600,000 |
| | B-40 | 6 Lane - Proposed | Kenney Fort Blvd (3) | Old Settlers Blvd to 2540' S of Old Settlers Blvd | 0.18 | 50% | \$ 2,800,000 | \$ 1,400,000 |
| | B-41 | 6 Lane - Proposed | Kenney Fort Blvd (4) | 2540' S of Old Settlers Blvd to Chandler Creek Blvd | 0.95 | 100% | \$ 15,200,000 | \$ 15,200,000 |
| | B-42 | 6 Lane - Enhanced | Kenney Fort Blvd (5) | Chandler Creek Blvd to Joe DiMaggio Blvd | 0.30 | 100% | \$ 5,800,000 | \$ 5,800,000 |
| | B-43 | 4 Lane - Enhanced | Red Bud Ln (4) | Old Settlers Blvd to 170' N of Joseph St | 0.45 | 100% | \$ 5,200,000 | \$ 5,200,000 |
| | B-44 | 4 Lane - Enhanced | Red Bud Ln (5) | 170' N of Joseph St to 160' S of Covered Wagon Trl | 0.18 | 50% | \$ 2,200,000 | \$ 1,100,000 |
| | B-45 | 4 Lane - Enhanced | Red Bud Ln (6) | 160' S of Covered Wagon Trl to US 79 | 0.41 | 100% | \$ 4,700,000 | \$ 4,700,000 |
| | B-46, C-6 | 6 Lane - Enhanced | US 79 (1) | N Mays St to 200' E of Red Bud Ln | 4.32 | 50% | \$ 13,340,000 | \$ 6,670,000 |
| | B-47 | 6 Lane - Enhanced | US 79 (2) | 200' E of Red Bud Ln to 1690' E of Red Bud Ln | 0.28 | 50% | \$ 900,000 | \$ 450,000 |
| | 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-1 | | N Mays St and University Blvd | TURN LANES | | 100% | \$ 784,000 | \$ 784,000 |
| | BI-2 | | Sunrise Rd and University Blvd | TURN LANES | | 100% | \$ 1,063,000 | \$ 1,063,000 |
| | BI-3 | | N Mays St and Steam Way | TURN LANES | | 100% | \$ 170,235 | \$ 170,235 |
| | BI-4, CI-8 | | A.W. Grimes Blvd and Palm Valley Blvd | OTHER & TURN LANES | | 50% | \$ 2,041,000 | \$ 1,020,500 |
| | - | | Update ITS and Traffic Management Infrastructure | - | | 33% | \$ 20,900,000 | \$ 6,966,667 |
| | Service Area Roadway Project Cost Subtotal | | | | | | | \$ 271,298,056 |
| | Service Area Intersection Project Cost Subtotal | | | | | | | \$ 10,004,402 |
| | 2018 Roadway Impact Fee Study Cost Per Service Area | | | | | | | \$ 34,673 |
| | Total Cost in SERVICE AREA B | | | | | | | \$ 281,337,131 |

- 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-2 | 4 Lane - Enhanced | CR 172 (1) | McNeil Dr to Lynda Sue St | 0.20 | 50% | \$ 2,400,000 | \$ 1,200,000 |
| | C-3 | 4 Lane - Enhanced | CR 172 (2) | Hesters Crossing Rd to 445' N of Hesters Crossing Rd | 0.08 | 50% | \$ 1,000,000 | \$ 500,000 |
| | C-4 | 4 Lane - Enhanced (AM) | Hesters Crossing Rd | Dry Creek Dr to IH 35 SBFR | 0.32 | 100% | \$ 700,000 | \$ 700,000 |
| | C-5 | 4 Lane - Enhanced | Bratton Ln | IH 35 SBFR to 1160' S of Michael Angelo Way | 0.42 | 50% | \$ 5,000,000 | \$ 2,500,000 |
| | B-46, C-6 | 6 Lane - Enhanced | US 79 (1) | N Mays St to 200' E of Red Bud Ln | 4.32 | 50% | \$ 13,340,000 | \$ 6,670,000 |
| | C-7 | 3 Lane - Proposed | 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% | \$ 1,400,000 | \$ 1,400,000 |
| | C-9 | 6 Lane - Existing | Kenney Fort Blvd (1) | US 79 to Forest Creek Blvd | 0.95 | 100% | \$ 23,375,873 | \$ 23,375,873 |
| | C-10 | 6 Lane - Proposed | Kenney Fort Blvd (2) | Forest Creek Dr to 830' S of Gattis School Rd | 1.04 | 100% | \$ 24,500,000 | \$ 24,500,000 |
| | C-11 | 4 Lane - Enhanced (AM) | Red Bud Ln (1) | Forest Ridge Blvd to 265' S of Forest Ridge Blvd | 0.05 | 50% | \$ 100,000 | \$ 50,000 |
| | C-12 | 4 Lane - Enhanced | Red Bud Ln (2) | 265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln | 0.11 | 100% | \$ 1,300,000 | \$ 1,300,000 |
| | C-13 | 4 Lane - Enhanced | Red Bud Ln (3) | 280' S of Woodlawn Ln to 130' S of Old Oaks Dr | 0.10 | 50% | \$ 1,300,000 | \$ 650,000 |
| | C-14 | 4 Lane - Enhanced | Red Bud Ln (4) | 130' S of Old Oaks Dr to 315' S of Country Dr | 0.11 | 100% | \$ 1,300,000 | \$ 1,300,000 |
| | C-15 | 4 Lane - Enhanced | Red Bud Ln (5) | 315' S of Country Dr to Wildflower Trl | 0.10 | 50% | \$ 1,300,000 | \$ 650,000 |
| | C-16 | 4 Lane - Enhanced | Red Bud Ln (6) | Wildflower Trl to 295' S of Wildflower Trl | 0.06 | 100% | \$ 700,000 | \$ 700,000 |
| | C-17 | 4 Lane - Enhanced | Red Bud Ln (7) | 295' S of Wildflower Trl to 840' N of Forest Creek Dr | 0.55 | 50% | \$ 7,700,000 | \$ 3,850,000 |
| | 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% | \$ 2,600,000 | \$ 2,600,000 |
| | C-19 | 4 Lane - Enhanced | Red Bud Ln (9) | 340' S of Forest Creek Dr to Gattis School Rd | 0.71 | 50% | \$ 8,300,000 | \$ 4,150,000 |
| | C-20 | 4 Lane - Enhanced | Gattis School Rd (1) | S Mays St to Surrey Dr | 0.65 | 100% | \$ 7,600,000 | \$ 7,600,000 |
| | C-21 | 6 Lane - Enhanced | Gattis School Rd (2) | Windy Park Dr to Red Bud Ln | 2.82 | 100% | \$ 48,300,000 | \$ 48,300,000 |
| | C-22 | 4 Lane - Enhanced (AM) | S Mays St / Dell Way | Gattis School Rd to Greenlawn Blvd | 1.24 | 100% | \$ 2,400,000 | \$ 2,400,000 |
| | C-23 | 6 Lane - Proposed | Kenney Fort Blvd (3) | 830' S of Gattis School Rd to SH 45 | 0.41 | 50% | \$ 6,700,000 | \$ 3,350,000 |
| | C-24 | 6 Lane - Enhanced (1/3) | Greenlawn Blvd | IH 35 NBFR to SH 45 EBFR | 1.86 | 100% | \$ 6,400,000 | \$ 6,400,000 |
| | C-25 | 3 Lane - Proposed | Roundville Ln | A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd | 0.21 | 100% | \$ 1,134,412 | \$ 1,134,412 |
| | C-26 | 4 Lane - Enhanced | Schultz (1) | SH 45 EBFR to 290' S of SH 45 EBFR | 1.45 | 100% | \$ 700,000 | \$ 700,000 |
| | C-27 | 4 Lane - Enhanced | Schultz (2) | 290' S of SH 45 EBFR to 255' S of Autumn Sage Way | 0.50 | 50% | \$ 5,900,000 | \$ 2,950,000 |
| | Proj. # | Intersection Improvements | Location | Improvement(s) | | % In Service Area | Total Project Cost | Cost in Service Area |
| | AI-4, CI-1 | | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 392,000 | \$ 196,000 |
| | AI-5, CI-2 | | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 588,000 | \$ 294,000 |
| | CI-3 | | IH 35 and Hesters Crossing Rd | TURN LANES | | 100% | \$ 196,000 | \$ 196,000 |
| | CI-4 | | IH 35 and Louis Henna Blvd (SH 45 FR) | TURN LANES & SIGNAL | | 100% | \$ 2,037,000 | \$ 2,037,000 |
| | CI-5 | | Mays St and Liberty Ave | SIGNAL | | 100% | \$ 353,000 | \$ 353,000 |
| | CI-6 | | Mays St and Gattis School Rd | TURN LANES | | 100% | \$ 1,847,503 | \$ 1,847,503 |
| | CI-7 | | Greenlawn Blvd and Louis Henna Blvd (SH 45 FR) | OTHER | | 100% | \$ 784,000 | \$ 784,000 |
| | BI-4, CI-8 | | A.W. Grimes Blvd and Palm Valley Blvd | OTHER & TURN LANES | | 50% | \$ 2,041,000 | \$ 1,020,500 |
| | CI-9 | | A.W. Grimes Blvd and Gattis School Rd | TURN LANES | | 100% | \$ 1,921,000 | \$ 1,921,000 |
| | CI-10 | | Red Bud Ln and Gattis School Rd | TURN LANES | | 100% | \$ 1,595,000 | \$ 1,595,000 |
| | - | | Update ITS and Traffic Managemnet Infrastructure | - | | 33% | \$ 20,900,000 | \$ 6,966,667 |
| Service Area Roadway Project Cost Subtotal | | | | | | | \$ 160,010,217 | |
| Service Area Intersection Project Cost Subtotal | | | | | | | \$ 17,210,670 | |
| 2018 Roadway Impact Fee Study Cost Per Service Area | | | | | | | \$ 34,673 | |
| Total Cost in SERVICE AREA C | | | | | | | \$ 177,255,560 | |

- 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.



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. 24). To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year period.

The growth in vehicle-miles from 2018 to 2028 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 2018 were made, along with growth projections for each of these demographic statistics through 2028. 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, 10th Edition*. This characteristic is more appropriate than the number of employees, because building square footage is tied more closely to trip generation and



is known at the time of application for any development that would require the assessment of an impact fee.

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

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 10th Edition* and the National Household Travel Survey performed by the Federal Highway Administration (FHWA). The *ITE Trip Generation Manual, 10th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips. The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the Capital Area Metropolitan Planning Organization (CAMPO) long-range transportation model and supplemented with the National Household Travel Survey conducted by the FHWA.



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

Variables:

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

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

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 | 0.99 | 0.56 | 0.63 | 1.15 | 3.81 |
| P _b | 0% | 0% | 0% | 0% | 34% |
| L | 8.59 | 8.59 | 12.89 | 6.76 | 6.35 |
| L _{max} | 4.30 | 4.30 | 6.00 | 3.38 | 3.18 |
| TDF | 4.26 | 2.41 | 3.78 | 3.89 | 7.98 |
| * L _{max} is less than 6 miles for residential and retail land uses; therefore this lower trip length is used for calculating the TDF for these land uses. | | | | | |

Variables:

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

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in Table 6. This table shows the growth in total vehicle-miles by service area between the years 2018 – 2028.

Table 6. 10-Year Growth Projections

| 2018 - 2028 Growth Projections ¹ | | | | | | | | | | | | | | | | |
|---|---------------------------|----------------------------|--------------------|----------------------------|----------------------------|--|-----------|-----------|-----------------------------------|----------------------|---------------------|---|---------|--------|--------|-----------------------------------|
| SERVICE AREA | RESIDENTIAL VEHICLE-MILES | | | | VEHICLE MILES ⁴ | 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 | | BASIC | SERVICE | RETAIL | BASIC ⁷ | SERVICE ⁸ | RETAIL ⁹ | BASIC | SERVICE | RETAIL | TOTAL | |
| A | 621 | 0.99 | | 0.56 | 4,892 | 1,300,000 | 600,000 | 500,000 | | | 2.57 | 4,914 | 2,334 | 3,990 | 11,238 | 16,130 |
| | 1,826 | 4.26 | 2,739 | 2.41 | 14,379 | 600,000 | 2,300,000 | 900,000 | 3.78 | 3.89 | 7.98 | 2,268 | 8,947 | 7,182 | 18,397 | 32,776 |
| C | 1,720 | | 3,485 | | 15,725 | 2,200,000 | 2,600,000 | 1,500,000 | | | | 8,316 | 10,114 | 11,970 | 30,400 | 46,125 |
| Totals | | 4,167 | | 7,156 | 34,997 | 4,100,000 | 5,500,000 | 2,900,000 | | | | 15,498 | 21,395 | 23,142 | 60,035 | 95,032 |

Notes:

- ¹ From City of Round Rock 2018 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 2018 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 6 (Continued). 10-Year Growth Projections
Vehicle Miles of Increase (2018-2028)

| SERVICE AREA | VEH-MILES |
|-----------------|-----------|
| A | 16,130 |
| B | 32,776 |
| C | 46,125 |



V. ROADWAY IMPACT FEE CALCULATION

A. Maximum Assessable Impact Fee Per Service Unit

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible RIF CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. Table 7 illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation. The calculation of the maximum assessable impact fee is shown in Table 8. The Roadway Impact Fee CIP consists of both roadway segment and intersection improvements. The roadway segment component is referred to as the "Roadway Impact Fee CIP," while the intersection component is referred to as the "Intersection Impact Fee CIP."

Table 7. Maximum Assessable Roadway Impact Fee Computation

| Line | Title | Description |
|------|--|---|
| 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) |
|---|---|--|

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) |
|---|---|--|

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) |
|---|--|---|

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) |
|---|---|---|

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)] |
|---|--------------------------------------|--|

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) |
|---|--|--|

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) |
|---|---|---|

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). |
|----|--|---|

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) |
|----|--|---|

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). |
|----|--|---|

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) |
|----|---|---|

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>Credit for Previous Contributions</i> | The total contributions by development toward the building of improvements in the Roadway Impact Fee CIP. |
|----|--|---|

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

| | | |
|----|--|---|
| 16 | <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 – Line 15). |
|----|--|---|

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 C and Appendix D, Plan for Awarding the Roadway Impact Fee Credit. The following table summarizes the portions of Table 8 that utilize this credit calculation.

| Line | Title | Description |
|------|--|---|
| 17 | <i>Financing Costs</i> | (from Appendix C – Plan for Awarding the Roadway Impact Fee Credit) |
| 18 | <i>Interest Earnings</i> | (from Appendix C – Plan for Awarding the Roadway Impact Fee Credit) |
| 19 | <i>Cost of the Roadway Impact Fee CIP and Financing Attributable to New Growth</i> | The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, and Interest Earnings. (Line 16 + Line 17 + Line 18) |
| 20 | <i>Pre-Credit Maximum Fee Per Service Unit</i> | Found by dividing the Cost of the CIP and Financing Attributable to New Growth (Line 19) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 19 / Line 8) |
| 21 | <i>Credit for Ad Valorem Taxes</i> | 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) |
| 22 | <i>Recoverable Cost of the Roadway Impact Fee CIP and Financing</i> | The difference between the Cost of the CIP and Financing Attributable to New Growth (Line 19) and the Credit for Ad Valorem Taxes (Line 21). (Line 19 + Line 21) |
| 23 | <i>Maximum Assessable Fee Per Service Unit</i> | Found by dividing the Recoverable Cost of the CIP and Financing (Line 22) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 22 / 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 / 50% cash)
 - Cost of financing
 - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Ad Valorem Tax Revenue Used to Fund Impact Fee Transportation Improvements

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

Once the cost of capacity added that is attributable to growth (Table 8 - line 16) is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Based on discussions with City staff, unless specific funding has already been determined, it is assumed that the City will debt finance 50% of the future project costs and cash finance 50%. For debt financing, the cost of financing is based on the City's Financial Advisor's estimates of future debt costs for bonds issued with 20-year terms, as shown in



Appendix E. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

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

Because debt is issued over 20-year terms and impact fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. Because of the generation of the fund balance, excess monies will be available for interest earnings. Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order to recognize that interest earnings are used to fund transportation improvements, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 1.71% based on the City's annual return on money market funds as of March 2018.

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



Chapter 395 requires a plan for awarding either a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the Transportation Impact Fee TIP. As an alternative, a credit equal to 50% of the total cost of implementing the Transportation Impact Fee TIP may be used. The City has elected to pursue the determination of a credit for the portion of ad valorem tax revenues generated by new service units during the program period that are used for payment of improvements that are included in the Transportation Impact Fee TIP. It should be noted that the credit is not a determination to recognize the total ad valorem tax revenue generated by new service units, but is only a credit for the portion of ad valorem tax revenue that is used for payment of improvements that are included in the Transportation Impact Fee TIP. Theoretically, the credit determination could be zero (\$0) if the City does not utilize any of the new service unit ad valorem tax revenue to fund improvements that are included in the Transportation Impact Fee TIP. 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 Transportation Impact Fee TIP) could potentially be funded by ad valorem tax revenue. Since payments made through ad valorem tax revenue will consist of not only the revenue generated by new service units in the defined service area, but also existing property owners throughout the City, the portion attributable to the new service units in the defined service area must be isolated, as illustrated in the credit calculation in Appendix E.



Table 8. Maximum Assessable Roadway Impact Fee

| SERVICE AREA: | | A | B | C |
|---------------|--|----------------|----------------|----------------|
| 1 | TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B) | 70,654 | 104,987 | 72,412 |
| 2 | TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B) | 18,407 | 32,160 | 23,729 |
| 3 | TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, APPENDIX C) | 1,446 | 2,044 | 1,974 |
| 4 | NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3) | 50,801 | 70,783 | 46,709 |
| 5 | TOTAL COST OF THE ROADWAY IMPACT FEE CIP AND STUDY WITHIN SERVICE AREA (FROM TABLES 5A TO 5C) | \$ 157,022,935 | \$ 271,332,729 | \$ 160,044,890 |
| 6 | COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5) | \$ 112,901,210 | \$ 182,934,502 | \$ 103,236,159 |
| 7 | COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6) | \$ 44,121,725 | \$ 88,398,227 | \$ 56,808,731 |
| 8 | TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 7 AND LAND USE ASSUMPTIONS) | 16,130 | 32,776 | 46,125 |
| 9 | PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4) | 31.7% | 46.3% | 98.7% |
| 10 | IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE | 31.7% | 46.3% | 98.7% |
| 11 | COST OF ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10) | \$ 35,789,684 | \$ 84,698,674 | \$ 101,894,089 |
| 12 | TOTAL COST OF THE INTERSECTION IMPACT FEE CIP WITHIN SERVICE AREA (FROM TABLES 4A TO 4C) | \$ 9,391,000 | \$ 10,004,402 | \$ 17,210,670 |
| 13 | PERCENT OF INTERSECTION CAPACITY ADDED ATTRIBUTABLE TO GROWTH (FROM TABLE 7 AND LAND USE ASSUMPTIONS) | 22.9% | 23.7% | 20.9% |
| 14 | COST OF INTERSECTION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 12 * LINE 13) | \$ 2,150,539 | \$ 2,371,043 | \$ 3,597,030 |
| 15 | CREDIT FOR PREVIOUS CONTRIBUTIONS | \$ 784,298 | \$ 4,014,565 | \$ 3,103,136 |
| 16 | COST OF TOTAL ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 14 - LINE 15) | \$ 37,155,925 | \$ 83,055,152 | \$ 102,387,983 |
| 17 | FINANCING COSTS (FROM APPENDIX D) | \$ 10,434,486 | \$ 23,891,052 | \$ 24,921,243 |
| 18 | INTEREST EARNINGS (FROM APPENDIX D) | \$ (4,125,954) | \$ (9,711,073) | \$ (9,934,786) |
| 19 | COST OF THE ROADWAY IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO NEW GROWTH (LINE 16 + LINE 17 + LINE 18) | \$ 43,464,456 | \$ 97,235,131 | \$ 117,374,440 |
| 20 | PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 19 / LINE 8) | \$ 2,695 | \$ 2,967 | \$ 2,545 |
| 21 | CREDIT FOR AD VALOREM TAXES (FROM APPENDIX D) | \$ (273,155) | \$ (1,116,621) | \$ (1,553,766) |
| 22 | RECOVERABLE COST OF ROADWAY IMPACT FEE CIP AND FINANCING (LINE 19 + LINE 21) | \$ 43,191,301 | \$ 96,118,510 | \$ 115,820,674 |
| 23 | MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 22 / LINE 8) | \$ 2,678 | \$ 2,933 | \$ 2,511 |

D. Service Unit Demand Per Unit of Development

The Roadway Impact Fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City will utilize the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in Table 9. This table lists the predominant land uses that may occur within the City of 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 10. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column in Table 9, if applicable to the land use, presents the percentage of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 10th Edition*, the latest edition. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning. However, for land uses not contained within the 10th Edition of the *ITE Trip Generation Manual*, an alternative service unit demand could be calculated by completing a trip generation study based on the procedure identified in the *ITE Trip Generation Handbook*.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on the CAMPO long range transportation model and supplemented by the *National Household Travel Survey* performed by the FHWA. The other adjustment to



trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above six (6) miles, the maximum trip length used for calculation is reduced to six (6) miles. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

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



Table 9. Land Use / Vehicle-Mile Equivalency Table (LUVMET)

| Land Use Category | ITE Land Use Code | Development Unit | Trip Gen Rate (PM) | Pass-by Rate | Pass-by Source | Trip Rate | Trip Length (mi) | Adj. For O-D | Adj. Trip Length (mi) | Max Trip Length (mi) | Veh-Mi Per Dev-Unit |
|-------------------------------------|-------------------|------------------|--------------------|--------------|----------------|-----------|------------------|--------------|-----------------------|----------------------|---------------------|
| PORT AND TERMINAL | | | | | | | | | | | |
| Truck Terminal | 030 | 1,000 SF GFA | 1.87 | | | 1.87 | 10.70 | 50% | 5.35 | 5.35 | 10.00 |
| INDUSTRIAL | | | | | | | | | | | |
| General Light Industrial | 110 | 1,000 SF GFA | 0.63 | | | 0.63 | 12.89 | 50% | 6.45 | 6.00 | 3.78 |
| Industrial Park | 130 | 1,000 SF GFA | 0.40 | | | 0.40 | 12.89 | 50% | 6.45 | 6.00 | 2.40 |
| Manufacturing | 140 | 1,000 SF GFA | 0.67 | | | 0.67 | 12.89 | 50% | 6.45 | 6.00 | 4.02 |
| Warehousing | 150 | 1,000 SF GFA | 0.19 | | | 0.19 | 12.89 | 50% | 6.45 | 6.00 | 1.14 |
| Mini-Warehouse | 151 | 1,000 SF GFA | 0.17 | | | 0.17 | 12.89 | 50% | 6.45 | 6.00 | 1.02 |
| RESIDENTIAL | | | | | | | | | | | |
| Single-Family Detached Housing | 210 | Dwelling Unit | 0.99 | | | 0.99 | 8.59 | 50% | 4.30 | 4.30 | 4.26 |
| Multifamily Housing (Low-Rise) | 220 | Dwelling Unit | 0.56 | | | 0.56 | 8.59 | 50% | 4.30 | 4.30 | 2.41 |
| Multifamily Housing (Mid-Rise) | 221 | Dwelling Unit | 0.44 | | | 0.44 | 8.59 | 50% | 4.30 | 4.30 | 1.89 |
| Multifamily Housing (High-Rise) | 222 | Dwelling Unit | 0.36 | | | 0.36 | 8.59 | 50% | 4.30 | 4.30 | 1.55 |
| Mobile Home Park / Manufactured Hom | 240 | Dwelling Unit | 0.46 | | | 0.46 | 8.59 | 50% | 4.30 | 4.30 | 1.98 |
| Senior Adult Housing-Detached | 251 | Dwelling Unit | 0.30 | | | 0.30 | 8.59 | 50% | 4.30 | 4.30 | 1.29 |
| Senior Adult Housing-Attached | 252 | Dwelling Unit | 0.26 | | | 0.26 | 8.59 | 50% | 4.30 | 4.30 | 1.12 |
| Assisted Living | 254 | Beds | 0.26 | | | 0.26 | 8.59 | 50% | 4.30 | 4.30 | 1.12 |
| LODGING | | | | | | | | | | | |
| Hotel | 310 | Room | 0.60 | | | 0.60 | 5.41 | 50% | 2.71 | 2.71 | 1.63 |
| Motel / Other Lodging Facilities | 320 | Room | 0.38 | | | 0.38 | 5.41 | 50% | 2.71 | 2.71 | 1.03 |
| RECREATIONAL | | | | | | | | | | | |
| Golf Driving Range | 432 | Tee | 1.25 | | | 1.25 | 6.35 | 50% | 3.18 | 3.18 | 3.98 |
| Golf Course | 430 | Acre | 0.28 | | | 0.28 | 6.35 | 50% | 3.18 | 3.18 | 0.89 |
| Recreational Community Center | 495 | 1,000 SF GFA | 2.31 | | | 2.31 | 6.35 | 50% | 3.18 | 3.18 | 7.35 |
| Ice Skating Rink | 465 | 1,000 SF GFA | 1.33 | | | 1.33 | 6.35 | 50% | 3.18 | 3.18 | 4.23 |
| Miniature Golf Course | 431 | Hole | 0.33 | | | 0.33 | 6.35 | 50% | 3.18 | 3.18 | 1.05 |
| Multiplex Movie Theater | 445 | Screens | 13.73 | | | 13.73 | 6.35 | 50% | 3.18 | 3.18 | 43.66 |
| Racquet / Tennis Club | 491 | Court | 3.82 | | | 3.82 | 6.35 | 50% | 3.18 | 3.18 | 12.15 |
| INSTITUTIONAL | | | | | | | | | | | |
| Church | 560 | 1,000 SF GFA | 0.49 | | | 0.49 | 6.30 | 50% | 3.15 | 3.15 | 1.54 |
| Day Care Center | 565 | 1,000 SF GFA | 11.12 | 44% | B | 6.23 | 3.39 | 50% | 1.70 | 1.70 | 10.59 |
| Primary/Middle School (1-8) | 522 | Students | 0.17 | | | 0.17 | 3.39 | 50% | 1.70 | 1.70 | 0.29 |
| High School | 530 | Students | 0.14 | | | 0.14 | 3.39 | 50% | 1.70 | 1.70 | 0.24 |
| Junior / Community College | 540 | Students | 0.11 | | | 0.11 | 3.39 | 50% | 1.70 | 1.70 | 0.19 |
| University / College | 550 | Students | 0.15 | | | 0.15 | 3.39 | 50% | 1.70 | 1.70 | 0.26 |
| MEDICAL | | | | | | | | | | | |
| Clinic | 630 | 1,000 SF GFA | 3.28 | | | 3.28 | 6.76 | 50% | 3.38 | 3.38 | 11.09 |
| Hospital | 610 | 1,000 SF GFA | 0.97 | | | 0.97 | 6.76 | 50% | 3.38 | 3.38 | 3.28 |
| Nursing Home | 620 | Beds | 0.22 | | | 0.22 | 6.76 | 50% | 3.38 | 3.38 | 0.74 |
| Animal Hospital/Veterinary Clinic | 640 | 1,000 SF GFA | 3.53 | 30% | B | 2.47 | 6.76 | 50% | 3.38 | 3.38 | 8.35 |

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

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

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



Table 9 (Cont'd). Land Use / Vehicle-Mile Equivalency Table (LUVMET)

| Land Use Category | ITE Land Use Code | Development Unit | Trip Gen Rate (PM) | Pass-by Rate | Pass-by Source | Trip Rate | Trip Length (mi) | Adj. For O-D | Adj. Trip Length (mi) | Max Trip Length (mi) | Veh-Mi Per Dev-Unit |
|--|-------------------|--------------------------|--------------------|--------------|----------------|-----------|------------------|--------------|-----------------------|----------------------|---------------------|
| OFFICE | | | | | | | | | | | |
| Corporate Headquarters Building | 714 | 1,000 SF GFA | 0.60 | | | 0.60 | 6.76 | 50% | 3.38 | 3.38 | 2.03 |
| General Office Building | 710 | 1,000 SF GFA | 1.15 | | | 1.15 | 6.76 | 50% | 3.38 | 3.38 | 3.89 |
| Medical-Dental Office Building | 720 | 1,000 SF GFA | 3.46 | | | 3.46 | 6.76 | 50% | 3.38 | 3.38 | 11.69 |
| Single Tenant Office Building | 715 | 1,000 SF GFA | 1.71 | | | 1.71 | 6.76 | 50% | 3.38 | 3.38 | 5.78 |
| Office Park | 750 | 1,000 SF GFA | 1.07 | | | 1.07 | 6.76 | 50% | 3.38 | 3.38 | 3.62 |
| COMMERCIAL | | | | | | | | | | | |
| Automobile Related | | | | | | | | | | | |
| Automobile Care Center | 942 | 1,000 SF GFA | 3.11 | 40% | B | 1.87 | 5.41 | 50% | 2.71 | 2.71 | 5.07 |
| Automobile Parts Sales | 843 | 1,000 SF GFA | 4.91 | 43% | A | 2.80 | 5.41 | 50% | 2.71 | 2.71 | 7.59 |
| Gasoline/Service Station | 944 | Vehicle Fueling Position | 14.03 | 42% | A | 8.14 | 1.20 | 50% | 0.60 | 0.60 | 4.88 |
| Gasoline/Service Station w/ Conv Market and Car Wash | 945 | Vehicle Fueling Position | 13.99 | 56% | B | 6.16 | 1.20 | 50% | 0.60 | 0.60 | 3.70 |
| New Car Sales | 841 | 1,000 SF GFA | 2.43 | 20% | B | 1.94 | 5.41 | 50% | 2.71 | 2.71 | 5.26 |
| Quick Lubrication Vehicle Shop | 941 | Servicing Positions | 4.85 | 40% | B | 2.91 | 5.41 | 50% | 2.71 | 2.71 | 7.89 |
| Self-Service Car Wash | 947 | Stall | 5.54 | 40% | B | 3.32 | 1.20 | 50% | 0.60 | 0.60 | 1.99 |
| Tire Store | 848 | 1,000 SF GFA | 3.98 | 28% | A | 2.87 | 5.41 | 50% | 2.71 | 2.71 | 7.78 |
| Dining | | | | | | | | | | | |
| Fast Food Restaurant with Drive-Thru Window | 934 | 1,000 SF GFA | 32.67 | 50% | A | 16.34 | 3.39 | 50% | 1.70 | 1.70 | 27.78 |
| Fast Food Restaurant without Drive-Thru Window | 933 | 1,000 SF GFA | 28.34 | 50% | B | 14.17 | 3.39 | 50% | 1.70 | 1.70 | 24.09 |
| High Turnover (Sit-Down) Restaurant | 932 | 1,000 SF GFA | 9.77 | 43% | A | 5.57 | 5.41 | 50% | 2.71 | 2.71 | 15.09 |
| Quality Restaurant | 931 | 1,000 SF GFA | 7.80 | 44% | A | 4.37 | 5.41 | 50% | 2.71 | 2.71 | 11.84 |
| Coffee/Donut Shop with Drive-Thru Window | 937 | 1,000 SF GFA | 43.38 | 70% | A | 13.01 | 1.20 | 50% | 0.60 | 0.60 | 7.81 |
| Other Retail | | | | | | | | | | | |
| Free-Standing Discount Store | 815 | 1,000 SF GFA | 4.83 | 30% | C | 3.38 | 6.35 | 50% | 3.18 | 3.18 | 10.75 |
| Nursery (Garden Center) | 817 | 1,000 SF GFA | 6.94 | 30% | B | 4.86 | 6.35 | 50% | 3.18 | 3.18 | 15.45 |
| Home Improvement Superstore | 862 | 1,000 SF GFA | 2.33 | 48% | A | 1.21 | 6.35 | 50% | 3.18 | 3.18 | 3.85 |
| Pharmacy/Drugstore w/o Drive-Thru Window | 880 | 1,000 SF GFA | 8.51 | 53% | A | 4.00 | 6.35 | 50% | 3.18 | 3.18 | 12.72 |
| Pharmacy/Drugstore w/ Drive-Thru Window | 881 | 1,000 SF GFA | 10.29 | 49% | A | 5.25 | 6.35 | 50% | 3.18 | 3.18 | 16.70 |
| Shopping Center | 820 | 1,000 SF GLA | 3.81 | 34% | A | 2.51 | 6.35 | 50% | 3.18 | 3.18 | 7.98 |
| Supermarket | 850 | 1,000 SF GFA | 9.24 | 36% | A | 5.91 | 6.35 | 50% | 3.18 | 3.18 | 18.79 |
| Toy/Children's Superstore | 864 | 1,000 SF GFA | 5.00 | 30% | B | 3.50 | 6.35 | 50% | 3.18 | 3.18 | 11.13 |
| Department Store | 875 | 1,000 SF GFA | 1.95 | 30% | B | 1.37 | 6.35 | 50% | 3.18 | 3.18 | 4.36 |
| SERVICES | | | | | | | | | | | |
| Walk-In Bank | 911 | 1,000 SF GFA | 12.13 | 40% | B | 7.28 | 3.39 | 50% | 1.70 | 1.70 | 12.38 |
| Drive-In Bank | 912 | Drive-in Lanes | 27.15 | 35% | A | 17.65 | 3.39 | 50% | 1.70 | 1.70 | 30.01 |
| Hair Salon | 918 | 1,000 SF GLA | 1.45 | 30% | B | 1.02 | 3.39 | 50% | 1.70 | 1.70 | 1.73 |

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

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

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



Table 10. Land Use Descriptions

| Land Use Category | ITE Land Use Code | Land Use Description |
|--------------------------------------|-------------------|---|
| PORT AND TERMINAL | | |
| Truck Terminal | 030 | Point of good transfer between trucks or between trucks and rail |
| INDUSTRIAL | | |
| General Light Industrial | 110 | Emphasis on activities other than manufacturing; typically employing fewer than 500 workers |
| Industrial Park | 130 | Area containing a number of industries or related facilities |
| Manufacturing | 140 | |
| Warehousing | 150 | Devoted to storage of materials but may included office and maintenance areas |
| Mini-Warehouse | 151 | Facilities with a number of units rented to others for the storage of goods |
| RESIDENTIAL | | |
| Single-Family Detached Housing | 210 | Single-family detached homes on individual lots |
| Multifamily Housing (Low-Rise) | 220 | At least 3 rental dwelling units and one or two levels (floors) per building |
| Multifamily Housing (Mid-Rise) | 221 | At least 3 rental dwelling units and between three and ten levels (floors) per building |
| Multifamily Housing (High-Rise) | 222 | At least 3 rental dwelling units and more than ten levels (floors) per building |
| Mobile Home Park / Manufactured Home | 240 | |
| Senior Adult Housing-Detached | 251 | Consists of detached independent living developments that include amenities such as golf courses and swimming pools |
| Senior Adult Housing-Attached | 252 | Consists of attached independent living developments that include limited social or recreation services |
| Assisted Living | 254 | Residential settings that provide either routine general protective oversight or assistance with activities. |
| LODGING | | |
| Hotel | 310 | Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services |
| Motel / Other Lodging Facilities | 320 | Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space |
| RECREATIONAL | | |
| Golf Driving Range | 432 | Facilities with driving tees for practice; may provide individual or group lessons; may have prop shop and/or refreshment facilities |
| Golf Course | 430 | May include municipal courses and private country clubs; may have driving ranges, pro shops, and restaurant/banquet facilities |
| Recreational Community Center | 495 | Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's |
| Ice Skating Rink | 465 | Rinks for ice skating and related sports; may contain spectator areas and refreshment facilities |
| Miniature Golf Course | 431 | One or more individual putting courses; category should not be used when part of a larger entertainment center(with batting cages, video game centers, etc) |
| Multiplex Movie Theater | 445 | Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area. |
| Racquet / Tennis Club | 491 | Indoor or outdoor facilities specifically designed for playing tennis |
| INSTITUTIONAL | | |
| Church | 560 | Churches and houses of worship |
| Day Care Center | 565 | Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds |
| Primary/Middle School (1-8) | 522 | Serves students who have not yet entered high school |
| High School | 530 | Serves students who have completed middle or junior high school |
| Junior / Community College | 540 | Two-year junior, community, or technical colleges |
| University / College | 550 | Four-year universities or colleges that may or may not offer graduate programs |
| MEDICAL | | |
| Clinic | 630 | Facilities with limited diagnostic and outpatient care |
| Hospital | 610 | Medical and surgical facilities with overnight accommodations |
| Nursing Home | 620 | Rest and convalescent homes with residents who do little or no driving |
| Animal Hospital/Veterinary Clinic | 640 | Rest and convalescent homes with residents who do little or no driving |
| OFFICE | | |
| Corporate Headquarters Building | 714 | Office building housing corporate headquarters of a single company or organization |
| General Office Building | 710 | Office buildings which house multiple tenants |
| Medical-Dental Office Building | 720 | Multi-tenant building with offices for physicians and/or dentists |
| Single Tenant Office Building | 715 | Single tenant office buildings other than corporate headquarters |
| Office Park | 750 | Office buildings (typically low-rise) in a campus setting and served by a common roadway system |



Table 10 (Cont'd). Land Use Descriptions

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



VI. SAMPLE CALCULATIONS

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

Example 1:

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

| Roadway Impact Fee Calculation Steps – Example 1 | |
|--|---|
| 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: 4.26 |
| Step 2 | Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile) |
| | <i>From Table 8, Line 19 [Maximum Assessable Fee Per Service Unit]</i> Service Area A: \$2,678 |
| Step 3 | Determine Maximum Assessable Impact Fee |
| | Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 4.26 * \$2,678 Maximum Assessable Impact Fee = \$11,408.28 |

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: 3.85 |
| Step 2 | Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile) |
| | <i>From Table 8, Line 19 [Maximum Assessable Fee Per Service Unit]</i> Service Area C: \$2,511 |
| 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 * 3.85 * \$2,511 Maximum Assessable Impact Fee = \$966,735 |

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 first public hearing on the Roadway Impact Fee Assumptions (Land Use and Capital Improvements Plan) and a second public hearing on the Roadway Impact Fee Calculation and Roadway Impact Fee Ordinance.

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

B. Collection and Use of Roadway Impact Fees

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

VIII. 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 8.

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

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

Below is the listing of the 2018 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

| Service Area | Maximum Fee Per Service Unit (per Vehicle-Mile) |
|--------------|---|
| A | \$2,678 |
| B | \$2,933 |
| C | \$2,511 |

- A. Conceptual Level Project Cost Projections
 - SERVICE AREA A
 - SERVICE AREA B
 - SERVICE AREA C
- B. Roadway Impact Fee CIP Service Units of Supply
- C. 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 - 2018 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 | 240' W of Lagoon Dr | 100% | \$ 7,800,000 | \$ 7,800,000 |
| A-2 | 4 Lane - Enhanced (1/2) | New Hope Rd (2) | (1/2) Widening | 240' W of Lagoon Dr | Mayfield Ranch Blvd | 50% | \$ 1,900,000 | \$ 950,000 |
| A-3 | 4 Lane - Proposed | New Hope Rd (3) | New | Mayfield Ranch Blvd | 1000' E of Wyoming Springs Dr | 50% | \$ 9,300,000 | \$ 4,650,000 |
| A-4, B-1 | 6 Lane - Enhanced | Westinghouse Rd | Widening | IH 35 SBFR | IH 35 NBFR | 50% | \$ 9,031,296 | \$ 4,515,648 |
| A-5 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (1) | (1/2) Widening | New Hope Dr (Future) | Blue Ridge Dr | 100% | \$ 1,700,000 | \$ 1,700,000 |
| A-6 | 4 Lane - Proposed | Wyoming Springs Dr (2) | New | Blue Ridge Dr | RM 1431 | 100% | \$ 9,100,000 | \$ 9,100,000 |
| A-7 | 6 Lane - Enhanced | RM 1431 (1) | Widening | 1100' W of Mayfield Ranch Blvd | 850' E of Stone Oak Dr | 50% | \$ 2,880,000 | \$ 1,440,000 |
| A-8 | 6 Lane - Enhanced | RM 1431 (2) | Widening | 850' E of Stone Oak Dr | 5195' E of Stone Oak St | 100% | \$ 3,020,000 | \$ 3,020,000 |
| A-9 | 6 Lane - Enhanced | RM 1431 (3) | Widening | 5195' E of Stone Oak St | IH 35 SBFR | 100% | \$ 3,840,000 | \$ 3,840,000 |
| A-10 | 4 Lane - Enhanced (1/2) | Wyoming Springs Dr (3) | (1/2) Widening | 390' N of GoldenOak Cir | Alondra Way | 100% | \$ 1,000,000 | \$ 1,000,000 |
| A-11 | 4 Lane - Proposed | Arterial L (1) | New | Wyoming Springs Dr | Chisholm Trl Rd (Future) | 100% | \$ 27,400,000 | \$ 27,400,000 |
| A-12 | 4 Lane - Proposed | Creek Bend Blvd (1) | New | RM 1431 | West End Pl | 100% | \$ 10,500,000 | \$ 10,500,000 |
| A-13 | 4 Lane - Enhanced (1/2) | Creek Bend Blvd (2) | (1/2) Widening | West End Pl | Camino Del Verdes Pl | 100% | \$ 5,900,000 | \$ 5,900,000 |
| A-14 | 4 Lane - Proposed | Chisholm Trl Rd (1) | New | RM 1431 | CR 173 | 100% | \$ 11,200,000 | \$ 11,200,000 |
| A-15, B-11 | 4 Lane - Proposed | Arterial L (2) | New | Chisholm Trl Rd (Future) | IH 35 NBFR | 50% | \$ 5,700,000 | \$ 2,850,000 |
| A-16 | 4 Lane - Enhanced | CR 173 | Widening | IH 35 SBFR | 3250' N of Wolle Ln | 100% | \$ 1,300,000 | \$ 1,300,000 |
| A-17 | 4 Lane - Enhanced | Chisholm Trl Rd (2) | Widening | 3250' N of Wolle Ln | 1980' N of Wolle Ln | 100% | \$ 2,900,000 | \$ 2,900,000 |
| A-18 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (3) | Access Management | 1980' N of Wolle Ln | FM 3406 | 100% | \$ 900,000 | \$ 900,000 |
| A-19 | 6 Lane - Enhanced | Sam Bass Rd (1) | Widening | 230' W of Tonkawa Trl | 390' W of Wyoming Springs Dr | 50% | \$ 3,500,000 | \$ 1,750,000 |
| A-20 | 6 Lane - Enhanced | Sam Bass Rd (2) | Widening | 390' W of Wyoming Springs Dr | FM 3406 | 100% | \$ 4,500,000 | \$ 4,500,000 |
| A-21 | 4 Lane - Enhanced | Sam Bass Rd (3) | Widening | FM 3406 | Desert Willow Dr | 50% | \$ 4,200,000 | \$ 2,100,000 |
| A-22 | 4 Lane - Enhanced | Sam Bass Rd (4) | Widening | Desert Willow Dr | Creek Bend Blvd | 100% | \$ 2,200,000 | \$ 2,200,000 |
| A-23 | 4 Lane - Enhanced | Sam Bass Rd (5) | Widening | Creek Bend Blvd | Hairy Man Dr | 100% | \$ 2,500,000 | \$ 2,500,000 |
| A-24 | 4 Lane - Enhanced | Sam Bass Rd (6) | Widening | Hairy Man Rd | 700' E of Hairy Man Rd | 50% | \$ 1,600,000 | \$ 800,000 |
| A-25 | 6 Lane - Enhanced | FM 3406 | Widening | Sam Bass Rd | IH 35 SBFR | 100% | \$ 6,980,000 | \$ 6,980,000 |
| A-26 | 4 Lane - Proposed | Wyoming Springs Dr (4) | New | Sam Bass Rd | Brushy Creek | 100% | \$ 8,500,000 | \$ 8,500,000 |
| A-27 | 4 Lane - Enhanced (AM) | Chisholm Trl Rd (4) | Access Management | FM 3406 | Sam Bass Rd | 100% | \$ 2,600,000 | \$ 2,600,000 |
| 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% | \$ 6,000,000 | \$ 6,000,000 |
| A-30 | 4 Lane - Enhanced | Deepwood Dr (2) | Widening | 345' N of RM 620 | RM 620 | 100% | \$ 800,000 | \$ 800,000 |
| A-31, C-1 | 6 Lane - Enhanced | RM 620 | Widening | Deepwood Dr | IH 35 SBFR | 50% | \$ 12,560,624 | \$ 6,280,312 |
| TOTAL | | | | | | | \$ 182,324,222 | \$ 156,988,262 |

City of Round Rock - 2018 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% | \$ 295,000 | \$ 295,000 |
| AI-2 | Sam Bass Rd and Hairy Man Rd | INTERSECTION IMPROVEMENT | | 75% | \$ 2,000,000 | \$ 1,500,000 |
| AI-3 | Sam Bass Rd and Chisholm Trl Rd | TURN LANES | | 100% | \$ 139,000 | \$ 139,000 |
| AI-4, CI-1 | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 392,000 | \$ 196,000 |
| AI-5, CI-2 | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 588,000 | \$ 294,000 |
| - | Update ITS and Traffic Managemenet Infrastructure | | | 33% | \$ 20,900,000 | \$ 6,967,000 |
| TOTAL | | | | | \$ 24,314,000 | \$ 9,391,000 |

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
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 240' W of Lagoon Dr | | |
| Impact Fee Class: | 4 Lane - Enhanced (1/2) | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 5,816 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 21,146 | cy | \$ 15.00 | \$ 317,000 |
| 201 | 12" Asphalt (Type C) | 11,516 | ton | \$ 72.00 | \$ 829,000 |
| 301 | 16" Base | 7,755 | cy | \$ 55.00 | \$ 427,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 18,740 | sy | \$ 6.00 | \$ 112,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 3,490 | gal | \$ 6.00 | \$ 21,000 |
| 601 | 10' Concrete Sidewalk | 116,320 | sf | \$ 5.50 | \$ 640,000 |
| 701 | Machine Laid Curb & Gutter | 11,632 | lf | \$ 16.00 | \$ 186,000 |
| 801 | Turn Lanes and Median Openings | 3,525 | sy | \$ 134.62 | \$ 475,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,007,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 150,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 60,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 902,000 | |
| ✓ Illumination | | 10% | \$ | 301,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 500,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 60,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 60,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 60,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 120,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 2,213,000 |
| Paving and Allowance Subtotal: | | | | | \$ 5,220,000 |
| Construction Contingency: | | | 15% | \$ | 783,000 |
| Mobilization | | | 8% | \$ | 418,000 |
| Prep ROW | | | 4% | \$ | 209,000 |
| Construction Cost TOTAL: | | | | | \$ 6,700,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 6,700,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,072,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 7,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 Mayfield Ranch Blvd | | | |
| Impact Fee Class: | 4 Lane - Enhanced (1/2) | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,223 | | | |
| Service Area(s): | A,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---------------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 4,447 | cy | \$ 15.00 | \$ 67,000 |
| 201 | 12" Asphalt (Type C) | 2,422 | ton | \$ 72.00 | \$ 174,000 |
| 301 | 16" Base | 1,631 | cy | \$ 55.00 | \$ 90,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,941 | sy | \$ 6.00 | \$ 24,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 734 | gal | \$ 6.00 | \$ 4,000 |
| 601 | 10' Concrete Sidewalk | 24,460 | sf | \$ 5.50 | \$ 135,000 |
| 701 | Machine Laid Curb & Gutter | 2,446 | lf | \$ 16.00 | \$ 39,000 |
| 801 | Turn Lanes and Median Openings | 741 | sy | \$ 134.62 | \$ 100,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 633,000 |
| 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% | \$ | 190,000 | |
| ✓ Illumination | | 10% | \$ | 63,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 200,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 13,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 13,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 13,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 25,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 562,000 |
| Paving and Allowance Subtotal: | | | | | \$ 1,195,000 |
| Construction Contingency: | | | | 15% | \$ 179,000 |
| Mobilization | | | | 8% | \$ 96,000 |
| Prep ROW | | | | 4% | \$ 48,000 |
| 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 | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 1,900,000 |

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

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | Mayfield Ranch Blvd to 1000' E of Wyoming Springs | | |
| Impact Fee Class: | 4 Lane - Proposed | | |
| Ultimate Class: | 4 Lane - Proposed | | |
| Length (lf): | 4,893 | | |
| Service Area(s): | A,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|--------------------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 35,580 | cy | \$ 15.00 | \$ 534,000 |
| 202 | 12" Asphalt (Type C) | 19,376 | ton | \$ 72.00 | \$ 1,395,000 |
| 302 | 16" Base | 13,048 | cy | \$ 55.00 | \$ 718,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 31,533 | sy | \$ 6.00 | \$ 189,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 5,872 | gal | \$ 6.00 | \$ 35,000 |
| 602 | 10' Concrete Sidewalk | 97,860 | sf | \$ 5.50 | \$ 538,000 |
| 702 | Machine Laid Curb & Gutter | 19,572 | lf | \$ 16.00 | \$ 313,000 |
| 802 | Turn Lanes and Median Openings | 2,965 | sy | \$ 134.62 | \$ 399,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 4,121,000 |
| 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% | \$ 82,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 1,236,000 |
| ✓ | Illumination | | | 10% | \$ 412,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 82,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 82,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 82,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 165,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 2,141,000 |
| | | | | Paving and Allowance Subtotal: | \$ 6,262,000 |
| Construction Contingency: | | | | 15% | \$ 939,000 |
| Mobilization | | | | 8% | \$ 501,000 |
| Prep ROW | | | | 4% | \$ 250,000 |
| Construction Cost TOTAL: | | | | \$ 8,000,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 8,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,280,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 9,300,000 |

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 or the determination of the City Engineer for a specific project.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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 | - | \$ - |
| Overall Project Cost Total: | | | \$ 45,156,480 |
| City Contribution: | | | \$ 9,031,296 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 9,031,296 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-5 |
|--------------------------|---------------------------------------|--|-------------|-----|
| Name: | Wyoming Springs Dr (1) | This project consists of widening existing pavement with half of a 4 lane divided arterial. | | |
| Limits: | New Hope Dr (Future) to Blue Ridge Dr | | | |
| Impact Fee Class: | 4 Lane - Enhanced (1/2) | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,190 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---------------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 4,327 | cy | \$ 15.00 | \$ 65,000 |
| 201 | 12" Asphalt (Type C) | 2,356 | ton | \$ 72.00 | \$ 170,000 |
| 301 | 16" Base | 1,587 | cy | \$ 55.00 | \$ 87,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,834 | sy | \$ 6.00 | \$ 23,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 714 | gal | \$ 6.00 | \$ 4,000 |
| 601 | 10' Concrete Sidewalk | 23,800 | sf | \$ 5.50 | \$ 131,000 |
| 701 | Machine Laid Curb & Gutter | 2,380 | lf | \$ 16.00 | \$ 38,000 |
| 801 | Turn Lanes and Median Openings | 721 | sy | \$ 134.62 | \$ 97,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 615,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 31,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 12,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 185,000 | |
| ✓ Illumination | | 10% | \$ | 62,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 12,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 12,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 12,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 25,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 351,000 |
| Paving and Allowance Subtotal: | | | | | \$ 966,000 |
| Construction Contingency: | | | 15% | \$ | 145,000 |
| Mobilization | | | 8% | \$ | 77,000 |
| Prep ROW | | | 4% | \$ | 39,000 |
| 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 | 15% | \$ 195,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-6 |
|----------------------|--------------------------|--|-------------|-----|
| Name: | Wyoming Springs Dr (2) | This project consists of the construction of a new 4 lane divided arterial. | | |
| Limits: | Blue Ridge Dr to RM 1431 | | | |
| Impact Fee Class: | 4 Lane - Proposed | | | |
| Ultimate Class: | 4 Lane - Proposed | | | |
| Length (lf): | 3,810 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 27,705 | cy | \$ 15.00 | \$ 416,000 |
| 202 | 12" Asphalt (Type C) | 15,088 | ton | \$ 72.00 | \$ 1,086,000 |
| 302 | 16" Base | 10,160 | cy | \$ 55.00 | \$ 559,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 24,553 | sy | \$ 6.00 | \$ 147,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,572 | gal | \$ 6.00 | \$ 27,000 |
| 602 | 10' Concrete Sidewalk | 76,200 | sf | \$ 5.50 | \$ 419,000 |
| 702 | Machine Laid Curb & Gutter | 15,240 | lf | \$ 16.00 | \$ 244,000 |
| 802 | Turn Lanes and Median Openings | 2,309 | sy | \$ 134.62 | \$ 311,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,209,000 |
| 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% | \$ | | 64,000 |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | | 963,000 |
| ✓ Illumination | | 10% | \$ | | 321,000 |
| Special Drainage Structures | None Anticipated | | \$ | | - |
| ✓ Water | Minor Adjustments | 2% | \$ | | 64,000 |
| ✓ Sewer | Minor Adjustments | 2% | \$ | | 64,000 |
| ✓ Turf and Erosion Control | | 2% | \$ | | 64,000 |
| ✓ Landscaping and Irrigation | | 4% | \$ | | 128,000 |
| Miscellaneous: | | 0% | \$ | | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 1,668,000 | | |
| Paving and Allowance Subtotal: | | | \$ 4,877,000 | | |
| Construction Contingency: | | | 15% | \$ | 732,000 |
| Mobilization | | | 8% | \$ | 390,000 |
| Prep ROW | | | 4% | \$ | 195,000 |
| Construction Cost TOTAL: | | | \$ 6,200,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 6,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 992,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,860,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 9,100,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 C | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 5,137 | | | |
| Service Area(s): | A,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 50,609 | cy | \$ 15.00 | \$ 759,000 |
| 205 | 12" Asphalt (Type C) | 28,630 | ton | \$ 72.00 | \$ 2,061,000 |
| 305 | 16" Base | 19,280 | cy | \$ 55.00 | \$ 1,060,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 45,662 | sy | \$ 6.00 | \$ 274,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 8,676 | gal | \$ 6.00 | \$ 52,000 |
| 605 | 10' Concrete Sidewalk | 102,740 | sf | \$ 5.50 | \$ 565,000 |
| 705 | Machine Laid Curb & Gutter | 20,548 | lf | \$ 16.00 | \$ 329,000 |
| 805 | Turn Lanes and Median Openings | 3,113 | sy | \$ 134.62 | \$ 419,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 5,519,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 276,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 110,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 1,656,000 | |
| ✓ Illumination | | 10% | \$ | 552,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 300,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 110,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 110,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 110,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 221,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 3,445,000 | |
| Paving and Allowance Subtotal: | | | \$ | 8,964,000 | |
| Construction Contingency: | | | 15% | \$ | 1,345,000 |
| Mobilization | | | 8% | \$ | 717,000 |
| Prep ROW | | | 4% | \$ | 359,000 |
| Construction Cost TOTAL: | | | \$ | 11,400,000 | |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 11,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,824,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 1,140,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 2,880,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

| 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 | 42,787 | cy | \$ 15.00 | \$ 642,000 |
| 205 | 12" Asphalt (Type C) | 24,205 | ton | \$ 72.00 | \$ 1,743,000 |
| 305 | 16" Base | 16,300 | cy | \$ 55.00 | \$ 896,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 38,604 | sy | \$ 6.00 | \$ 232,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 7,335 | gal | \$ 6.00 | \$ 44,000 |
| 605 | 10' Concrete Sidewalk | 86,860 | sf | \$ 5.50 | \$ 478,000 |
| 705 | Machine Laid Curb & Gutter | 17,372 | lf | \$ 16.00 | \$ 278,000 |
| 805 | Turn Lanes and Median Openings | 2,632 | sy | \$ 134.62 | \$ 354,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 4,667,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 233,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 93,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 1,400,000 | |
| ✓ Illumination | | 10% | \$ | 467,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 2,100,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 93,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 93,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 93,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 187,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | |
| Allowance Subtotal: | | | | | \$ 4,759,000 |
| Paving and Allowance Subtotal: | | | | | \$ 9,426,000 |
| Construction Contingency: | | | | | 15% \$ 1,414,000 |
| Mobilization | | | | | 8% \$ 754,000 |
| Prep ROW | | | | | 4% \$ 377,000 |
| Construction Cost TOTAL: | | | | | \$ 12,000,000 |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 12,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,920,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 1,200,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 3,020,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

| 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): | 7,074 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|---------------------|---------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 69,692 | cy | \$ 15.00 | \$ 1,045,000 |
| 205 | 12" Asphalt (Type C) | 39,426 | ton | \$ 72.00 | \$ 2,839,000 |
| 305 | 16" Base | 26,549 | cy | \$ 55.00 | \$ 1,460,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 62,880 | sy | \$ 6.00 | \$ 377,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 11,947 | gal | \$ 6.00 | \$ 72,000 |
| 605 | 10' Concrete Sidewalk | 141,480 | sf | \$ 5.50 | \$ 778,000 |
| 705 | Machine Laid Curb & Gutter | 28,296 | lf | \$ 16.00 | \$ 453,000 |
| 805 | Turn Lanes and Median Openings | 4,287 | sy | \$ 134.62 | \$ 577,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 7,601,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | Allowance | Item Cost | |
| ✓ | Traffic Control | Construction Phase Traffic Control | 5% | \$ | 380,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 152,000 |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ | 2,280,000 |
| ✓ | Illumination | | 10% | \$ | 760,000 |
| | Special Drainage Structures | None Anticipated | | \$ | - |
| ✓ | Water | Minor Adjustments | 2% | \$ | 152,000 |
| ✓ | Sewer | Minor Adjustments | 2% | \$ | 152,000 |
| ✓ | Turf and Erosion Control | | 2% | \$ | 152,000 |
| ✓ | Landscaping and Irrigation | | 4% | \$ | 304,000 |
| | Miscellaneous: | | 0% | \$ | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 4,332,000 | |
| Paving and Allowance Subtotal: | | | | \$ 11,933,000 | |
| Construction Contingency: | | | | 15% | \$ 1,790,000 |
| Mobilization | | | | 8% | \$ 955,000 |
| Prep ROW | | | | 4% | \$ 477,000 |
| Construction Cost TOTAL: | | | | \$ 15,200,000 | |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 15,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,432,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 1,520,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 3,840,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

| 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 | | |
| Length (lf): | 703 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|----------------------------|----------------|-------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 2,556 | cy | \$ 15.00 | \$ 38,000 |
| 201 | 12" Asphalt (Type C) | 1,392 | ton | \$ 72.00 | \$ 100,000 |
| 301 | 16" Base | 937 | cy | \$ 55.00 | \$ 52,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 2,265 | sy | \$ 6.00 | \$ 14,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 422 | gal | \$ 6.00 | \$ 3,000 |
| 601 | 10' Concrete Sidewalk | 14,060 | sf | \$ 5.50 | \$ 77,000 |
| 701 | Machine Laid Curb & Gutter | 1,406 | lf | \$ 16.00 | \$ 22,000 |
| 801 | Turn Lanes and Median Openings | 426 | sy | \$ 134.62 | \$ 57,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 363,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 18,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 7,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 109,000 | |
| ✓ Illumination | | 10% | \$ | 36,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 7,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 7,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 7,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 15,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ | 206,000 |
| Paving and Allowance Subtotal: | | | \$ | 569,000 | |
| Construction Contingency: | | | 15% | \$ | 85,000 |
| Mobilization | | | 8% | \$ | 46,000 |
| Prep ROW | | | 4% | \$ | 23,000 |
| 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: | Existing Alignment | 15% | \$ 120,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,000,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-11 |
|----------------------|--|---|-------------|------|
| Name: | Arterial L (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): | 11,378 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|----------------------------|----------------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 82,736 | cy | \$ 15.00 | \$ 1,241,000 |
| 202 | 12" Asphalt (Type C) | 45,057 | ton | \$ 72.00 | \$ 3,244,000 |
| 302 | 16" Base | 30,341 | cy | \$ 55.00 | \$ 1,669,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 73,325 | sy | \$ 6.00 | \$ 440,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 13,654 | gal | \$ 6.00 | \$ 82,000 |
| 602 | 10' Concrete Sidewalk | 227,560 | sf | \$ 5.50 | \$ 1,252,000 |
| 702 | Machine Laid Curb & Gutter | 45,512 | lf | \$ 16.00 | \$ 728,000 |
| 802 | Turn Lanes and Median Openings | 6,896 | sy | \$ 134.62 | \$ 928,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 9,584,000 |
| 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% | \$ 192,000 | |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ 2,875,000 | |
| ✓ | Illumination | | 10% | \$ 958,000 | |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | \$ 200,000 | |
| ✓ | Water | Minor Adjustments | 2% | \$ 192,000 | |
| ✓ | Sewer | Minor Adjustments | 2% | \$ 192,000 | |
| ✓ | Turf and Erosion Control | | 2% | \$ 192,000 | |
| ✓ | Landscaping and Irrigation | | 4% | \$ 383,000 | |
| Miscellaneous: | | | 0% | \$ - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 5,184,000 | |
| Paving and Allowance Subtotal: | | | | \$ 14,768,000 | |
| Construction Contingency: | | | | 15% | \$ 2,215,000 |
| Mobilization | | | | 8% | \$ 1,181,000 |
| Prep ROW | | | | 4% | \$ 591,000 |
| Construction Cost TOTAL: | | | | \$ 18,800,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 18,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 3,008,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 5,640,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 27,400,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 - Proposed | | |
| Ultimate Class: | 4 Lane - Proposed | | |
| Length (lf): | 4,220 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 30,686 | cy | \$ 15.00 | \$ 460,000 |
| 202 | 12" Asphalt (Type C) | 16,711 | ton | \$ 72.00 | \$ 1,203,000 |
| 302 | 16" Base | 11,253 | cy | \$ 55.00 | \$ 619,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 27,196 | sy | \$ 6.00 | \$ 163,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 5,064 | gal | \$ 6.00 | \$ 30,000 |
| 602 | 10' Concrete Sidewalk | 84,400 | sf | \$ 5.50 | \$ 464,000 |
| 702 | Machine Laid Curb & Gutter | 16,880 | lf | \$ 16.00 | \$ 270,000 |
| 802 | Turn Lanes and Median Openings | 2,558 | sy | \$ 134.62 | \$ 344,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 3,553,000 |
| 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% | \$ 71,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 1,066,000 |
| ✓ | Illumination | | | 10% | \$ 355,000 |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | | \$ 200,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 71,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 71,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 71,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 142,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 2,047,000 |
| | | | | Paving and Allowance Subtotal: \$ | 5,600,000 |
| Construction Contingency: | | | | 15% | \$ 840,000 |
| Mobilization | | | | 8% | \$ 448,000 |
| Prep ROW | | | | 4% | \$ 224,000 |
| Construction Cost TOTAL: \$ | | | | 7,200,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 7,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,152,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 2,160,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 10,500,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 - Enhanced (1/2) | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 4,163 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 15,136 | cy | \$ 15.00 | \$ 227,000 |
| 201 | 12" Asphalt (Type C) | 8,243 | ton | \$ 72.00 | \$ 593,000 |
| 301 | 16" Base | 5,551 | cy | \$ 55.00 | \$ 305,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,414 | sy | \$ 6.00 | \$ 80,000 |
| 501 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,498 | gal | \$ 6.00 | \$ 15,000 |
| 601 | 10' Concrete Sidewalk | 83,260 | sf | \$ 5.50 | \$ 458,000 |
| 701 | Machine Laid Curb & Gutter | 8,326 | lf | \$ 16.00 | \$ 133,000 |
| 801 | Turn Lanes and Median Openings | 2,523 | sy | \$ 134.62 | \$ 340,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 2,151,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 108,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 43,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 645,000 |
| ✓ | Illumination | | | 10% | \$ 215,000 |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | | \$ 100,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 43,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 43,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 43,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 86,000 |
| | Miscellaneous: | | | 0% | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 1,326,000 |
| Paving and Allowance Subtotal: \$ | | | | | 3,477,000 |
| Construction Contingency: | | | | 15% | \$ 522,000 |
| Mobilization | | | | 8% | \$ 278,000 |
| Prep ROW | | | | 4% | \$ 139,000 |
| Construction Cost TOTAL: \$ | | | | | 4,500,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 720,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 675,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,900,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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): | 4,250 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 30,904 | cy | \$ 15.00 | \$ 464,000 |
| 202 | 12" Asphalt (Type C) | 16,830 | ton | \$ 72.00 | \$ 1,212,000 |
| 302 | 16" Base | 11,333 | cy | \$ 55.00 | \$ 623,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 27,389 | sy | \$ 6.00 | \$ 164,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 5,100 | gal | \$ 6.00 | \$ 31,000 |
| 602 | 10' Concrete Sidewalk | 85,000 | sf | \$ 5.50 | \$ 468,000 |
| 702 | Machine Laid Curb & Gutter | 17,000 | lf | \$ 16.00 | \$ 272,000 |
| 802 | Turn Lanes and Median Openings | 2,576 | sy | \$ 134.62 | \$ 347,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 3,581,000 |
| 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% | \$ 1,074,000 |
| √ | Illumination | | | 10% | \$ 358,000 |
| √ | Special Drainage Structures | Bridge Crossing | | | \$ 600,000 |
| √ | Water | Minor Adjustments | | 2% | \$ 72,000 |
| √ | Sewer | Minor Adjustments | | 2% | \$ 72,000 |
| √ | Turf and Erosion Control | | | 2% | \$ 72,000 |
| √ | Landscaping and Irrigation | | | 4% | \$ 143,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 2,463,000 |
| | | | | Paving and Allowance Subtotal: \$ | 6,044,000 |
| Construction Contingency: | | | | 15% | \$ 907,000 |
| Mobilization | | | | 8% | \$ 484,000 |
| Prep ROW | | | | 4% | \$ 242,000 |
| Construction Cost TOTAL: \$ | | | | | 7,700,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 7,700,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,232,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 2,310,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 11,200,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 2,909 | cy | \$ 15.00 | \$ 44,000 |
| 202 | 12" Asphalt (Type C) | 1,584 | ton | \$ 72.00 | \$ 114,000 |
| 302 | 16" Base | 1,067 | cy | \$ 55.00 | \$ 59,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 2,578 | sy | \$ 6.00 | \$ 15,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 480 | gal | \$ 6.00 | \$ 3,000 |
| 602 | 10' Concrete Sidewalk | 8,000 | sf | \$ 5.50 | \$ 44,000 |
| 702 | Machine Laid Curb & Gutter | 1,600 | lf | \$ 16.00 | \$ 26,000 |
| 802 | Turn Lanes and Median Openings | 242 | sy | \$ 134.62 | \$ 33,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 338,000 |
| 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% | \$ 7,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 101,000 |
| ✓ | Illumination | | | 10% | \$ 34,000 |
| | Special Drainage Structures | None Anticipated | | | |
| ✓ | Water | Minor Adjustments | | 2% | \$ 7,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 7,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 14,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 7,000 |
| ✓ | Overpass? | | | 0% | \$ 2,500,000 |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 2,677,000 |
| | | | | Paving and Allowance Subtotal: \$ | 3,015,000 |
| Construction Contingency: | | | | 15% | \$ 452,000 |
| Mobilization | | | | 8% | \$ 241,000 |
| Prep ROW | | | | 4% | \$ 121,000 |
| Construction Cost TOTAL: \$ | | | | | 3,900,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 3,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 624,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,170,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. A-16 |
|--------------------------|-----------------------------------|---|-------------------------|
| Name: | CR 173 | This project consists of the reconstruction of existing pavement to a 4 lane divided arterial. | |
| Limits: | IH 35 SBFR to 3250' N of Wolle Ln | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 538 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 3,912 | cy | \$ 15.00 | \$ 59,000 |
| 203 | 12" Asphalt (Type C) | 2,130 | ton | \$ 72.00 | \$ 153,000 |
| 303 | 16" Base | 1,435 | cy | \$ 55.00 | \$ 79,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,467 | sy | \$ 6.00 | \$ 21,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 646 | gal | \$ 6.00 | \$ 4,000 |
| 603 | 10' Concrete Sidewalk | 10,760 | sf | \$ 5.50 | \$ 59,000 |
| 703 | Machine Laid Curb & Gutter | 2,152 | lf | \$ 16.00 | \$ 34,000 |
| 803 | Turn Lanes and Median Openings | 326 | sy | \$ 134.62 | \$ 44,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 453,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 23,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 9,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 136,000 |
| ✓ | Illumination | | | 10% | \$ 45,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 9,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 9,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 9,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 18,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 258,000 |
| Paving and Allowance Subtotal: \$ | | | | 711,000 | |
| Construction Contingency: | | | | 15% | \$ 107,000 |
| Mobilization | | | | 8% | \$ 57,000 |
| Prep ROW | | | | 4% | \$ 28,000 |
| 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: | Existing Alignment | 15% | \$ 150,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,300,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,272 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 9,249 | cy | \$ 15.00 | \$ 139,000 |
| 203 | 12" Asphalt (Type C) | 5,037 | ton | \$ 72.00 | \$ 363,000 |
| 303 | 16" Base | 3,392 | cy | \$ 55.00 | \$ 187,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 8,197 | sy | \$ 6.00 | \$ 49,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,526 | gal | \$ 6.00 | \$ 9,000 |
| 603 | 10' Concrete Sidewalk | 25,440 | sf | \$ 5.50 | \$ 140,000 |
| 703 | Machine Laid Curb & Gutter | 5,088 | lf | \$ 16.00 | \$ 81,000 |
| 803 | Turn Lanes and Median Openings | 771 | sy | \$ 134.62 | \$ 104,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,072,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 54,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 21,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 322,000 | |
| ✓ Illumination | | 10% | \$ | 107,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 21,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 21,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 21,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 43,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 610,000 | | |
| Paving and Allowance Subtotal: | | | \$ 1,682,000 | | |
| Construction Contingency: | | | 15% | \$ | 252,000 |
| Mobilization | | | 8% | \$ | 135,000 |
| Prep ROW | | | 4% | \$ | 67,000 |
| Construction Cost TOTAL: | | | \$ 2,200,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 352,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 330,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,900,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| Project Information: | | Description: | Project No. |
|----------------------|--------------------------------|--|-------------|
| Name: | Chisholm Trl Rd (3) | This project consists of the construction of a median in the existing center turn lane. | A-18 |
| Limits: | 1980' N of Wolle Ln to FM 3406 | | |
| Impact Fee Class: | 4 Lane - Enhanced (AM) | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 2,552 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 4,789 | cy | \$ 15.00 | \$ 72,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 5,104 | lf | \$ 16.00 | \$ 82,000 |
| 804 | Turn Lanes and Median Openings | 1,547 | sy | \$ 134.62 | \$ 208,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 362,000 |
| 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 | \$ 10,000 |
| | Roadway Drainage | None Anticipated | | 0% | \$ - |
| ✓ | Street Lighting | 1 Assem / 100', \$15/LF cond/cndr | | \$2,800 | \$ 110,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Utilities | Minor Adjustments | | \$1,000 / STA | \$ 5,000 |
| ✓ | ADA Ramps & Requirements | 4 ramps / 600' | | \$2,200 | \$ 37,000 |
| ✓ | Landscaping and Irrigation | Grass, Trees, Restoration, E/S Controls | | \$10 / SY | \$ 121,000 |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 298,000 |
| Paving and Allowance Subtotal: \$ | | | | 660,000 | |
| Construction Contingency: | | | | 15% | \$ 99,000 |
| Mobilization | | | | 5% | \$ 33,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 8,000 |
| 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 | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 900,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-19 |
|----------------------|--------------------------------------|---|-------------|------|
| Name: | Sam Bass Rd (1) | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | | |
| Limits: | 230' W of Tonkawa Trl to 390' W of W | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 1,221 | | | |
| Service Area(s): | A,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 12,029 | cy | \$ 15.00 | \$ 180,000 |
| 205 | 12" Asphalt (Type C) | 6,805 | ton | \$ 72.00 | \$ 490,000 |
| 305 | 16" Base | 4,583 | cy | \$ 55.00 | \$ 252,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 10,853 | sy | \$ 6.00 | \$ 65,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,062 | gal | \$ 6.00 | \$ 12,000 |
| 605 | 10' Concrete Sidewalk | 24,420 | sf | \$ 5.50 | \$ 134,000 |
| 705 | Machine Laid Curb & Gutter | 4,884 | lf | \$ 16.00 | \$ 78,000 |
| 805 | Turn Lanes and Median Openings | 740 | sy | \$ 134.62 | \$ 100,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,311,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 66,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 26,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 393,000 |
| ✓ | Illumination | | | 10% | \$ 131,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 26,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 26,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 26,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 52,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 746,000 |
| Paving and Allowance Subtotal: \$ | | | | | 2,057,000 |
| Construction Contingency: | | | | 15% | \$ 309,000 |
| Mobilization | | | | 8% | \$ 165,000 |
| Prep ROW | | | | 4% | \$ 82,000 |
| 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 | 15% | \$ 405,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 3,500,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-20 |
|----------------------|---|--|-------------|------|
| Name: | Sam Bass Rd (2) | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | | |
| Limits: | 390' W of Wyoming Springs Dr to FM 3406 | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 1,569 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 15,458 | cy | \$ 15.00 | \$ 232,000 |
| 205 | 12" Asphalt (Type C) | 8,745 | ton | \$ 72.00 | \$ 630,000 |
| 305 | 16" Base | 5,889 | cy | \$ 55.00 | \$ 324,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,947 | sy | \$ 6.00 | \$ 84,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,650 | gal | \$ 6.00 | \$ 16,000 |
| 605 | 10' Concrete Sidewalk | 31,380 | sf | \$ 5.50 | \$ 173,000 |
| 705 | Machine Laid Curb & Gutter | 6,276 | lf | \$ 16.00 | \$ 100,000 |
| 805 | Turn Lanes and Median Openings | 951 | sy | \$ 134.62 | \$ 128,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,687,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 84,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 34,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 506,000 |
| ✓ | Illumination | | | 10% | \$ 169,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 34,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 34,000 |
| ✓ | Turf and Erosion Control | | | 2% | \$ 34,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 67,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 962,000 |
| | | | | Paving and Allowance Subtotal: \$ | 2,649,000 |
| 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 | 15% | \$ 510,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 4,500,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-21 |
|--------------------------|-----------------------------|---|-------------|------|
| Name: | Sam Bass Rd (3) | This project consists of the reconstruction of existing pavement to a 4 lane divided arterial. | | |
| Limits: | FM 3406 to Desert Willow Dr | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,853 | | | |
| Service Area(s): | A,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 13,474 | cy | \$ 15.00 | \$ 202,000 |
| 203 | 12" Asphalt (Type C) | 7,338 | ton | \$ 72.00 | \$ 528,000 |
| 303 | 16" Base | 4,941 | cy | \$ 55.00 | \$ 272,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 11,942 | sy | \$ 6.00 | \$ 72,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,224 | gal | \$ 6.00 | \$ 13,000 |
| 603 | 10' Concrete Sidewalk | 37,060 | sf | \$ 5.50 | \$ 204,000 |
| 703 | Machine Laid Curb & Gutter | 7,412 | lf | \$ 16.00 | \$ 119,000 |
| 803 | Turn Lanes and Median Openings | 1,123 | sy | \$ 134.62 | \$ 151,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,561,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 78,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 31,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 468,000 | |
| ✓ Illumination | | 10% | \$ | 156,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 31,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 31,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 31,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 62,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 888,000 | | |
| Paving and Allowance Subtotal: | | | \$ 2,449,000 | | |
| Construction Contingency: | | | 15% | \$ | 367,000 |
| Mobilization | | | 8% | \$ | 196,000 |
| Prep ROW | | | 4% | \$ | 98,000 |
| Construction Cost TOTAL: | | | \$ 3,200,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 3,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 512,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 480,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 4,200,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 7,206 | cy | \$ 15.00 | \$ 108,000 |
| 203 | 12" Asphalt (Type C) | 3,924 | ton | \$ 72.00 | \$ 283,000 |
| 303 | 16" Base | 2,643 | cy | \$ 55.00 | \$ 145,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 6,386 | sy | \$ 6.00 | \$ 38,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 1,189 | gal | \$ 6.00 | \$ 7,000 |
| 603 | 10' Concrete Sidewalk | 19,820 | sf | \$ 5.50 | \$ 109,000 |
| 703 | Machine Laid Curb & Gutter | 3,964 | lf | \$ 16.00 | \$ 63,000 |
| 803 | Turn Lanes and Median Openings | 601 | sy | \$ 134.62 | \$ 81,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 834,000 |
| 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% | \$ 250,000 |
| ✓ | 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 | | | 2% | \$ 17,000 |
| ✓ | Landscaping and Irrigation | | | 4% | \$ 33,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 476,000 |
| | | | | Paving and Allowance Subtotal: \$ | 1,310,000 |
| Construction Contingency: | | | | 15% | \$ 197,000 |
| Mobilization | | | | 8% | \$ 105,000 |
| 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 | 15% | \$ 255,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,200,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,121 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 8,151 | cy | \$ 15.00 | \$ 122,000 |
| 203 | 12" Asphalt (Type C) | 4,439 | ton | \$ 72.00 | \$ 320,000 |
| 303 | 16" Base | 2,989 | cy | \$ 55.00 | \$ 164,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 7,224 | sy | \$ 6.00 | \$ 43,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,345 | gal | \$ 6.00 | \$ 8,000 |
| 603 | 10' Concrete Sidewalk | 22,420 | sf | \$ 5.50 | \$ 123,000 |
| 703 | Machine Laid Curb & Gutter | 4,484 | lf | \$ 16.00 | \$ 72,000 |
| 803 | Turn Lanes and Median Openings | 679 | sy | \$ 134.62 | \$ 91,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 943,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 47,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 19,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 283,000 | |
| ✓ Illumination | | 10% | \$ | 94,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 19,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 38,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 538,000 | |
| Paving and Allowance Subtotal: | | | \$ | 1,481,000 | |
| Construction Contingency: | | | 15% | \$ | 222,000 |
| Mobilization | | | 8% | \$ | 118,000 |
| Prep ROW | | | 4% | \$ | 59,000 |
| Construction Cost TOTAL: | | | \$ | 1,900,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 304,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 285,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,500,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 700' E of Hairy Man Rd | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 703 | | | |
| Service Area(s): | A,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---------------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 5,112 | cy | \$ 15.00 | \$ 77,000 |
| 203 | 12" Asphalt (Type C) | 2,784 | ton | \$ 72.00 | \$ 200,000 |
| 303 | 16" Base | 1,875 | cy | \$ 55.00 | \$ 103,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 4,530 | sy | \$ 6.00 | \$ 27,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 844 | gal | \$ 6.00 | \$ 5,000 |
| 603 | 10' Concrete Sidewalk | 14,060 | sf | \$ 5.50 | \$ 77,000 |
| 703 | Machine Laid Curb & Gutter | 2,812 | lf | \$ 16.00 | \$ 45,000 |
| 803 | Turn Lanes and Median Openings | 426 | sy | \$ 134.62 | \$ 57,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 591,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 30,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 12,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 177,000 | |
| ✓ Illumination | | 10% | \$ | 59,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 12,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 12,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 12,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 24,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 338,000 |
| Paving and Allowance Subtotal: | | | | | \$ 929,000 |
| Construction Contingency: | | | 15% | \$ | 139,000 |
| Mobilization | | | 8% | \$ | 74,000 |
| Prep ROW | | | 4% | \$ | 37,000 |
| Construction Cost TOTAL: | | | | | \$ 1,200,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 192,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 180,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | A-25 |
|----------------------|---------------------------|---|-------------|------|
| Name: | FM 3406 | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | | |
| Limits: | Sam Bass Rd to IH 35 SBFR | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 8,690 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|----------------------------|----------------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 85,613 | cy | \$ 15.00 | \$ 1,284,000 |
| 205 | 12" Asphalt (Type C) | 48,432 | ton | \$ 72.00 | \$ 3,487,000 |
| 305 | 16" Base | 32,614 | cy | \$ 55.00 | \$ 1,794,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 77,244 | sy | \$ 6.00 | \$ 463,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 14,676 | gal | \$ 6.00 | \$ 88,000 |
| 605 | 10' Concrete Sidewalk | 173,800 | sf | \$ 5.50 | \$ 956,000 |
| 705 | Machine Laid Curb & Gutter | 34,760 | lf | \$ 16.00 | \$ 556,000 |
| 805 | Turn Lanes and Median Openings | 5,267 | sy | \$ 134.62 | \$ 709,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 9,337,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | Allowance | Item Cost | |
| ✓ | Traffic Control | Construction Phase Traffic Control | 5% | \$ | 467,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 187,000 |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ | 2,801,000 |
| ✓ | Illumination | | 10% | \$ | 934,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | \$ | 7,100,000 |
| ✓ | Water | Minor Adjustments | 2% | \$ | 187,000 |
| ✓ | Sewer | Minor Adjustments | 2% | \$ | 187,000 |
| ✓ | Turf and Erosion Control | | 2% | \$ | 187,000 |
| ✓ | Landscaping and Irrigation | | 4% | \$ | 373,000 |
| | Miscellaneous: | | 0% | \$ | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 12,423,000 | |
| Paving and Allowance Subtotal: | | | | \$ 21,760,000 | |
| Construction Contingency: | | | | 15% | \$ 3,264,000 |
| Mobilization | | | | 8% | \$ 1,741,000 |
| Prep ROW | | | | 4% | \$ 870,000 |
| Construction Cost TOTAL: | | | | \$ 27,700,000 | |

| Impact Fee Project Cost Summary | | | |
|--|---------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 27,700,000 |
| Engineering/Survey/Testing: | | 16% | \$ 4,432,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 2,770,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 6,980,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

| 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. | | |
| Limits: | Sam Bass Rd to Brushy Creek | | | |
| Impact Fee Class: | 4 Lane - Proposed | | | |
| Ultimate Class: | 4 Lane - Proposed | | | |
| Length (lf): | 2,057 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|----------------------------|---------------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 14,958 | cy | \$ 15.00 | \$ 224,000 |
| 202 | 12" Asphalt (Type C) | 8,146 | ton | \$ 72.00 | \$ 586,000 |
| 302 | 16" Base | 5,485 | cy | \$ 55.00 | \$ 302,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,256 | sy | \$ 6.00 | \$ 80,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,468 | gal | \$ 6.00 | \$ 15,000 |
| 602 | 10' Concrete Sidewalk | 41,140 | sf | \$ 5.50 | \$ 226,000 |
| 702 | Machine Laid Curb & Gutter | 8,228 | lf | \$ 16.00 | \$ 132,000 |
| 802 | Turn Lanes and Median Openings | 1,247 | sy | \$ 134.62 | \$ 168,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,733,000 |
| 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% | \$ 35,000 | |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ 520,000 | |
| ✓ | Illumination | | 10% | \$ 173,000 | |
| ✓ | Special Drainage Structures | Bridge Crossing | | \$ 1,900,000 | |
| ✓ | Water | Minor Adjustments | 2% | \$ 35,000 | |
| ✓ | Sewer | Minor Adjustments | 2% | \$ 35,000 | |
| ✓ | Turf and Erosion Control | | 2% | \$ 35,000 | |
| ✓ | Landscaping and Irrigation | | 4% | \$ 69,000 | |
| Miscellaneous: | | | 0% | \$ - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 2,802,000 | |
| Paving and Allowance Subtotal: | | | | \$ 4,535,000 | |
| Construction Contingency: | | | | 15% | \$ 680,000 |
| Mobilization | | | | 8% | \$ 363,000 |
| Prep ROW | | | | 4% | \$ 181,000 |
| Construction Cost TOTAL: | | | | \$ 5,800,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 5,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 928,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,740,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 8,500,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| Project Information: | | Description: | Project No. A-27 |
|----------------------|------------------------|--|------------------|
| Name: | Chisholm Trl Rd (4) | This project consists of the construction of a median in the existing center turn lane. | |
| Limits: | FM 3406 to Sam Bass Rd | | |
| Impact Fee Class: | 4 Lane - Enhanced (AM) | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 7,000 | | |
| Service Area(s): | A | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 13,136 | cy | \$ 15.00 | \$ 197,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 14,000 | lf | \$ 16.00 | \$ 224,000 |
| 804 | Turn Lanes and Median Openings | 4,242 | sy | \$ 134.62 | \$ 571,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 992,000 |
| 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 | \$ 26,000 |
| | Roadway Drainage | None Anticipated | | 0% | \$ - |
| ✓ | Street Lighting | 1 Assem / 100', \$15/LF cond/cndr | | \$2,800 | \$ 301,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Utilities | Minor Adjustments | | \$1,000 / STA | \$ 14,000 |
| ✓ | ADA Ramps & Requirements | 4 ramps / 600' | | \$2,200 | \$ 103,000 |
| ✓ | Landscaping and Irrigation | Grass, Trees, Restoration, E/S Controls | | \$10 / SY | \$ 331,000 |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 790,000 |
| Paving and Allowance Subtotal: \$ | | | | 1,782,000 | |
| Construction Contingency: | | | | 15% | \$ 267,000 |
| Mobilization | | | | 5% | \$ 89,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 21,000 |
| Construction Cost TOTAL: \$ | | | | 2,200,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 352,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 2,600,000 |

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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 - Existing | | | |
| 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: | | - | \$ 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
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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): | 1,769 | | | |
| Service Area(s): | A | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 12,863 | cy | \$ 15.00 | \$ 193,000 |
| 202 | 12" Asphalt (Type C) | 7,005 | ton | \$ 72.00 | \$ 504,000 |
| 302 | 16" Base | 4,717 | cy | \$ 55.00 | \$ 259,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 11,400 | sy | \$ 6.00 | \$ 68,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,123 | gal | \$ 6.00 | \$ 13,000 |
| 602 | 10' Concrete Sidewalk | 35,380 | sf | \$ 5.50 | \$ 195,000 |
| 702 | Machine Laid Curb & Gutter | 7,076 | lf | \$ 16.00 | \$ 113,000 |
| 802 | Turn Lanes and Median Openings | 1,072 | sy | \$ 134.62 | \$ 144,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,489,000 |
| 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% | \$ | | 447,000 |
| ✓ Illumination | | 10% | \$ | | 149,000 |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | | 900,000 |
| ✓ Water | Minor Adjustments | 2% | \$ | | 30,000 |
| ✓ Sewer | Minor Adjustments | 2% | \$ | | 30,000 |
| ✓ Turf and Erosion Control | | 2% | \$ | | 30,000 |
| ✓ Landscaping and Irrigation | | 4% | \$ | | 60,000 |
| Miscellaneous: | | 0% | \$ | | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 1,676,000 | | |
| Paving and Allowance Subtotal: | | | \$ 3,165,000 | | |
| Construction Contingency: | | | 15% | \$ | 475,000 |
| Mobilization | | | 8% | \$ | 253,000 |
| 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: | New Roadway Alignment | 30% | \$ 1,230,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 6,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 2,516 | cy | \$ 15.00 | \$ 38,000 |
| 203 | 12" Asphalt (Type C) | 1,370 | ton | \$ 72.00 | \$ 99,000 |
| 303 | 16" Base | 923 | cy | \$ 55.00 | \$ 51,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 2,230 | sy | \$ 6.00 | \$ 13,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 415 | gal | \$ 6.00 | \$ 2,000 |
| 603 | 10' Concrete Sidewalk | 6,920 | sf | \$ 5.50 | \$ 38,000 |
| 703 | Machine Laid Curb & Gutter | 1,384 | lf | \$ 16.00 | \$ 22,000 |
| 803 | Turn Lanes and Median Openings | 210 | sy | \$ 134.62 | \$ 28,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 291,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 15,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 6,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 87,000 | |
| ✓ Illumination | | 10% | \$ | 29,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 6,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 6,000 | |
| ✓ Turf and Erosion Control | | 2% | \$ | 6,000 | |
| ✓ Landscaping and Irrigation | | 4% | \$ | 12,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ | 167,000 |
| Paving and Allowance Subtotal: | | | \$ | 458,000 | |
| Construction Contingency: | | | 15% | \$ | 69,000 |
| Mobilization | | | 8% | \$ | 37,000 |
| Prep ROW | | | 4% | \$ | 18,000 |
| 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: | Existing Alignment | 15% | \$ 90,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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): | 4,922 | | |
| 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: | | - | \$ 25,545,000 |
| Engineering/Survey/Testing: | | - | \$ 3,116,086 |
| ROW/Easement Acquisition: | TxDOT Roadway | - | \$ 14,629,808 |
| Overall Project Cost Total: | | | \$ 43,290,894 |
| City Contribution: | | | \$ 12,560,624 |
| Impact Fee Project Cost (29%): | | | \$ 12,560,624 |

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.

City of Round Rock - 2018 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% | \$ 9,031,296 | \$ 4,515,648 |
| B-2 | 4 Lane - Enhanced | Westinghouse Rd (2) | Widening | 3895' E of A.W. Grimes | 6350' W of A.W. Grimes | 50% | \$ 5,500,000 | \$ 2,750,000 |
| B-3 | 4 Lane - Existing | N Mays St (1) | Previously Constructed | 1777' N of Teravista Pkwy | Teravista Pkwy | 100% | \$ 1,889,219 | \$ 1,889,219 |
| B-4 | 6 Lane - Enhanced | University Blvd (1) | Widening | University Oaks Blvd | 335' W of Sunrise Dr | 100% | \$ 8,900,000 | \$ 8,900,000 |
| B-5 | 6 Lane - Enhanced | University Blvd (2) | Widening | 335' W of Sunrise Dr | A.W. Grimes Blvd | 50% | \$ 30,700,000 | \$ 15,350,000 |
| B-6 | 4 Lane - Enhanced | University Blvd (3) | Widening | A.W. Grimes Blvd | 1830' E of A.W. Grimes Blvd | 100% | \$ 4,800,000 | \$ 4,800,000 |
| B-7 | 4 Lane - Enhanced | University Blvd (4) | Widening | 1830' E of A.W. Grimes Blvd | Lunata Way | 50% | \$ 9,700,000 | \$ 4,850,000 |
| B-8 | 4 Lane - Enhanced | University Blvd (5) | Widening | Lunata Way | SH 130 SBFR | 100% | \$ 29,300,000 | \$ 29,300,000 |
| B-9 | 4 Lane - Enhanced | N Mays St (2) | Widening | University Blvd | 2000' S of University Blvd | 100% | \$ 5,800,000 | \$ 5,800,000 |
| B-10 | 4 Lane - Proposed | N Mays St (3) | New | 2000' S of University Blvd | Paloma Dr | 100% | \$ 24,800,000 | \$ 24,800,000 |
| A-15, B-11 | 4 Lane - Proposed | Arterial L (1) | New | Chisholm Trl Rd (Future) | IH 35 NBFR | 50% | \$ 5,700,000 | \$ 2,850,000 |
| B-12 | 4 Lane - Proposed | Arterial L (2) | New | IH 35 NBFR | Cypress Blvd | 100% | \$ 21,200,000 | \$ 21,200,000 |
| B-13 | 4 Lane - Enhanced | N Mays St (4) | Widening | Paloma Dr | 540' N of Steam Way | 100% | \$ 3,100,000 | \$ 3,100,000 |
| B-14 | 4 Lane - Existing | Sunrise Rd (1) | Previously Constructed | University Blvd | Hidden Valley Dr | 100% | \$ 979,190 | \$ 979,190 |
| B-15 | 4 Lane - Enhanced (AM) | Sunrise Rd (2) | Access Management | Hidden Valley Dr | 325' S of Eagles Nest St | 100% | \$ 1,000,000 | \$ 1,000,000 |
| B-16 | 4 Lane - Enhanced (AM) | Sunrise Rd (3) | Access Management | 325' S of Eagles Nest St | Applegate Cir | 50% | \$ 600,000 | \$ 300,000 |
| B-17 | 4 Lane - Enhanced (AM) | Sunrise Rd (4) | Access Management | Applegate Cir | Lake Dr | 100% | \$ 500,000 | \$ 500,000 |
| B-18 | 4 Lane - Enhanced (AM) | Sunrise Rd (5) | Access Management | Lake Dr | 545' S of Lake Dr | 50% | \$ 200,000 | \$ 100,000 |
| B-19 | 4 Lane - Enhanced (AM) | Sunrise Rd (6) | Access Management | 545' S of Lake Dr | Old Settlers Blvd | 100% | \$ 800,000 | \$ 800,000 |
| B-20 | 4 Lane - Enhanced (1/2) | College Park (1) | (1/2) Widening | Satellite View | Avery Nelson Blvd | 100% | \$ 5,400,000 | \$ 5,400,000 |
| B-21 | 3 Lane - Proposed | Avery Nelson | New | Gulf Way | College Park | 100% | \$ 2,800,000 | \$ 2,800,000 |
| B-22 | 4 Lane - Proposed | College Park (2) | New | Avery Nelson Rd | 1355' N of Old Settlers Blvd | 100% | \$ 11,500,000 | \$ 11,500,000 |
| B-23 | 3 Lane - Existing | Seton Pkwy | Previously Constructed | 2400' N of Avery Nelson Blvd | Avery Nelson Blvd | 100% | \$ 2,043,320 | \$ 2,043,320 |
| B-24 | 4 Lane - Existing | Medical Center Pkwy | Previously Constructed | Seton Pkwy | A.W. Grimes Blvd | 100% | \$ 810,679 | \$ 810,679 |
| B-25 | 4 Lane - Enhanced | CR 112 (1) | Widening | A.W. Grimes Blvd | 3580' E of A.W. Grimes Blvd | 100% | \$ 8,000,000 | \$ 8,000,000 |
| B-26 | 4 Lane - Enhanced | CR 112 (2) | Widening | 3580' E of A.W. Grimes Blvd | CR 117 | 50% | \$ 5,000,000 | \$ 2,500,000 |
| B-27 | 4 Lane - Proposed | Kenney Fort Blvd (1) | New | CR 117 | Old Settlers Blvd | 100% | \$ 13,700,000 | \$ 13,700,000 |
| B-28 | 4 Lane - Enhanced (1/2) | Red Bud Ln (1) | (1/2) Widening | Guadalajara St | 160' N of Margarita Loop | 100% | \$ 2,600,000 | \$ 2,600,000 |
| B-29 | 4 Lane - Enhanced (1/2) | Red Bud Ln (2) | (1/2) Widening | 160' N of Margarita Loop | CR 117 | 50% | \$ 3,000,000 | \$ 1,500,000 |
| B-30 | 4 Lane - Enhanced | Red Bud Ln (3) | Widening | CR 117 | Old Settlers Blvd | 100% | \$ 4,100,000 | \$ 4,100,000 |
| B-31 | 6 Lane - Enhanced (1/3) | Old Settlers Blvd (1) | Widening | N Mays St | Sunrise Rd | 100% | \$ 6,800,000 | \$ 6,800,000 |
| B-32 | 6 Lane - Enhanced | Old Settlers Blvd (2) | Widening | Sunrise Rd | A.W. Grimes Blvd | 100% | \$ 18,100,000 | \$ 18,100,000 |
| B-33 | 4 Lane - Proposed | Old Settlers Blvd (3) | New | Red Bud Ln | CR 110 | 100% | \$ 5,800,000 | \$ 5,800,000 |
| B-34 | 4 Lane - Enhanced (AM) | Spur 379 (N Mays St) | Access Management | 540' N of Steam Way | Northwest Dr | 100% | \$ 2,700,000 | \$ 2,700,000 |
| B-35 | 4 Lane - Enhanced (AM) | Sunrise Rd (7) | Access Management | Old Settlers Blvd | Country Aire Dr | 100% | \$ 600,000 | \$ 600,000 |
| B-36 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (1) | Widening | Old Settlers Blvd | 375' S of Chandler Creek Blvd | 100% | \$ 1,000,000 | \$ 1,000,000 |
| 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% | \$ 1,000,000 | \$ 500,000 |
| B-38 | 6 Lane - Enhanced | FM 1460 (A.W. Grimes Blvd) (3) | Widening | 1250' N of Tiger Trl | US 79 | 100% | \$ 3,940,000 | \$ 3,940,000 |
| B-39 | 6 Lane - Proposed (1/2) | Kenney Fort Blvd (2) | (1/2) Widening | Old Settler's Blvd | 2540' S of Old Settler's Blvd | 100% | \$ 2,600,000 | \$ 2,600,000 |
| B-40 | 6 Lane - Proposed | Kenney Fort Blvd (3) | Widening | Old Settler's Blvd | 2540' S of Old Settler's Blvd | 50% | \$ 2,800,000 | \$ 1,400,000 |

City of Round Rock - 2018 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 | 6 Lane - Proposed | Kenney Fort Blvd (4) | New | 2540' S of Old Settlers Blvd | Chandler Creek Blvd | 100% | \$ 15,200,000 | \$ 15,200,000 |
| B-42 | 6 Lane - Enhanced | Kenney Fort Blvd (5) | Widening | Chandler Creek Blvd | Joe DiMaggio Blvd | 100% | \$ 5,800,000 | \$ 5,800,000 |
| B-43 | 4 Lane - Enhanced | Red Bud Ln (4) | Widening | Old Settlers Blvd | 170' N of Joseph St | 100% | \$ 5,200,000 | \$ 5,200,000 |
| B-44 | 4 Lane - Enhanced | Red Bud Ln (5) | Widening | 170' N of Joseph St | 160' S of Covered Wagon Trl | 50% | \$ 2,200,000 | \$ 1,100,000 |
| B-45 | 4 Lane - Enhanced | Red Bud Ln (6) | Widening | 160' S of Covered Wagon Trl | US 79 | 100% | \$ 4,700,000 | \$ 4,700,000 |
| B-46, C-6 | 6 Lane - Enhanced | US 79 (1) | Widening | N Mays St | 200' E of Red Bud Ln | 50% | \$ 13,340,000 | \$ 6,670,000 |
| B-47 | 6 Lane - Enhanced | US 79 (2) | Widening | 200' E of Red Bud Ln | 1690' E of Red Bud Ln | 50% | \$ 900,000 | \$ 450,000 |

TOTAL \$ 316,133,704 \$ 271,298,056

Intersection Improvements - Service Area B

| # | Project | Improvement | | Percent in Service Area | Project Cost | Total Cost in Service Area |
|------------|---|---------------|---------------|-------------------------|---------------|----------------------------|
| | | Improvement 1 | Improvement 2 | | | |
| BI-1 | N Mays St and University Blvd | TURN LANES | | 100% | \$ 784,000 | \$ 784,000 |
| BI-2 | Sunrise Rd and University Blvd | TURN LANES | | 100% | \$ 1,063,000 | \$ 1,063,000 |
| BI-3 | N Mays St and Steam Way | TURN LANES | | 100% | \$ 170,235 | \$ 170,235 |
| BI-4, CI-8 | A.W. Grimes Blvd and Palm Valley Blvd | OTHER | TURN LANES | 50% | \$ 2,041,000 | \$ 1,020,500 |
| - | Update ITS and Traffic Managemenet Infrastructure | | | 33% | \$ 20,900,000 | \$ 6,966,667 |

TOTAL \$ 24,958,235 \$ 10,004,402

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
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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 | - | \$ - |
| Overall Project Cost Total: | | | \$ 45,156,480 |
| City Contribution: | | | \$ 9,031,296 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 9,031,296 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-2 |
|----------------------|--|--|-------------|-----|
| Name: | Westinghouse Rd (2) | This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial. | | |
| Limits: | 3895' E of A.W. Grimes to 6350' W of A.W. Grimes | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 2,456 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 17,859 | cy | \$ 15.00 | \$ 268,000 |
| 203 | 12" Asphalt (Type C) | 9,726 | ton | \$ 72.00 | \$ 700,000 |
| 303 | 16" Base | 6,549 | cy | \$ 55.00 | \$ 360,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 15,828 | sy | \$ 6.00 | \$ 95,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,947 | gal | \$ 6.00 | \$ 18,000 |
| 603 | 10' Concrete Sidewalk | 49,120 | sf | \$ 5.50 | \$ 270,000 |
| 703 | Machine Laid Curb & Gutter | 9,824 | lf | \$ 16.00 | \$ 157,000 |
| 803 | Turn Lanes and Median Openings | 1,488 | sy | \$ 134.62 | \$ 200,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 2,068,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 103,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 41,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 620,000 |
| ✓ | 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: \$ | 1,177,000 |
| Paving and Allowance Subtotal: \$ | | | | | 3,245,000 |
| Construction Contingency: | | | | 15% | \$ 487,000 |
| 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 | 15% | \$ 630,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,500,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| Project Information: | | Description: | Project No. | B-3 |
|----------------------|---|--------------|-------------|---|
| Name: | N Mays St (1) | | | This project consisted of the construction of a 4 lane divided arterial. |
| Limits: | 1777' N of Teravista Pkwy to Teravista Pkwy | | | |
| Impact Fee Class: | 4 Lane - Existing | | | |
| Ultimate Class: | 4 Lane - Existing | | | |
| Length (lf): | 1,777 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|---------------------|
| Construction Cost TOTAL: | \$ 1,749,428 |

| Impact Fee Project Cost Summary | | | |
|--|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,749,428 |
| Engineering/Survey/Testing: | | - | \$ 139,791 |
| ROW/Easement Acquisition: | No ROW Costs Included | - | \$ - |
| Overall Project Cost Total: | | | \$ 1,889,219 |
| City Contribution: | | | \$ 1,889,219 |
| Impact Fee Project Cost (100%): | | | \$ 1,889,219 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-4 |
|--------------------------|--|---|-------------|-----|
| Name: | University Blvd (1) | This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial. | | |
| Limits: | University Oaks Blvd to 335' W of Sunrise Dr | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Existing | | | |
| Length (lf): | 2,602 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 25,635 | cy | \$ 15.00 | \$ 385,000 |
| 205 | 12" Asphalt (Type C) | 14,502 | ton | \$ 72.00 | \$ 1,044,000 |
| 305 | 16" Base | 9,766 | cy | \$ 55.00 | \$ 537,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 23,129 | sy | \$ 6.00 | \$ 139,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,394 | gal | \$ 6.00 | \$ 26,000 |
| 605 | 10' Concrete Sidewalk | 52,040 | sf | \$ 5.50 | \$ 286,000 |
| 705 | Machine Laid Curb & Gutter | 10,408 | lf | \$ 16.00 | \$ 167,000 |
| 805 | Turn Lanes and Median Openings | 1,577 | sy | \$ 134.62 | \$ 212,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,796,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 140,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 56,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 839,000 | |
| ✓ Illumination | | 10% | \$ | 280,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 900,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 56,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 56,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 112,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 56,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 2,495,000 | | |
| Paving and Allowance Subtotal: | | | \$ 5,291,000 | | |
| Construction Contingency: | | | 15% | \$ | 794,000 |
| Mobilization | | | 8% | \$ | 423,000 |
| 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: | Existing Alignment | 15% | \$ 1,020,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 8,900,000 |

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

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 B | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 10,703 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|---------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 105,444 | cy | \$ 15.00 | \$ 1,582,000 |
| 205 | 12" Asphalt (Type C) | 59,651 | ton | \$ 72.00 | \$ 4,295,000 |
| 305 | 16" Base | 40,169 | cy | \$ 55.00 | \$ 2,209,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 95,138 | sy | \$ 6.00 | \$ 571,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 18,076 | gal | \$ 6.00 | \$ 108,000 |
| 605 | 10' Concrete Sidewalk | 214,060 | sf | \$ 5.50 | \$ 1,177,000 |
| 705 | Machine Laid Curb & Gutter | 42,812 | lf | \$ 16.00 | \$ 685,000 |
| 805 | Turn Lanes and Median Openings | 6,487 | sy | \$ 134.62 | \$ 873,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 11,500,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 575,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 230,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 3,450,000 | |
| ✓ Illumination | | 10% | \$ | 1,150,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 300,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 230,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 230,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 460,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 230,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 6,855,000 | |
| Paving and Allowance Subtotal: | | | \$ | 18,355,000 | |
| Construction Contingency: | | | 15% | \$ | 2,753,000 |
| Mobilization | | | 8% | \$ | 1,468,000 |
| Prep ROW | | | 4% | \$ | 734,000 |
| Construction Cost TOTAL: | | | \$ | 23,400,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 23,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 3,744,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 3,510,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 30,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | 6 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 | 13,976 | cy | \$ 15.00 | \$ 210,000 |
| 203 | 12" Asphalt (Type C) | 7,611 | ton | \$ 72.00 | \$ 548,000 |
| 303 | 16" Base | 5,125 | cy | \$ 55.00 | \$ 282,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 12,386 | sy | \$ 6.00 | \$ 74,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,306 | gal | \$ 6.00 | \$ 14,000 |
| 603 | 10' Concrete Sidewalk | 38,440 | sf | \$ 5.50 | \$ 211,000 |
| 703 | Machine Laid Curb & Gutter | 7,688 | lf | \$ 16.00 | \$ 123,000 |
| 803 | Turn Lanes and Median Openings | 1,165 | sy | \$ 134.62 | \$ 157,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,619,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 81,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 32,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 486,000 | |
| ✓ Illumination | | 10% | \$ | 162,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 300,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 32,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 32,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 65,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 32,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,222,000 | |
| Paving and Allowance Subtotal: | | | \$ | 2,841,000 | |
| Construction Contingency: | | | 15% | \$ | 426,000 |
| Mobilization | | | 8% | \$ | 227,000 |
| Prep ROW | | | 4% | \$ | 114,000 |
| 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 | 15% | \$ 555,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 4,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | 6 Lane - Enhanced | | |
| Length (lf): | 4,093 | | |
| Service Area(s): | B,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 29,763 | cy | \$ 15.00 | \$ 446,000 |
| 203 | 12" Asphalt (Type C) | 16,208 | ton | \$ 72.00 | \$ 1,167,000 |
| 303 | 16" Base | 10,915 | cy | \$ 55.00 | \$ 600,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 26,377 | sy | \$ 6.00 | \$ 158,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,912 | gal | \$ 6.00 | \$ 29,000 |
| 603 | 10' Concrete Sidewalk | 81,860 | sf | \$ 5.50 | \$ 450,000 |
| 703 | Machine Laid Curb & Gutter | 16,372 | lf | \$ 16.00 | \$ 262,000 |
| 803 | Turn Lanes and Median Openings | 2,481 | sy | \$ 134.62 | \$ 334,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,446,000 |
| 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% | \$ | 1,034,000 | |
| ✓ Illumination | | 10% | \$ | 345,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 400,000 | |
| ✓ 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: | \$ 2,365,000 | | |
| Paving and Allowance Subtotal: | | | \$ 5,811,000 | | |
| Construction Contingency: | | | 15% | \$ | 872,000 |
| Mobilization | | | 8% | \$ | 465,000 |
| Prep ROW | | | 4% | \$ | 232,000 |
| Construction Cost TOTAL: | | | \$ 7,400,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 7,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,184,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 1,110,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 9,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 SH 130 SBFR | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 6 Lane - Enhanced | | |
| Length (lf): | 13,032 | | |
| Service Area(s): | B | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|----------------------|------------|----------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 94,764 | cy | \$ 15.00 | \$ 1,421,000 |
| 203 | 12" Asphalt (Type C) | 51,607 | ton | \$ 72.00 | \$ 3,716,000 |
| 303 | 16" Base | 34,752 | cy | \$ 55.00 | \$ 1,911,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 83,984 | sy | \$ 6.00 | \$ 504,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 15,638 | gal | \$ 6.00 | \$ 94,000 |
| 603 | 10' Concrete Sidewalk | 260,640 | sf | \$ 5.50 | \$ 1,434,000 |
| 703 | Machine Laid Curb & Gutter | 52,128 | lf | \$ 16.00 | \$ 834,000 |
| 803 | Turn Lanes and Median Openings | 7,898 | sy | \$ 134.62 | \$ 1,063,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 10,977,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 549,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 220,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 3,293,000 | |
| ✓ Illumination | | 10% | \$ | 1,098,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 400,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 220,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 220,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 439,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 220,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 6,659,000 | | |
| Paving and Allowance Subtotal: | | | \$ 17,636,000 | | |
| Construction Contingency: | | | 15% | \$ | 2,645,000 |
| Mobilization | | | 8% | \$ | 1,411,000 |
| Prep ROW | | | 4% | \$ | 705,000 |
| Construction Cost TOTAL: | | | \$ 22,400,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 22,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 3,584,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 3,360,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 29,300,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | University Blvd to 2000' S of University Blvd | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 2,002 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|-----------|-----------|------------|----------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 14,558 | cy | \$ 15.00 | \$ 218,000 |
| 203 | 12" Asphalt (Type C) | 7,928 | ton | \$ 72.00 | \$ 571,000 |
| 303 | 16" Base | 5,339 | cy | \$ 55.00 | \$ 294,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 12,902 | sy | \$ 6.00 | \$ 77,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,402 | gal | \$ 6.00 | \$ 14,000 |
| 603 | 10' Concrete Sidewalk | 40,040 | sf | \$ 5.50 | \$ 220,000 |
| 703 | Machine Laid Curb & Gutter | 8,008 | lf | \$ 16.00 | \$ 128,000 |
| 803 | Turn Lanes and Median Openings | 1,213 | sy | \$ 134.62 | \$ 163,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,685,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 84,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 34,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 506,000 | |
| ✓ Illumination | | 10% | \$ | 169,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 800,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 34,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 34,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 67,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 34,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 1,762,000 |
| Paving and Allowance Subtotal: | | | | | \$ 3,447,000 |
| 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: | Existing Alignment | 15% | \$ 660,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-10 |
|----------------------|---|--|-------------|------|
| Name: | N Mays St (3) | This project consists of the construction of a new 4 lane divided arterial. | | |
| Limits: | 2000' S of University Blvd to Paloma Dr | | | |
| Impact Fee Class: | 4 Lane - Proposed | | | |
| Ultimate Class: | 4 Lane - Proposed | | | |
| Length (lf): | 4,634 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|-----------|-----------|------------|------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 33,697 | cy | \$ 15.00 | \$ 505,000 |
| 202 | 12" Asphalt (Type C) | 18,351 | ton | \$ 72.00 | \$ 1,321,000 |
| 302 | 16" Base | 12,357 | cy | \$ 55.00 | \$ 680,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 29,864 | sy | \$ 6.00 | \$ 179,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 5,561 | gal | \$ 6.00 | \$ 33,000 |
| 602 | 10' Concrete Sidewalk | 92,680 | sf | \$ 5.50 | \$ 510,000 |
| 702 | Machine Laid Curb & Gutter | 18,536 | lf | \$ 16.00 | \$ 297,000 |
| 802 | Turn Lanes and Median Openings | 2,808 | sy | \$ 134.62 | \$ 378,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,903,000 |
| 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% | \$ | 78,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 1,171,000 | |
| ✓ Illumination | | 10% | \$ | 390,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 7,400,000 | |
| ✓ 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 | |
| | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | |
| Allowance Subtotal: | | | | | \$ 9,429,000 |
| Paving and Allowance Subtotal: | | | | | \$ 13,332,000 |
| Construction Contingency: | | | | | 15% \$ 2,000,000 |
| Mobilization | | | | | 8% \$ 1,067,000 |
| Prep ROW | | | | | 4% \$ 533,000 |
| Construction Cost TOTAL: | | | | | \$ 17,000,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|-----------------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 17,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,720,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 5,100,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 24,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 2,909 | cy | \$ 15.00 | \$ 44,000 |
| 202 | 12" Asphalt (Type C) | 1,584 | ton | \$ 72.00 | \$ 114,000 |
| 302 | 16" Base | 1,067 | cy | \$ 55.00 | \$ 59,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 2,578 | sy | \$ 6.00 | \$ 15,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 480 | gal | \$ 6.00 | \$ 3,000 |
| 602 | 10' Concrete Sidewalk | 8,000 | sf | \$ 5.50 | \$ 44,000 |
| 702 | Machine Laid Curb & Gutter | 1,600 | lf | \$ 16.00 | \$ 26,000 |
| 802 | Turn Lanes and Median Openings | 242 | sy | \$ 134.62 | \$ 33,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 338,000 |
| 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% | \$ 7,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 101,000 |
| ✓ | Illumination | | | 10% | \$ 34,000 |
| | Special Drainage Structures | None Anticipated | | | |
| ✓ | Water | Minor Adjustments | | 2% | \$ 7,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 7,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 14,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 7,000 |
| ✓ | Overpass? | | | 0% | \$ 2,500,000 |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 2,677,000 |
| | | | | Paving and Allowance Subtotal: \$ | 3,015,000 |
| Construction Contingency: | | | | 15% | \$ 452,000 |
| Mobilization | | | | 8% | \$ 241,000 |
| Prep ROW | | | | 4% | \$ 121,000 |
| Construction Cost TOTAL: \$ | | | | | 3,900,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 3,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 624,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,170,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-12 |
|----------------------|----------------------------|--|-------------|------|
| Name: | Arterial L (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 | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 26,498 | cy | \$ 15.00 | \$ 397,000 |
| 202 | 12" Asphalt (Type C) | 14,430 | ton | \$ 72.00 | \$ 1,039,000 |
| 302 | 16" Base | 9,717 | cy | \$ 55.00 | \$ 534,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 23,484 | sy | \$ 6.00 | \$ 141,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,373 | gal | \$ 6.00 | \$ 26,000 |
| 602 | 10' Concrete Sidewalk | 72,880 | sf | \$ 5.50 | \$ 401,000 |
| 702 | Machine Laid Curb & Gutter | 14,576 | lf | \$ 16.00 | \$ 233,000 |
| 802 | Turn Lanes and Median Openings | 2,208 | sy | \$ 134.62 | \$ 297,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,068,000 |
| 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% | \$ | | 61,000 |
| √ Roadway Drainage | Standard Internal System | 30% | \$ | | 920,000 |
| √ Illumination | | 10% | \$ | | 307,000 |
| √ Special Drainage Structures | Bridge Crossing | | \$ | | 6,700,000 |
| √ Water | Minor Adjustments | 2% | \$ | | 61,000 |
| √ Sewer | Minor Adjustments | 2% | \$ | | 61,000 |
| √ Turf and Erosion Control | | 4% | \$ | | 123,000 |
| √ Landscaping and Irrigation | | 2% | \$ | | 61,000 |
| | | 0% | \$ | | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | | 8,294,000 |
| Paving and Allowance Subtotal: | | | \$ | | 11,362,000 |
| Construction Contingency: | | | 15% | \$ | 1,704,000 |
| Mobilization | | | 8% | \$ | 909,000 |
| Prep ROW | | | 4% | \$ | 454,000 |
| Construction Cost TOTAL: | | | \$ | | 14,500,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|-----------------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 14,500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,320,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 4,350,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 21,200,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 10,195 | cy | \$ 15.00 | \$ 153,000 |
| 203 | 12" Asphalt (Type C) | 5,552 | ton | \$ 72.00 | \$ 400,000 |
| 303 | 16" Base | 3,739 | cy | \$ 55.00 | \$ 206,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 9,035 | sy | \$ 6.00 | \$ 54,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,682 | gal | \$ 6.00 | \$ 10,000 |
| 603 | 10' Concrete Sidewalk | 28,040 | sf | \$ 5.50 | \$ 154,000 |
| 703 | Machine Laid Curb & Gutter | 5,608 | lf | \$ 16.00 | \$ 90,000 |
| 803 | Turn Lanes and Median Openings | 850 | sy | \$ 134.62 | \$ 114,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,181,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 59,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 24,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 354,000 | |
| ✓ Illumination | | 10% | \$ | 118,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 24,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 24,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 47,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 24,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 674,000 | | |
| Paving and Allowance Subtotal: | | | \$ 1,855,000 | | |
| Construction Contingency: | | | 15% | \$ | 278,000 |
| Mobilization | | | 8% | \$ | 148,000 |
| Prep ROW | | | 4% | \$ | 74,000 |
| Construction Cost TOTAL: | | | \$ 2,400,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 384,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 360,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 3,100,000 |

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| Project Information: | | Description: | Project No. | B-14 |
|----------------------|-------------------------------------|--|-------------|------|
| Name: | Sunrise Rd (1) | This project consists of the reconstruction of existing pavement to include a median. | | |
| Limits: | University Blvd to Hidden Valley Dr | | | |
| Impact Fee Class: | 4 Lane - Existing | | | |
| Ultimate Class: | 4 Lane - Existing | | | |
| Length (lf): | 1,231 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|---------------------------------|
| | Construction Cost TOTAL: |

| Impact Fee Project Cost Summary | | | |
|--|--------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 804,190 |
| Engineering/Survey/Testing: | | - | \$ 175,000 |
| ROW/Easement Acquisition: | Existing Alignment | - | \$ - |
| Overall Project Cost Total: | | | \$ 979,190 |
| City Contribution: | | | \$ 979,190 |
| Impact Fee Project Cost (100%): | | | \$ 979,190 |

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.

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| 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 | | |
| 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 | \$ 15.00 | \$ 80,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 5,716 | lf | \$ 16.00 | \$ 91,000 |
| 804 | Turn Lanes and Median Openings | 1,732 | sy | \$ 134.62 | \$ 233,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 404,000 |
| 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: \$ | | | | 736,000 | |
| Construction Contingency: | | | | 15% | \$ 110,000 |
| Mobilization | | | | 5% | \$ 37,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 9,000 |
| 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: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 1,000,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | | |
| Length (lf): | 1,576 | | |
| Service Area(s): | B,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 2,957 | cy | \$ 15.00 | \$ 44,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 3,152 | lf | \$ 16.00 | \$ 50,000 |
| 804 | Turn Lanes and Median Openings | 955 | sy | \$ 134.62 | \$ 129,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 223,000 |
| 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: \$ | | | | 412,000 | |
| Construction Contingency: | | | | 15% | \$ 62,000 |
| Mobilization | | | | 5% | \$ 21,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 5,000 |
| Construction Cost TOTAL: \$ | | | | 500,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 80,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 600,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|---------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 2,017 | cy | \$ 15.00 | \$ 30,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 2,150 | lf | \$ 16.00 | \$ 34,000 |
| 804 | Turn Lanes and Median Openings | 652 | sy | \$ 134.62 | \$ 88,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 152,000 |
| 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: | | | | \$ | 286,000 |
| Construction Contingency: | | | | 15% | \$ 43,000 |
| Mobilization | | | | 5% | \$ 14,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 3,000 |
| Construction Cost TOTAL: | | | | \$ | 400,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 64,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 500,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|-----------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 1,019 | cy | \$ 15.00 | \$ 15,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 1,086 | lf | \$ 16.00 | \$ 17,000 |
| 804 | Turn Lanes and Median Openings | 329 | sy | \$ 134.62 | \$ 44,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 76,000 |
| 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: \$ | | | | 151,000 | |
| Construction Contingency: | | | | 15% | \$ 23,000 |
| Mobilization | | | | 5% | \$ 8,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 2,000 |
| 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 | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 200,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| 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 | | |
| 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 | \$ 15.00 | \$ 59,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 4,196 | lf | \$ 16.00 | \$ 67,000 |
| 804 | Turn Lanes and Median Openings | 1,272 | sy | \$ 134.62 | \$ 171,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 297,000 |
| 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: \$ | | | | 544,000 | |
| Construction Contingency: | | | | 15% | \$ 82,000 |
| Mobilization | | | | 5% | \$ 27,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 6,000 |
| 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 | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-20 |
|--------------------------|-------------------------------------|--|-------------|------|
| Name: | College Park (1) | This project consists of widening existing pavement with half of a 4 lane divided arterial. | | |
| Limits: | Satellite View to Avery Nelson Blvd | | | |
| Impact Fee Class: | 4 Lane - Enhanced (1/2) | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 3,948 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 14,354 | cy | \$ 15.00 | \$ 215,000 |
| 201 | 12" Asphalt (Type C) | 7,817 | ton | \$ 72.00 | \$ 563,000 |
| 301 | 16" Base | 5,264 | cy | \$ 55.00 | \$ 290,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 12,721 | sy | \$ 6.00 | \$ 76,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,369 | gal | \$ 6.00 | \$ 14,000 |
| 601 | 10' Concrete Sidewalk | 78,960 | sf | \$ 5.50 | \$ 434,000 |
| 701 | Machine Laid Curb & Gutter | 7,896 | lf | \$ 16.00 | \$ 126,000 |
| 801 | Turn Lanes and Median Openings | 2,393 | sy | \$ 134.62 | \$ 322,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,040,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 102,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 41,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 612,000 | |
| ✓ Illumination | | 10% | \$ | 204,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 41,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 41,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 82,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 41,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 1,164,000 |
| Paving and Allowance Subtotal: | | | | | \$ 3,204,000 |
| Construction Contingency: | | | 15% | \$ | 481,000 |
| Mobilization | | | 8% | \$ | 256,000 |
| Prep ROW | | | 4% | \$ | 128,000 |
| 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 | 15% | \$ 615,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,400,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-21 |
|----------------------|--------------------------|---|-------------|------|
| Name: | Avery Nelson | This project consists of the construction of a new 3 lane undivided collector. | | |
| Limits: | Gulf Way to College Park | | | |
| Impact Fee Class: | 3 Lane - Proposed | | | |
| Ultimate Class: | 3 Lane - Proposed | | | |
| Length (lf): | 2,145 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 109 | Unclassified Street Excavation | 6,373 | cy | \$ 15.00 | \$ 96,000 |
| 209 | 5" Asphalt (Type C) | 3,474 | ton | \$ 72.00 | \$ 250,000 |
| 309 | 10" Base | 3,509 | cy | \$ 55.00 | \$ 193,000 |
| 409 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,108 | sy | \$ 6.00 | \$ 79,000 |
| 509 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,526 | gal | \$ 6.00 | \$ 15,000 |
| 609 | 10' Concrete Sidewalk | 42,900 | sf | \$ 5.50 | \$ 236,000 |
| 709 | Machine Laid Curb & Gutter | 4,290 | lf | \$ 16.00 | \$ 69,000 |
| 809 | Turn Lanes and Median Openings | 0 | sy | \$ 134.62 | \$ - |
| Paving Construction Cost Subtotal: \$ | | | | | 938,000 |
| 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% | \$ 19,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 281,000 |
| ✓ | Illumination | | | 10% | \$ 94,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 19,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 19,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 38,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 19,000 |
| | | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 489,000 |
| | | | | Paving and Allowance Subtotal: \$ | 1,427,000 |
| Construction Contingency: | | | | 15% | \$ 214,000 |
| Mobilization | | | | 8% | \$ 114,000 |
| Prep ROW | | | | 4% | \$ 57,000 |
| Construction Cost TOTAL: \$ | | | | | 1,900,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 304,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 570,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 34,904 | cy | \$ 15.00 | \$ 524,000 |
| 202 | 12" Asphalt (Type C) | 19,008 | ton | \$ 72.00 | \$ 1,369,000 |
| 302 | 16" Base | 12,800 | cy | \$ 55.00 | \$ 704,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 30,933 | sy | \$ 6.00 | \$ 186,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 5,760 | gal | \$ 6.00 | \$ 35,000 |
| 602 | 10' Concrete Sidewalk | 96,000 | sf | \$ 5.50 | \$ 528,000 |
| 702 | Machine Laid Curb & Gutter | 19,200 | lf | \$ 16.00 | \$ 307,000 |
| 802 | Turn Lanes and Median Openings | 2,909 | sy | \$ 134.62 | \$ 392,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 4,045,000 |
| 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% | \$ | | 1,214,000 |
| ✓ 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: \$ 2,105,000 |
| Paving and Allowance Subtotal: | | | | | \$ 6,150,000 |
| Construction Contingency: | | | | 15% | \$ 923,000 |
| Mobilization | | | | 8% | \$ 492,000 |
| 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 | 30% | \$ 2,370,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 11,500,000 |

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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 - Proposed | | | |
| Length (lf): | 2,397 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|---------------------|
| Construction Cost TOTAL: | \$ 2,113,056 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,113,056 |
| Engineering/Survey/Testing: | | - | \$ 269,931 |
| ROW/Easement Acquisition: | Existing Alignment | - | \$ - |
| Overall Project Cost Total: | | | \$ 2,382,987 |
| City Contribution: | | | \$ 2,043,320 |
| Impact Fee Project Cost (86%): | | | \$ 2,043,320 |

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.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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: | Seton Pkwy to A.W. Grimes Blvd | | | |
| Impact Fee Class: | 4 Lane - Existing | | | |
| Ultimate Class: | 4 Lane - Existing | | | |
| Length (lf): | 951 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|-------------------|
| Construction Cost TOTAL: | \$ 838,347 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 838,347 |
| Engineering/Survey/Testing: | | - | \$ 107,094 |
| ROW/Easement Acquisition: | Existing Alignment | - | \$ - |
| Overall Project Cost Total: | | | \$ 945,441 |
| City Contribution: | | | \$ 810,679 |
| Impact Fee Project Cost (86%): | | | \$ 810,679 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-25 |
|----------------------|---|---|-------------|------|
| Name: | CR 112 (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: | 6 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 | \$ 15.00 | \$ 390,000 |
| 203 | 12" Asphalt (Type C) | 14,177 | ton | \$ 72.00 | \$ 1,021,000 |
| 303 | 16" Base | 9,547 | cy | \$ 55.00 | \$ 525,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 23,071 | sy | \$ 6.00 | \$ 138,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,296 | gal | \$ 6.00 | \$ 26,000 |
| 603 | 10' Concrete Sidewalk | 71,600 | sf | \$ 5.50 | \$ 394,000 |
| 703 | Machine Laid Curb & Gutter | 14,320 | lf | \$ 16.00 | \$ 229,000 |
| 803 | Turn Lanes and Median Openings | 2,170 | sy | \$ 134.62 | \$ 292,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,015,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 151,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 60,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 905,000 | |
| ✓ Illumination | | 10% | \$ | 302,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 60,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 60,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 121,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 60,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,719,000 | |
| Paving and Allowance Subtotal: | | | \$ | 4,734,000 | |
| Construction Contingency: | | | 15% | \$ | 710,000 |
| Mobilization | | | 8% | \$ | 379,000 |
| Prep ROW | | | 4% | \$ | 189,000 |
| 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 | 15% | \$ 915,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 8,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-26 |
|----------------------|---------------------------------------|--|-------------|------|
| Name: | CR 112 (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 CR 117 | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 2,244 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 16,317 | cy | \$ 15.00 | \$ 245,000 |
| 203 | 12" Asphalt (Type C) | 8,886 | ton | \$ 72.00 | \$ 640,000 |
| 303 | 16" Base | 5,984 | cy | \$ 55.00 | \$ 329,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 14,461 | sy | \$ 6.00 | \$ 87,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,693 | gal | \$ 6.00 | \$ 16,000 |
| 603 | 10' Concrete Sidewalk | 44,880 | sf | \$ 5.50 | \$ 247,000 |
| 703 | Machine Laid Curb & Gutter | 8,976 | lf | \$ 16.00 | \$ 144,000 |
| 803 | Turn Lanes and Median Openings | 1,360 | sy | \$ 134.62 | \$ 183,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,891,000 |
| 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% | \$ 567,000 |
| ✓ | 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 | | | 4% | \$ 76,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 38,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 1,079,000 |
| | | | | Paving and Allowance Subtotal: \$ | 2,970,000 |
| 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 | 15% | \$ 570,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,000,000 |

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

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-27 |
|----------------------|-----------------------------|--|-------------|------|
| Name: | Kenney Fort Blvd (1) | This project consists of the construction of a new 4 lane divided arterial. | | |
| Limits: | CR 117 to Old Settlers Blvd | | | |
| Impact Fee Class: | 4 Lane - Proposed | | | |
| Ultimate Class: | 4 Lane - Proposed | | | |
| Length (lf): | 5,598 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|--------------------------------|------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 40,706 | cy | \$ 15.00 | \$ 611,000 |
| 202 | 12" Asphalt (Type C) | 22,168 | ton | \$ 72.00 | \$ 1,596,000 |
| 302 | 16" Base | 14,928 | cy | \$ 55.00 | \$ 821,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 36,076 | sy | \$ 6.00 | \$ 216,000 |
| 502 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 6,718 | gal | \$ 6.00 | \$ 40,000 |
| 602 | 10' Concrete Sidewalk | 111,960 | sf | \$ 5.50 | \$ 616,000 |
| 702 | Machine Laid Curb & Gutter | 22,392 | lf | \$ 16.00 | \$ 358,000 |
| 802 | Turn Lanes and Median Openings | 3,393 | sy | \$ 134.62 | \$ 457,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 4,715,000 |
| 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% | \$ 94,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 1,415,000 |
| ✓ | Illumination | | | 10% | \$ 472,000 |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | | \$ 200,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 94,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 94,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 189,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 94,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 2,652,000 |
| | | | | Paving and Allowance Subtotal: | \$ 7,367,000 |
| | | | | Construction Contingency: | 15% \$ 1,105,000 |
| | | | | Mobilization | 8% \$ 589,000 |
| | | | | Prep ROW | 4% \$ 295,000 |
| | | | | Construction Cost TOTAL: | \$ 9,400,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 9,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,504,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 2,820,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 13,700,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-28 |
|----------------------|--|--|-------------|------|
| 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 - Enhanced (1/2) | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 1,867 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 6,788 | cy | \$ 15.00 | \$ 102,000 |
| 201 | 12" Asphalt (Type C) | 3,697 | ton | \$ 72.00 | \$ 266,000 |
| 301 | 16" Base | 2,489 | cy | \$ 55.00 | \$ 137,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 6,016 | sy | \$ 6.00 | \$ 36,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,120 | gal | \$ 6.00 | \$ 7,000 |
| 601 | 10' Concrete Sidewalk | 37,340 | sf | \$ 5.50 | \$ 205,000 |
| 701 | Machine Laid Curb & Gutter | 3,734 | lf | \$ 16.00 | \$ 60,000 |
| 801 | Turn Lanes and Median Openings | 1,132 | sy | \$ 134.62 | \$ 152,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 965,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 48,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 19,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 290,000 | |
| ✓ Illumination | | 10% | \$ | 97,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 39,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 19,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 550,000 | |
| Paving and Allowance Subtotal: | | | \$ | 1,515,000 | |
| Construction Contingency: | | | 15% | \$ | 227,000 |
| Mobilization | | | 8% | \$ | 121,000 |
| Prep ROW | | | 4% | \$ | 61,000 |
| Construction Cost TOTAL: | | | \$ | 2,000,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 320,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 300,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-29 |
|--------------------------|------------------------------------|--|-------------|------|
| 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 | | | |
| Length (lf): | 1,845 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|-------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 101 | Unclassified Street Excavation | 6,708 | cy | \$ 15.00 | \$ 101,000 |
| 201 | 12" Asphalt (Type C) | 3,653 | ton | \$ 72.00 | \$ 263,000 |
| 301 | 16" Base | 2,460 | cy | \$ 55.00 | \$ 135,000 |
| 401 | 10" Lime Stabilization (with Lime @ 45#/sy) | 5,945 | sy | \$ 6.00 | \$ 36,000 |
| 501 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,107 | gal | \$ 6.00 | \$ 7,000 |
| 601 | 10' Concrete Sidewalk | 36,900 | sf | \$ 5.50 | \$ 203,000 |
| 701 | Machine Laid Curb & Gutter | 3,690 | lf | \$ 16.00 | \$ 59,000 |
| 801 | Turn Lanes and Median Openings | 1,118 | sy | \$ 134.62 | \$ 151,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 955,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 48,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 19,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 287,000 | |
| ✓ Illumination | | 10% | \$ | 96,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 300,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 19,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 38,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 19,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 845,000 | | |
| Paving and Allowance Subtotal: | | | \$ 1,800,000 | | |
| Construction Contingency: | | | 15% | \$ | 270,000 |
| Mobilization | | | 8% | \$ | 144,000 |
| Prep ROW | | | 4% | \$ | 72,000 |
| Construction Cost TOTAL: | | | \$ 2,300,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,300,000 |
| Engineering/Survey/Testing: | | 16% | \$ 368,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 345,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 3,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. B-30 |
|----------------------|-----------------------------|---|------------------|
| Name: | Red Bud Ln (3) | This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial. | |
| Limits: | CR 117 to Old Settlers Blvd | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 1,788 | | |
| Service Area(s): | B | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 13,002 | cy | \$ 15.00 | \$ 195,000 |
| 203 | 12" Asphalt (Type C) | 7,080 | ton | \$ 72.00 | \$ 510,000 |
| 303 | 16" Base | 4,768 | cy | \$ 55.00 | \$ 262,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 11,523 | sy | \$ 6.00 | \$ 69,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,146 | gal | \$ 6.00 | \$ 13,000 |
| 603 | 10' Concrete Sidewalk | 35,760 | sf | \$ 5.50 | \$ 197,000 |
| 703 | Machine Laid Curb & Gutter | 7,152 | lf | \$ 16.00 | \$ 114,000 |
| 803 | Turn Lanes and Median Openings | 1,084 | sy | \$ 134.62 | \$ 146,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,506,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 75,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 30,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 452,000 | |
| ✓ Illumination | | 10% | \$ | 151,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 30,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 30,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 60,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 30,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 858,000 | |
| Paving and Allowance Subtotal: | | | \$ | 2,364,000 | |
| Construction Contingency: | | | 15% | \$ | 355,000 |
| Mobilization | | | 8% | \$ | 189,000 |
| Prep ROW | | | 4% | \$ | 95,000 |
| 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: | Existing Alignment | 15% | \$ 465,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 4,100,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | | | |
| Length (lf): | 7,045 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|---------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 106 | Unclassified Street Excavation | 26,440 | cy | \$ 15.00 | \$ 397,000 |
| 206 | 12" Asphalt (Type C) | 6,027 | ton | \$ 72.00 | \$ 434,000 |
| 306 | 16" Base | 9,741 | cy | \$ 55.00 | \$ 536,000 |
| 406 | 10" Lime Stabilization (with Lime @ 45#/sy) | 25,049 | sy | \$ 6.00 | \$ 150,000 |
| 506 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 4,384 | gal | \$ 6.00 | \$ 26,000 |
| 606 | 10' Concrete Sidewalk | 140,900 | sf | \$ 5.50 | \$ 775,000 |
| 706 | Machine Laid Curb & Gutter | 14,090 | lf | \$ 16.00 | \$ 225,000 |
| 806 | Turn Lanes and Median Openings | 0 | sy | \$ 134.62 | \$ - |
| Paving Construction Cost Subtotal: | | | | | \$ 2,543,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 127,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 51,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 763,000 |
| ✓ | Illumination | | | 10% | \$ 254,000 |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | | \$ 100,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 51,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 51,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 102,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 51,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 1,550,000 |
| Paving and Allowance Subtotal: | | | | | \$ 4,093,000 |
| Construction Contingency: | | | | 15% | \$ 614,000 |
| Mobilization | | | | 8% | \$ 327,000 |
| Prep ROW | | | | 4% | \$ 164,000 |
| Construction Cost TOTAL: | | | | | \$ 5,200,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 5,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 832,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 780,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 6,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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): | 5,955 | | |
| Service Area(s): | B | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 58,668 | cy | \$ 15.00 | \$ 880,000 |
| 205 | 12" Asphalt (Type C) | 33,189 | ton | \$ 72.00 | \$ 2,390,000 |
| 305 | 16" Base | 22,350 | cy | \$ 55.00 | \$ 1,229,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 52,933 | sy | \$ 6.00 | \$ 318,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 10,057 | gal | \$ 6.00 | \$ 60,000 |
| 605 | 10' Concrete Sidewalk | 119,100 | sf | \$ 5.50 | \$ 655,000 |
| 705 | Machine Laid Curb & Gutter | 23,820 | lf | \$ 16.00 | \$ 381,000 |
| 805 | Turn Lanes and Median Openings | 3,609 | sy | \$ 134.62 | \$ 486,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 6,399,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 320,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 128,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 1,920,000 | |
| ✓ Illumination | | 10% | \$ | 640,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 800,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 128,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 128,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 256,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 128,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 4,448,000 | |
| Paving and Allowance Subtotal: | | | \$ | 10,847,000 | |
| Construction Contingency: | | | 15% | \$ | 1,627,000 |
| Mobilization | | | 8% | \$ | 868,000 |
| Prep ROW | | | 4% | \$ | 434,000 |
| Construction Cost TOTAL: | | | \$ | 13,800,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 13,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,208,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 2,070,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 18,100,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-33 |
|----------------------|-----------------------|--|-------------|------|
| Name: | Old Settlers Blvd (3) | This project consists of the construction of a new 4 lane divided arterial. | | |
| Limits: | Red Bud Ln to CR 110 | | | |
| Impact Fee Class: | 4 Lane - Proposed | | | |
| Ultimate Class: | 4 Lane - Proposed | | | |
| Length (lf): | 2,416 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|---------------------|--------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 102 | Unclassified Street Excavation | 17,568 | cy | \$ 15.00 | \$ 264,000 |
| 202 | 12" Asphalt (Type C) | 9,567 | ton | \$ 72.00 | \$ 689,000 |
| 302 | 16" Base | 6,443 | cy | \$ 55.00 | \$ 354,000 |
| 402 | 10" Lime Stabilization (with Lime @ 45#/sy) | 15,570 | sy | \$ 6.00 | \$ 93,000 |
| 502 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,899 | gal | \$ 6.00 | \$ 17,000 |
| 602 | 10' Concrete Sidewalk | 48,320 | sf | \$ 5.50 | \$ 266,000 |
| 702 | Machine Laid Curb & Gutter | 9,664 | lf | \$ 16.00 | \$ 155,000 |
| 802 | Turn Lanes and Median Openings | 1,464 | sy | \$ 134.62 | \$ 197,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,035,000 |
| 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% | \$ 41,000 | |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ 611,000 | |
| ✓ | Illumination | | 10% | \$ 204,000 | |
| Special Drainage Structures | | None Anticipated | | \$ - | |
| ✓ | Water | Minor Adjustments | 2% | \$ 41,000 | |
| ✓ | Sewer | Minor Adjustments | 2% | \$ 41,000 | |
| ✓ | Turf and Erosion Control | | 4% | \$ 81,000 | |
| ✓ | Landscaping and Irrigation | | 2% | \$ 41,000 | |
| Miscellaneous: | | | 0% | \$ - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 1,060,000 | |
| Paving and Allowance Subtotal: | | | | \$ 3,095,000 | |
| Construction Contingency: | | | | 15% | \$ 464,000 |
| Mobilization | | | | 8% | \$ 248,000 |
| Prep ROW | | | | 4% | \$ 124,000 |
| Construction Cost TOTAL: | | | | \$ 4,000,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|-----------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 640,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,200,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,800,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| Project Information: | | Description: | Project No. B-34 |
|----------------------|-------------------------------------|--|------------------|
| Name: | Spur 379 (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 | | |
| 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 | 14,119 | cy | \$ 15.00 | \$ 212,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 15,048 | lf | \$ 16.00 | \$ 241,000 |
| 804 | Turn Lanes and Median Openings | 4,560 | sy | \$ 134.62 | \$ 614,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,067,000 |
| 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: \$ | | | | 1,864,000 | |
| Construction Contingency: | | | | 15% | \$ 280,000 |
| Mobilization | | | | 5% | \$ 93,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 23,000 |
| Construction Cost TOTAL: \$ | | | | 2,300,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,300,000 |
| Engineering/Survey/Testing: | | 16% | \$ 368,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 2,700,000 |

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 2,787 | cy | \$ 15.00 | \$ 42,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 2,970 | lf | \$ 16.00 | \$ 48,000 |
| 804 | Turn Lanes and Median Openings | 900 | sy | \$ 134.62 | \$ 121,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 211,000 |
| 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: \$ | | | | 381,000 | |
| Construction Contingency: | | | | 15% | \$ 57,000 |
| Mobilization | | | | 5% | \$ 19,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 4,000 |
| Construction Cost TOTAL: \$ | | | | 500,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 80,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 18,187 | cy | \$ 15.00 | \$ 273,000 |
| 205 | 12" Asphalt (Type C) | 10,288 | ton | \$ 72.00 | \$ 741,000 |
| 305 | 16" Base | 6,928 | cy | \$ 55.00 | \$ 381,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 16,409 | sy | \$ 6.00 | \$ 98,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 3,118 | gal | \$ 6.00 | \$ 19,000 |
| 605 | 10' Concrete Sidewalk | 36,920 | sf | \$ 5.50 | \$ 203,000 |
| 705 | Machine Laid Curb & Gutter | 7,384 | lf | \$ 16.00 | \$ 118,000 |
| 805 | Turn Lanes and Median Openings | 1,119 | sy | \$ 134.62 | \$ 151,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,984,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 99,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 40,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 595,000 | |
| ✓ Illumination | | 10% | \$ | 198,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 40,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 40,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 79,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 40,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,131,000 | |
| Paving and Allowance Subtotal: | | | \$ | 3,115,000 | |
| Construction Contingency: | | | 15% | \$ | 467,000 |
| Mobilization | | | 8% | \$ | 249,000 |
| Prep ROW | | | 4% | \$ | 125,000 |
| Construction Cost TOTAL: | | | \$ | 4,000,000 | |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 640,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 400,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 1,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 Tr | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 1,055 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|-----------|-----------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 10,394 | cy | \$ 15.00 | \$ 156,000 |
| 205 | 12" Asphalt (Type C) | 5,880 | ton | \$ 72.00 | \$ 423,000 |
| 305 | 16" Base | 3,960 | cy | \$ 55.00 | \$ 218,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 9,378 | sy | \$ 6.00 | \$ 56,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,782 | gal | \$ 6.00 | \$ 11,000 |
| 605 | 10' Concrete Sidewalk | 21,100 | sf | \$ 5.50 | \$ 116,000 |
| 705 | Machine Laid Curb & Gutter | 4,220 | lf | \$ 16.00 | \$ 68,000 |
| 805 | Turn Lanes and Median Openings | 639 | sy | \$ 134.62 | \$ 86,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,134,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 57,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 23,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 340,000 | |
| ✓ Illumination | | 10% | \$ | 113,000 | |
| ✓ Special Drainage Structures | Bridge Crossing | | \$ | 1,300,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 23,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 23,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 45,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 23,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| Allowance Subtotal: | | | | | \$ 1,947,000 |
| Paving and Allowance Subtotal: | | | | | \$ 3,081,000 |
| Construction Contingency: | | | 15% | \$ | 462,000 |
| Mobilization | | | 8% | \$ | 246,000 |
| Prep ROW | | | 4% | \$ | 123,000 |
| Construction Cost TOTAL: | | | | | \$ 4,000,000 |

| Impact Fee Project Cost Summary | | | |
|--|---------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 640,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 400,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 1,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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): | 6,601 | | |
| Service Area(s): | B | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 65,032 | cy | \$ 15.00 | \$ 975,000 |
| 205 | 12" Asphalt (Type C) | 36,790 | ton | \$ 72.00 | \$ 2,649,000 |
| 305 | 16" Base | 24,774 | cy | \$ 55.00 | \$ 1,363,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 58,676 | sy | \$ 6.00 | \$ 352,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 11,148 | gal | \$ 6.00 | \$ 67,000 |
| 605 | 10' Concrete Sidewalk | 132,020 | sf | \$ 5.50 | \$ 726,000 |
| 705 | Machine Laid Curb & Gutter | 26,404 | lf | \$ 16.00 | \$ 422,000 |
| 805 | Turn Lanes and Median Openings | 4,001 | sy | \$ 134.62 | \$ 539,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 7,093,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 355,000 | |
| ✓ 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 | Bridge Crossing | | \$ | 1,100,000 | |
| ✓ 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: | \$ | 5,144,000 | |
| Paving and Allowance Subtotal: | | | \$ | 12,237,000 | |
| Construction Contingency: | | | 15% | \$ | 1,836,000 |
| Mobilization | | | 8% | \$ | 979,000 |
| Prep ROW | | | 4% | \$ | 489,000 |
| Construction Cost TOTAL: | | | \$ | 15,600,000 | |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 15,600,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,496,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 1,560,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 3,940,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-39 |
|----------------------|---|---|-------------|------|
| Name: | Kenney Fort Blvd (2) | 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 | | | |
| Length (lf): | 1,566 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|---------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 107 | Unclassified Street Excavation | 7,714 | cy | \$ 15.00 | \$ 116,000 |
| 207 | 12" Asphalt (Type C) | 4,364 | ton | \$ 72.00 | \$ 314,000 |
| 307 | 16" Base | 2,939 | cy | \$ 55.00 | \$ 162,000 |
| 407 | 10" Lime Stabilization (with Lime @ 45#/sy) | 6,960 | sy | \$ 6.00 | \$ 42,000 |
| 507 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,645 | gal | \$ 6.00 | \$ 16,000 |
| 607 | 10' Concrete Sidewalk | 31,320 | sf | \$ 5.50 | \$ 172,000 |
| 707 | Machine Laid Curb & Gutter | 3,132 | lf | \$ 16.00 | \$ 50,000 |
| 807 | Turn Lanes and Median Openings | 949 | sy | \$ 134.62 | \$ 128,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,000,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 50,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 20,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 300,000 |
| ✓ | Illumination | | | 10% | \$ 100,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 20,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 20,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 40,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 20,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 570,000 |
| Paving and Allowance Subtotal: | | | | \$ | 1,570,000 |
| Construction Contingency: | | | | 15% | \$ 236,000 |
| Mobilization | | | | 8% | \$ 126,000 |
| Prep ROW | | | | 4% | \$ 63,000 |
| Construction Cost TOTAL: | | | | \$ | 2,000,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 320,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 300,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. B-40 |
|--------------------------|---|---|------------------|
| Name: | Kenney Fort Blvd (3) | 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,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 108 | Unclassified Street Excavation | 9,556 | cy | \$ 15.00 | \$ 143,000 |
| 208 | 5" Asphalt (Type C) | 5,406 | ton | \$ 72.00 | \$ 389,000 |
| 308 | 10" Base | 3,640 | cy | \$ 55.00 | \$ 200,000 |
| 408 | 10" Lime Stabilization (with Lime @ 45#/sy) | 8,622 | sy | \$ 6.00 | \$ 52,000 |
| 508 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 1,638 | gal | \$ 6.00 | \$ 10,000 |
| 608 | 10' Concrete Sidewalk | 19,400 | sf | \$ 5.50 | \$ 107,000 |
| 708 | Machine Laid Curb & Gutter | 3,880 | lf | \$ 16.00 | \$ 62,000 |
| 808 | Turn Lanes and Median Openings | 588 | sy | \$ 134.62 | \$ 79,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,042,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 52,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 21,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 313,000 |
| ✓ | Illumination | | | 10% | \$ 104,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 21,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 21,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 42,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 21,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 595,000 |
| | | | | Paving and Allowance Subtotal: \$ | 1,637,000 |
| Construction Contingency: | | | | 15% | \$ 246,000 |
| Mobilization | | | | 8% | \$ 131,000 |
| Prep ROW | | | | 4% | \$ 65,000 |
| Construction Cost TOTAL: \$ | | | | | 2,100,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,100,000 |
| Engineering/Survey/Testing: | | 16% | \$ 336,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 315,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-41 |
|----------------------|---|--|-------------|------|
| Name: | Kenney Fort Blvd (4) | 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): | 5,010 | | | |
| Service Area(s): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|---------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 108 | Unclassified Street Excavation | 49,358 | cy | \$ 15.00 | \$ 740,000 |
| 208 | 5" Asphalt (Type C) | 27,922 | ton | \$ 72.00 | \$ 2,010,000 |
| 308 | 10" Base | 18,803 | cy | \$ 55.00 | \$ 1,034,000 |
| 408 | 10" Lime Stabilization (with Lime @ 45#/sy) | 44,533 | sy | \$ 6.00 | \$ 267,000 |
| 508 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 8,461 | gal | \$ 6.00 | \$ 51,000 |
| 608 | 10' Concrete Sidewalk | 100,200 | sf | \$ 5.50 | \$ 551,000 |
| 708 | Machine Laid Curb & Gutter | 20,040 | lf | \$ 16.00 | \$ 321,000 |
| 808 | Turn Lanes and Median Openings | 3,036 | sy | \$ 134.62 | \$ 409,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 5,383,000 |
| 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% | \$ 108,000 |
| √ | Roadway Drainage | Standard Internal System | | 30% | \$ 1,615,000 |
| √ | Illumination | | | 10% | \$ 538,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| √ | Water | Minor Adjustments | | 2% | \$ 108,000 |
| √ | Sewer | Minor Adjustments | | 2% | \$ 108,000 |
| √ | Turf and Erosion Control | | | 4% | \$ 215,000 |
| √ | Landscaping and Irrigation | | | 2% | \$ 108,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 2,800,000 |
| Paving and Allowance Subtotal: \$ | | | | | 8,183,000 |
| Construction Contingency: | | | | 15% | \$ 1,227,000 |
| Mobilization | | | | 8% | \$ 655,000 |
| Prep ROW | | | | 4% | \$ 327,000 |
| Construction Cost TOTAL: \$ | | | | | 10,400,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|-----------------------|-----------|---------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 10,400,000 |
| Engineering/Survey/Testing: | | 16% | \$ 1,664,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 3,120,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 15,200,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-42 |
|----------------------|-------------------------------------|---|-------------|------|
| Name: | Kenney Fort Blvd (5) | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | | |
| 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 | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 15,418 | cy | \$ 15.00 | \$ 231,000 |
| 205 | 12" Asphalt (Type C) | 8,722 | ton | \$ 72.00 | \$ 628,000 |
| 305 | 16" Base | 5,874 | cy | \$ 55.00 | \$ 323,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,911 | sy | \$ 6.00 | \$ 83,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,643 | gal | \$ 6.00 | \$ 16,000 |
| 605 | 10' Concrete Sidewalk | 31,300 | sf | \$ 5.50 | \$ 172,000 |
| 705 | Machine Laid Curb & Gutter | 6,260 | lf | \$ 16.00 | \$ 100,000 |
| 805 | Turn Lanes and Median Openings | 948 | sy | \$ 134.62 | \$ 128,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 1,681,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 84,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 34,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 504,000 |
| ✓ | Illumination | | | 10% | \$ 168,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | | \$ 800,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 34,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 34,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 67,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 34,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 1,759,000 |
| | | | | Paving and Allowance Subtotal: \$ | 3,440,000 |
| Construction Contingency: | | | | 15% | \$ 516,000 |
| Mobilization | | | | 8% | \$ 275,000 |
| 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: | Existing Alignment | 15% | \$ 660,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,800,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. B-43 |
|----------------------|--|---|------------------|
| 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 St | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 2,356 | | |
| Service Area(s): | B | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 17,132 | cy | \$ 15.00 | \$ 257,000 |
| 203 | 12" Asphalt (Type C) | 9,330 | ton | \$ 72.00 | \$ 672,000 |
| 303 | 16" Base | 6,283 | cy | \$ 55.00 | \$ 346,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 15,183 | sy | \$ 6.00 | \$ 91,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,827 | gal | \$ 6.00 | \$ 17,000 |
| 603 | 10' Concrete Sidewalk | 47,120 | sf | \$ 5.50 | \$ 259,000 |
| 703 | Machine Laid Curb & Gutter | 9,424 | lf | \$ 16.00 | \$ 151,000 |
| 803 | Turn Lanes and Median Openings | 1,428 | sy | \$ 134.62 | \$ 192,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,985,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 99,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 40,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 596,000 | |
| ✓ Illumination | | 10% | \$ | 199,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 40,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 40,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 79,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 40,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,133,000 | |
| Paving and Allowance Subtotal: | | | \$ | 3,118,000 | |
| Construction Contingency: | | | 15% | \$ | 468,000 |
| Mobilization | | | 8% | \$ | 249,000 |
| Prep ROW | | | 4% | \$ | 125,000 |
| Construction Cost TOTAL: | | | \$ | 4,000,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 640,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 600,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,200,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-44 |
|----------------------|--|---|-------------|------|
| 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 Covered Wagon Trl | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 957 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 6,959 | cy | \$ 15.00 | \$ 104,000 |
| 203 | 12" Asphalt (Type C) | 3,790 | ton | \$ 72.00 | \$ 273,000 |
| 303 | 16" Base | 2,552 | cy | \$ 55.00 | \$ 140,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 6,167 | sy | \$ 6.00 | \$ 37,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 1,148 | gal | \$ 6.00 | \$ 7,000 |
| 603 | 10' Concrete Sidewalk | 19,140 | sf | \$ 5.50 | \$ 105,000 |
| 703 | Machine Laid Curb & Gutter | 3,828 | lf | \$ 16.00 | \$ 61,000 |
| 803 | Turn Lanes and Median Openings | 580 | sy | \$ 134.62 | \$ 78,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 805,000 |
| 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% | \$ 242,000 |
| ✓ | 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% | \$ 32,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 16,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 459,000 |
| | | | | Paving and Allowance Subtotal: \$ | 1,264,000 |
| Construction Contingency: | | | | 15% | \$ 190,000 |
| Mobilization | | | | 8% | \$ 101,000 |
| 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 | 15% | \$ 255,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,200,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-45 |
|----------------------|--------------------------------------|---|-------------|------|
| 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): | B | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 15,569 | cy | \$ 15.00 | \$ 234,000 |
| 203 | 12" Asphalt (Type C) | 8,478 | ton | \$ 72.00 | \$ 610,000 |
| 303 | 16" Base | 5,709 | cy | \$ 55.00 | \$ 314,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,798 | sy | \$ 6.00 | \$ 83,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,569 | gal | \$ 6.00 | \$ 15,000 |
| 603 | 10' Concrete Sidewalk | 42,820 | sf | \$ 5.50 | \$ 236,000 |
| 703 | Machine Laid Curb & Gutter | 8,564 | lf | \$ 16.00 | \$ 137,000 |
| 803 | Turn Lanes and Median Openings | 1,298 | sy | \$ 134.62 | \$ 175,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,804,000 |
| 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% | \$ | 541,000 | |
| ✓ Illumination | | 10% | \$ | 180,000 | |
| 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: | \$ | 1,027,000 | |
| Paving and Allowance Subtotal: | | | \$ | 2,831,000 | |
| Construction Contingency: | | | 15% | \$ | 425,000 |
| Mobilization | | | 8% | \$ | 226,000 |
| Prep ROW | | | 4% | \$ | 113,000 |
| Construction Cost TOTAL: | | | \$ | 3,600,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 3,600,000 |
| Engineering/Survey/Testing: | | 16% | \$ 576,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 540,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 4,700,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. |
|----------------------|-----------------------------------|---|------------------|
| Name: | US 79 (1) | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | B-46, C-6 |
| Limits: | N Mays St to 200' E of Red Bud Ln | | |
| Impact Fee Class: | 6 Lane - Enhanced | | |
| Ultimate Class: | 6 Lane - Enhanced | | |
| Length (lf): | 22,817 | | |
| Service Area(s): | B,C | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|--------------------------------|---------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 224,790 | cy | \$ 15.00 | \$ 3,372,000 |
| 205 | 12" Asphalt (Type C) | 127,167 | ton | \$ 72.00 | \$ 9,156,000 |
| 305 | 16" Base | 85,634 | cy | \$ 55.00 | \$ 4,710,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 202,818 | sy | \$ 6.00 | \$ 1,217,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 38,535 | gal | \$ 6.00 | \$ 231,000 |
| 605 | 10' Concrete Sidewalk | 456,340 | sf | \$ 5.50 | \$ 2,510,000 |
| 705 | Machine Laid Curb & Gutter | 91,268 | lf | \$ 16.00 | \$ 1,460,000 |
| 805 | Turn Lanes and Median Openings | 13,828 | sy | \$ 134.62 | \$ 1,862,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 24,518,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 1,226,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 490,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 7,355,000 |
| ✓ | Illumination | | | 10% | \$ 2,452,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | | \$ 3,100,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 490,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 490,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 981,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 490,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 17,074,000 |
| | | | | Paving and Allowance Subtotal: | \$ 41,592,000 |
| Construction Contingency: | | | | 15% | \$ 6,239,000 |
| Mobilization | | | | 8% | \$ 3,327,000 |
| Prep ROW | | | | 4% | \$ 1,664,000 |
| Construction Cost TOTAL: | | | | \$ 52,900,000 | |

| Impact Fee Project Cost Summary | | | |
|--|---------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 52,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 8,464,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 5,290,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 13,340,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. | B-47 |
|----------------------|---|---|-------------|------|
| Name: | US 79 (2) | 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): | 1,488 | | | |
| Service Area(s): | B,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|---------------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 14,660 | cy | \$ 15.00 | \$ 220,000 |
| 205 | 12" Asphalt (Type C) | 8,293 | ton | \$ 72.00 | \$ 597,000 |
| 305 | 16" Base | 5,585 | cy | \$ 55.00 | \$ 307,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 13,227 | sy | \$ 6.00 | \$ 79,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 2,513 | gal | \$ 6.00 | \$ 15,000 |
| 605 | 10' Concrete Sidewalk | 29,760 | sf | \$ 5.50 | \$ 164,000 |
| 705 | Machine Laid Curb & Gutter | 5,952 | lf | \$ 16.00 | \$ 95,000 |
| 805 | Turn Lanes and Median Openings | 902 | sy | \$ 134.62 | \$ 121,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,598,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 80,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 32,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 479,000 |
| ✓ | Illumination | | | 10% | \$ 160,000 |
| ✓ | Special Drainage Structures | Minor Stream Crossing | | | \$ 300,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 32,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 32,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 64,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 32,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 1,211,000 |
| Paving and Allowance Subtotal: | | | | | \$ 2,809,000 |
| Construction Contingency: | | | | 15% | \$ 421,000 |
| Mobilization | | | | 8% | \$ 225,000 |
| Prep ROW | | | | 4% | \$ 112,000 |
| Construction Cost TOTAL: | | | | | \$ 3,600,000 |

| Impact Fee Project Cost Summary | | | |
|---|---------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 3,600,000 |
| Engineering/Survey/Testing: | | 16% | \$ 576,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 360,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 900,000 |

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City of Round Rock - 2018 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-2 | 4 Lane - Enhanced | CR 172 (1) | Widening | McNeil Dr | Lynda Sue St | 50% | \$ 2,400,000 | \$ 1,200,000 |
| C-3 | 4 Lane - Enhanced | CR 172 (2) | Widening | Hesters Crossing Rd | 445' N of Hesters Crossing Rd | 50% | \$ 1,000,000 | \$ 500,000 |
| C-4 | 4 Lane - Enhanced (AM) | Hesters Crossing Rd | Access Management | Dry Creek Dr | IH 35 SBFR | 100% | \$ 700,000 | \$ 700,000 |
| C-5 | 4 Lane - Enhanced | Bratton Ln | Widening | IH 35 SBFR | 1160' S of Michael Angelo Way | 50% | \$ 5,000,000 | \$ 2,500,000 |
| B-46, C-6 | 6 Lane - Enhanced | US 79 (1) | Widening | N Mays St | 200' E of Red Bud Ln | 50% | \$ 13,340,000 | \$ 6,670,000 |
| C-7 | 3 Lane - Proposed | McNeil Extension | Under Construction | 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% | \$ 1,400,000 | \$ 1,400,000 |
| C-9 | 6 Lane - Existing | Kenney Fort Blvd (1) | Previously Constructed | US 79 | Forest Creek Blvd | 100% | \$ 23,375,873 | \$ 23,375,873 |
| C-10 | 6 Lane - Proposed | Kenney Fort Blvd (2) | New | Forest Creek Dr | 830' S of Gattis School Rd | 100% | \$ 24,500,000 | \$ 24,500,000 |
| C-11 | 4 Lane - Enhanced (AM) | Red Bud Ln (1) | Access Management | Forest Ridge Blvd | 265' S of Forest Ridge Blvd | 50% | \$ 100,000 | \$ 50,000 |
| C-12 | 4 Lane - Enhanced | Red Bud Ln (2) | Widening | 265' S of Forest Ridge Blvd | 280' S of Woodlawn Ln | 100% | \$ 1,300,000 | \$ 1,300,000 |
| C-13 | 4 Lane - Enhanced | Red Bud Ln (3) | Widening | 280' S of Woodlawn Ln | 130' S of Old Oaks Dr | 50% | \$ 1,300,000 | \$ 650,000 |
| C-14 | 4 Lane - Enhanced | Red Bud Ln (4) | Widening | 130' S of Old Oaks Dr | 315' S of Country Dr | 100% | \$ 1,300,000 | \$ 1,300,000 |
| C-15 | 4 Lane - Enhanced | Red Bud Ln (5) | Widening | 315' S of Country Dr | Wildflower Trl | 50% | \$ 1,300,000 | \$ 650,000 |
| C-16 | 4 Lane - Enhanced | Red Bud Ln (6) | Widening | Wildflower Trl | 295' S of Wildflower Trl | 100% | \$ 700,000 | \$ 700,000 |
| C-17 | 4 Lane - Enhanced | Red Bud Ln (7) | Widening | 295' S of Wildflower Trl | 840' N of Forest Creek Dr | 50% | \$ 7,700,000 | \$ 3,850,000 |
| C-18 | 4 Lane - Enhanced | Red Bud Ln (8) | Widening | 840' N of Forest Creek Dr | 340' S of Forest Creek Dr | 100% | \$ 2,600,000 | \$ 2,600,000 |
| C-19 | 4 Lane - Enhanced | Red Bud Ln (9) | Widening | 340' S of Forest Creek Dr | Gattis School Rd | 50% | \$ 8,300,000 | \$ 4,150,000 |
| C-20 | 4 Lane - Enhanced | Gattis School Rd (1) | Widening | S Mays St | Surrey Dr | 100% | \$ 7,600,000 | \$ 7,600,000 |
| C-21 | 6 Lane - Enhanced | Gattis School Rd (2) | Widening | Windy Park Dr | Red Bud Ln | 100% | \$ 48,300,000 | \$ 48,300,000 |
| C-22 | 4 Lane - Enhanced (AM) | S Mays St / Dell Way | Access Management | Gattis School Rd | Greenlawn Blvd | 100% | \$ 2,400,000 | \$ 2,400,000 |
| C-23 | 6 Lane - Proposed | Kenney Fort Blvd (3) | New | 830' S of Gattis School Rd | SH 45 | 50% | \$ 6,700,000 | \$ 3,350,000 |
| C-24 | 6 Lane - Enhanced (1/3) | Greenlawn Blvd | Median Widening | IH 35 NBFR | SH 45 EBFR | 100% | \$ 6,400,000 | \$ 6,400,000 |
| C-25 | 3 Lane - Proposed | Roundville Ln | Under Construction | A.W. Grimes Blvd | 2060' W of A.W. Grimes Blvd | 100% | \$ 1,134,412 | \$ 1,134,412 |
| C-26 | 4 Lane - Enhanced | Schultz (1) | Widening | SH 45 EBFR | 290' S of SH 45 EBFR | 100% | \$ 700,000 | \$ 700,000 |
| C-27 | 4 Lane - Enhanced | Schultz (2) | Widening | 290' S of SH 45 EBFR | 255' S of Autumn Sage Way | 50% | \$ 5,900,000 | \$ 2,950,000 |
| TOTAL | | | | | | | \$ 192,810,529 | \$ 160,010,217 |

City of Round Rock - 2018 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 | | | |
| AI-4, CI-1 | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 392,000 | \$ 196,000 |
| AI-5, CI-2 | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | | 50% | \$ 588,000 | \$ 294,000 |
| CI-3 | IH 35 and Hesters Crossing Rd | TURN LANES | | 100% | \$ 196,000 | \$ 196,000 |
| CI-4 | IH 35 and Louis Henna Blvd (SH 45 FR) | TURN LANES | SIGNAL | 100% | \$ 2,037,000 | \$ 2,037,000 |
| CI-5 | Mays St and Liberty Ave | SIGNAL | | 100% | \$ 353,000 | \$ 353,000 |
| CI-6 | Mays St and Gattis School Rd | TURN LANES | | 100% | \$ 1,847,503 | \$ 1,847,503 |
| CI-7 | Greenlawn Blvd and Louis Henna Blvd (SH 45 FR) | OTHER | | 100% | \$ 784,000 | \$ 784,000 |
| BI-4, CI-8 | A.W. Grimes Blvd and Palm Valley Blvd | OTHER | TURN LANES | 50% | \$ 2,041,000 | \$ 1,020,500 |
| CI-9 | A.W. Grimes Blvd and Gattis School Rd | TURN LANES | | 100% | \$ 1,921,000 | \$ 1,921,000 |
| CI-10 | Red Bud Ln and Gattis School Rd | TURN LANES | | 100% | \$ 1,595,000 | \$ 1,595,000 |
| - | Update ITS and Traffic Managemenet Infrastructure | | | 33% | \$ 20,900,000 | \$ 6,966,667 |
| TOTAL | | | | | \$ 32,654,503 | \$ 17,210,670 |

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
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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): | 4,922 | | |
| 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: | | - | \$ 25,545,000 |
| Engineering/Survey/Testing: | | - | \$ 3,116,086 |
| ROW/Easement Acquisition: | TxDOT Roadway | - | \$ 14,629,808 |
| Overall Project Cost Total: | | | \$ 43,290,894 |
| City Contribution: | | | \$ 12,560,624 |
| Impact Fee Project Cost (29%): | | | \$ 12,560,624 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. C-2 |
|--------------------------|---------------------------|---|------------------------|
| Name: | CR 172 (1) | This project consists of the reconstruction of existing pavement to a 4 lane divided arterial. | |
| Limits: | McNeil Dr to Lynda Sue St | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 4 Lane - Enhanced | | |
| Length (lf): | 1,053 | | |
| Service Area(s): | C,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 7,657 | cy | \$ 15.00 | \$ 115,000 |
| 203 | 12" Asphalt (Type C) | 4,170 | ton | \$ 72.00 | \$ 300,000 |
| 303 | 16" Base | 2,808 | cy | \$ 55.00 | \$ 154,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 6,786 | sy | \$ 6.00 | \$ 41,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 1,264 | gal | \$ 6.00 | \$ 8,000 |
| 603 | 10' Concrete Sidewalk | 21,060 | sf | \$ 5.50 | \$ 116,000 |
| 703 | Machine Laid Curb & Gutter | 4,212 | lf | \$ 16.00 | \$ 67,000 |
| 803 | Turn Lanes and Median Openings | 638 | sy | \$ 134.62 | \$ 86,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 887,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 44,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 18,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 266,000 |
| ✓ | Illumination | | | 10% | \$ 89,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 18,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 18,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 35,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 18,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 506,000 |
| | | | | Paving and Allowance Subtotal: \$ | 1,393,000 |
| Construction Contingency: | | | | 15% | \$ 209,000 |
| Mobilization | | | | 8% | \$ 111,000 |
| Prep ROW | | | | 4% | \$ 56,000 |
| Construction Cost TOTAL: \$ | | | | | 1,800,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 288,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 270,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,400,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|-----------|---------------------|------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 3,236 | cy | \$ 15.00 | \$ 49,000 |
| 203 | 12" Asphalt (Type C) | 1,762 | ton | \$ 72.00 | \$ 127,000 |
| 303 | 16" Base | 1,187 | cy | \$ 55.00 | \$ 65,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 2,868 | sy | \$ 6.00 | \$ 17,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 534 | gal | \$ 6.00 | \$ 3,000 |
| 603 | 10' Concrete Sidewalk | 8,900 | sf | \$ 5.50 | \$ 49,000 |
| 703 | Machine Laid Curb & Gutter | 1,780 | lf | \$ 16.00 | \$ 28,000 |
| 803 | Turn Lanes and Median Openings | 270 | sy | \$ 134.62 | \$ 36,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 374,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 19,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 7,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 112,000 | |
| ✓ Illumination | | 10% | \$ | 37,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 7,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 7,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 15,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 7,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ | 211,000 |
| Paving and Allowance Subtotal: | | | \$ | 585,000 | |
| Construction Contingency: | | | 15% | \$ | 88,000 |
| Mobilization | | | 8% | \$ | 47,000 |
| Prep ROW | | | 4% | \$ | 23,000 |
| 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: | Existing Alignment | 15% | \$ 120,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,000,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | | | |
| Length (lf): | 1,691 | | | |
| Service Area(s): | C | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---|----------------------------|----------------------|-------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 3,173 | cy | \$ 15.00 | \$ 48,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 3,382 | lf | \$ 16.00 | \$ 54,000 |
| 804 | Turn Lanes and Median Openings | 1,025 | sy | \$ 134.62 | \$ 138,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 240,000 |
| 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: | | | | \$ | 442,000 |
| Construction Contingency: | | | | 15% | \$ 66,000 |
| Mobilization | | | | 5% | \$ 22,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 5,000 |
| 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 | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 16,107 | cy | \$ 15.00 | \$ 242,000 |
| 203 | 12" Asphalt (Type C) | 8,771 | ton | \$ 72.00 | \$ 632,000 |
| 303 | 16" Base | 5,907 | cy | \$ 55.00 | \$ 325,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 14,274 | sy | \$ 6.00 | \$ 86,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 2,658 | gal | \$ 6.00 | \$ 16,000 |
| 603 | 10' Concrete Sidewalk | 44,300 | sf | \$ 5.50 | \$ 244,000 |
| 703 | Machine Laid Curb & Gutter | 8,860 | lf | \$ 16.00 | \$ 142,000 |
| 803 | Turn Lanes and Median Openings | 1,342 | sy | \$ 134.62 | \$ 181,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 1,868,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 93,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 37,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 560,000 | |
| ✓ Illumination | | 10% | \$ | 187,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 37,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 37,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 75,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 37,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,063,000 | |
| Paving and Allowance Subtotal: | | | \$ | 2,931,000 | |
| Construction Contingency: | | | 15% | \$ | 440,000 |
| Mobilization | | | 8% | \$ | 234,000 |
| Prep ROW | | | 4% | \$ | 117,000 |
| 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 | 15% | \$ 570,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,000,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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: | N Mays St to 200' E of Red Bud Ln | | | |
| Impact Fee Class: | 6 Lane - Enhanced | | | |
| Ultimate Class: | 6 Lane - Enhanced | | | |
| Length (lf): | 22,817 | | | |
| Service Area(s): | B,C | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|--|----------------------------|----------------------|----------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 224,790 | cy | \$ 15.00 | \$ 3,372,000 |
| 205 | 12" Asphalt (Type C) | 127,167 | ton | \$ 72.00 | \$ 9,156,000 |
| 305 | 16" Base | 85,634 | cy | \$ 55.00 | \$ 4,710,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 202,818 | sy | \$ 6.00 | \$ 1,217,000 |
| 505 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 38,535 | gal | \$ 6.00 | \$ 231,000 |
| 605 | 10' Concrete Sidewalk | 456,340 | sf | \$ 5.50 | \$ 2,510,000 |
| 705 | Machine Laid Curb & Gutter | 91,268 | lf | \$ 16.00 | \$ 1,460,000 |
| 805 | Turn Lanes and Median Openings | 13,828 | sy | \$ 134.62 | \$ 1,862,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 24,518,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | Allowance | Item Cost | |
| ✓ | Traffic Control | Construction Phase Traffic Control | 5% | \$ | 1,226,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 490,000 |
| ✓ | Roadway Drainage | Standard Internal System | 30% | \$ | 7,355,000 |
| ✓ | Illumination | | 10% | \$ | 2,452,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | \$ | 3,100,000 |
| ✓ | Water | Minor Adjustments | 2% | \$ | 490,000 |
| ✓ | Sewer | Minor Adjustments | 2% | \$ | 490,000 |
| ✓ | Turf and Erosion Control | | 4% | \$ | 981,000 |
| ✓ | Landscaping and Irrigation | | 2% | \$ | 490,000 |
| | Miscellaneous: | | 0% | \$ | - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ 17,074,000 | |
| Paving and Allowance Subtotal: | | | | \$ 41,592,000 | |
| Construction Contingency: | | | | 15% | \$ 6,239,000 |
| Mobilization | | | | 8% | \$ 3,327,000 |
| Prep ROW | | | | 4% | \$ 1,664,000 |
| Construction Cost TOTAL: | | | | \$ 52,900,000 | |

| Impact Fee Project Cost Summary | | | |
|--|---------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 52,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 8,464,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | TxDOT Roadway | 10% | \$ 5,290,000 |
| Impact Fee Project Cost TOTAL (20% City Contribution) | | | \$ 13,340,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| 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 - Proposed | | | |
| Ultimate Class: | 3 Lane - Proposed | | | |
| Length (lf): | 2,731 | | | |
| 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: | | - | \$ 4,350,076 |
| Engineering/Survey/Testing: | | - | \$ 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
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | | | |
| Length (lf): | 3,656 | | | |
| Service Area(s): | C | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---|----------------------------|----------------------|-------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 6,861 | cy | \$ 15.00 | \$ 103,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 7,312 | lf | \$ 16.00 | \$ 117,000 |
| 804 | Turn Lanes and Median Openings | 2,216 | sy | \$ 134.62 | \$ 298,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 518,000 |
| 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: | | | | \$ 938,000 | |
| Construction Contingency: | | | | 15% | \$ 141,000 |
| Mobilization | | | | 5% | \$ 47,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 11,000 |
| Construction Cost TOTAL: | | | | \$ | 1,200,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 1,200,000 |
| Engineering/Survey/Testing: | | 16% | \$ 192,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 1,400,000 |

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| Project Information: | | Description: | Project No. | C-9 |
|----------------------|----------------------------|---|-------------|-----|
| Name: | Kenney Fort Blvd (1) | This project consisted of the construction of a 6 lane divided arterial. | | |
| Limits: | US 79 to Forest Creek Blvd | | | |
| Impact Fee Class: | 6 Lane - Existing | | | |
| Ultimate Class: | 6 Lane - Existing | | | |
| Length (lf): | 5,039 | | | |
| Service Area(s): | C | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|----------------------|
| Construction Cost TOTAL: | \$ 25,605,733 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 25,605,733 |
| Engineering/Survey/Testing: | | - | \$ 5,020,140 |
| ROW/Easement Acquisition: | Existing Alignment | - | \$ 750,000 |
| Overall Project Cost Total: | | | \$ 31,375,873 |
| City Contribution: | | | \$ 23,375,873 |
| Impact Fee Project Cost (75%): | | | \$ 23,375,873 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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): | 5,514 | | | |
| Service Area(s): | C | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|---------------------|---------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 108 | Unclassified Street Excavation | 54,323 | cy | \$ 15.00 | \$ 815,000 |
| 208 | 5" Asphalt (Type C) | 30,731 | ton | \$ 72.00 | \$ 2,213,000 |
| 308 | 10" Base | 20,695 | cy | \$ 55.00 | \$ 1,138,000 |
| 408 | 10" Lime Stabilization (with Lime @ 45#/sy) | 49,013 | sy | \$ 6.00 | \$ 294,000 |
| 508 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 9,313 | gal | \$ 6.00 | \$ 56,000 |
| 608 | 10' Concrete Sidewalk | 110,280 | sf | \$ 5.50 | \$ 607,000 |
| 708 | Machine Laid Curb & Gutter | 22,056 | lf | \$ 16.00 | \$ 353,000 |
| 808 | Turn Lanes and Median Openings | 3,342 | sy | \$ 134.62 | \$ 450,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 5,926,000 |
| 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% | \$ 119,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 1,778,000 |
| ✓ | Illumination | | | 10% | \$ 593,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | | \$ 4,200,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 119,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 119,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 237,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 119,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 7,284,000 |
| Paving and Allowance Subtotal: | | | | | \$ 13,210,000 |
| Construction Contingency: | | | | 15% | \$ 1,982,000 |
| Mobilization | | | | 8% | \$ 1,057,000 |
| Prep ROW | | | | 4% | \$ 528,000 |
| Construction Cost TOTAL: | | | | | \$ 16,800,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 16,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 2,688,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 5,040,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 24,500,000 |

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.

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

| 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 | | | |
| Length (lf): | 265 | | | |
| Service Area(s): | C,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|---------------------|-----------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 497 | cy | \$ 15.00 | \$ 7,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 530 | lf | \$ 16.00 | \$ 8,000 |
| 804 | Turn Lanes and Median Openings | 161 | sy | \$ 134.62 | \$ 22,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 37,000 |
| 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: | | | | \$ | 82,000 |
| Construction Contingency: | | | | 15% | \$ 12,000 |
| Mobilization | | | | 5% | \$ 4,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 1,000 |
| Construction Cost TOTAL: | | | | \$ | 100,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 100,000 |
| Engineering/Survey/Testing: | | 16% | \$ 16,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 100,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 L | | | |
| 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 | 4,108 | cy | \$ 15.00 | \$ 62,000 |
| 203 | 12" Asphalt (Type C) | 2,237 | ton | \$ 72.00 | \$ 161,000 |
| 303 | 16" Base | 1,507 | cy | \$ 55.00 | \$ 83,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,641 | sy | \$ 6.00 | \$ 22,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 678 | gal | \$ 6.00 | \$ 4,000 |
| 603 | 10' Concrete Sidewalk | 11,300 | sf | \$ 5.50 | \$ 62,000 |
| 703 | Machine Laid Curb & Gutter | 2,260 | lf | \$ 16.00 | \$ 36,000 |
| 803 | Turn Lanes and Median Openings | 342 | sy | \$ 134.62 | \$ 46,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 476,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 24,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 10,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 143,000 | |
| ✓ Illumination | | 10% | \$ | 48,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 10,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 10,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 19,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 10,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 274,000 |
| Paving and Allowance Subtotal: | | | | | \$ 750,000 |
| Construction Contingency: | | | 15% | \$ | 113,000 |
| Mobilization | | | 8% | \$ | 60,000 |
| Prep ROW | | | 4% | \$ | 30,000 |
| 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: | Existing Alignment | 15% | \$ 150,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,300,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|---|---|-----------|-----------|------------|---------------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 4,028 | cy | \$ 15.00 | \$ 60,000 |
| 203 | 12" Asphalt (Type C) | 2,194 | ton | \$ 72.00 | \$ 158,000 |
| 303 | 16" Base | 1,477 | cy | \$ 55.00 | \$ 81,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,570 | sy | \$ 6.00 | \$ 21,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 665 | gal | \$ 6.00 | \$ 4,000 |
| 603 | 10' Concrete Sidewalk | 11,080 | sf | \$ 5.50 | \$ 61,000 |
| 703 | Machine Laid Curb & Gutter | 2,216 | lf | \$ 16.00 | \$ 35,000 |
| 803 | Turn Lanes and Median Openings | 336 | sy | \$ 134.62 | \$ 45,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 465,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 23,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 9,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 140,000 | |
| ✓ Illumination | | 10% | \$ | 47,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 19,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 9,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 265,000 |
| Paving and Allowance Subtotal: | | | | | \$ 730,000 |
| Construction Contingency: | | | 15% | \$ | 110,000 |
| Mobilization | | | 8% | \$ | 58,000 |
| Prep ROW | | | 4% | \$ | 29,000 |
| 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: | Existing Alignment | 15% | \$ 150,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,300,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 4,079 | cy | \$ 15.00 | \$ 61,000 |
| 203 | 12" Asphalt (Type C) | 2,222 | ton | \$ 72.00 | \$ 160,000 |
| 303 | 16" Base | 1,496 | cy | \$ 55.00 | \$ 82,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,615 | sy | \$ 6.00 | \$ 22,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 673 | gal | \$ 6.00 | \$ 4,000 |
| 603 | 10' Concrete Sidewalk | 11,220 | sf | \$ 5.50 | \$ 62,000 |
| 703 | Machine Laid Curb & Gutter | 2,244 | lf | \$ 16.00 | \$ 36,000 |
| 803 | Turn Lanes and Median Openings | 340 | sy | \$ 134.62 | \$ 46,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 473,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 24,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 9,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 142,000 | |
| ✓ Illumination | | 10% | \$ | 47,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 19,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 9,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 268,000 | |
| Paving and Allowance Subtotal: | | | \$ | 741,000 | |
| Construction Contingency: | | | 15% | \$ | 111,000 |
| Mobilization | | | 8% | \$ | 59,000 |
| Prep ROW | | | 4% | \$ | 30,000 |
| 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: | Existing Alignment | 15% | \$ 150,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,300,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 4,007 | cy | \$ 15.00 | \$ 60,000 |
| 203 | 12" Asphalt (Type C) | 2,182 | ton | \$ 72.00 | \$ 157,000 |
| 303 | 16" Base | 1,469 | cy | \$ 55.00 | \$ 81,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 3,551 | sy | \$ 6.00 | \$ 21,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 661 | gal | \$ 6.00 | \$ 4,000 |
| 603 | 10' Concrete Sidewalk | 11,020 | sf | \$ 5.50 | \$ 61,000 |
| 703 | Machine Laid Curb & Gutter | 2,204 | lf | \$ 16.00 | \$ 35,000 |
| 803 | Turn Lanes and Median Openings | 334 | sy | \$ 134.62 | \$ 45,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 464,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 23,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 9,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 139,000 | |
| ✓ Illumination | | 10% | \$ | 46,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 9,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 19,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 9,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 263,000 | |
| Paving and Allowance Subtotal: | | | \$ | 727,000 | |
| Construction Contingency: | | | 15% | \$ | 109,000 |
| Mobilization | | | 8% | \$ | 58,000 |
| Prep ROW | | | 4% | \$ | 29,000 |
| 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: | Existing Alignment | 15% | \$ 150,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 1,300,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 2,131 | cy | \$ 15.00 | \$ 32,000 |
| 203 | 12" Asphalt (Type C) | 1,160 | ton | \$ 72.00 | \$ 84,000 |
| 303 | 16" Base | 781 | cy | \$ 55.00 | \$ 43,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 1,888 | sy | \$ 6.00 | \$ 11,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 352 | gal | \$ 6.00 | \$ 2,000 |
| 603 | 10' Concrete Sidewalk | 5,860 | sf | \$ 5.50 | \$ 32,000 |
| 703 | Machine Laid Curb & Gutter | 1,172 | lf | \$ 16.00 | \$ 19,000 |
| 803 | Turn Lanes and Median Openings | 178 | sy | \$ 134.62 | \$ 24,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 247,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 12,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 5,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 74,000 | |
| ✓ Illumination | | 10% | \$ | 25,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 5,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 5,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 10,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 5,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | Allowance Subtotal: | \$ | 141,000 |
| Paving and Allowance Subtotal: | | | \$ | 388,000 | |
| Construction Contingency: | | | 15% | \$ | 58,000 |
| Mobilization | | | 8% | \$ | 31,000 |
| Prep ROW | | | 4% | \$ | 16,000 |
| Construction Cost TOTAL: | | | \$ | 500,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 80,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 75,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 700,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|-----------|-----------|------------|----------------------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 21,139 | cy | \$ 15.00 | \$ 317,000 |
| 203 | 12" Asphalt (Type C) | 11,512 | ton | \$ 72.00 | \$ 829,000 |
| 303 | 16" Base | 7,752 | cy | \$ 55.00 | \$ 426,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 18,734 | sy | \$ 6.00 | \$ 112,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 3,488 | gal | \$ 6.00 | \$ 21,000 |
| 603 | 10' Concrete Sidewalk | 58,140 | sf | \$ 5.50 | \$ 320,000 |
| 703 | Machine Laid Curb & Gutter | 11,628 | lf | \$ 16.00 | \$ 186,000 |
| 803 | Turn Lanes and Median Openings | 1,762 | sy | \$ 134.62 | \$ 237,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,448,000 |
| 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 | | \$ | 800,000 | |
| ✓ 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: \$ 2,195,000 |
| Paving and Allowance Subtotal: | | | | | \$ 4,643,000 |
| Construction Contingency: | | | | | 15% \$ 696,000 |
| Mobilization | | | | | 8% \$ 371,000 |
| Prep ROW | | | | | 4% \$ 186,000 |
| 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 | 15% | \$ 885,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 7,700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 8,595 | cy | \$ 15.00 | \$ 129,000 |
| 203 | 12" Asphalt (Type C) | 4,681 | ton | \$ 72.00 | \$ 337,000 |
| 303 | 16" Base | 3,152 | cy | \$ 55.00 | \$ 173,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 7,617 | sy | \$ 6.00 | \$ 46,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 1,418 | gal | \$ 6.00 | \$ 9,000 |
| 603 | 10' Concrete Sidewalk | 23,640 | sf | \$ 5.50 | \$ 130,000 |
| 703 | Machine Laid Curb & Gutter | 4,728 | lf | \$ 16.00 | \$ 76,000 |
| 803 | Turn Lanes and Median Openings | 716 | sy | \$ 134.62 | \$ 96,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 996,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 50,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 20,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 299,000 | |
| ✓ Illumination | | 10% | \$ | 100,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 20,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 20,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 40,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 20,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | | Allowance Subtotal: \$ 569,000 |
| Paving and Allowance Subtotal: | | | | | \$ 1,565,000 |
| Construction Contingency: | | | | | 15% \$ 235,000 |
| Mobilization | | | | | 8% \$ 125,000 |
| Prep ROW | | | | | 4% \$ 63,000 |
| Construction Cost TOTAL: | | | | | \$ 2,000,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,000,000 |
| Engineering/Survey/Testing: | | 16% | \$ 320,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 300,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 2,600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 School Rd | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 3,735 | | | |
| Service Area(s): | C,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 27,159 | cy | \$ 15.00 | \$ 407,000 |
| 203 | 12" Asphalt (Type C) | 14,791 | ton | \$ 72.00 | \$ 1,065,000 |
| 303 | 16" Base | 9,960 | cy | \$ 55.00 | \$ 548,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 24,070 | sy | \$ 6.00 | \$ 144,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,482 | gal | \$ 6.00 | \$ 27,000 |
| 603 | 10' Concrete Sidewalk | 74,700 | sf | \$ 5.50 | \$ 411,000 |
| 703 | Machine Laid Curb & Gutter | 14,940 | lf | \$ 16.00 | \$ 239,000 |
| 803 | Turn Lanes and Median Openings | 2,264 | sy | \$ 134.62 | \$ 305,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 3,146,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 157,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 63,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 944,000 | |
| ✓ Illumination | | 10% | \$ | 315,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 63,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 63,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 126,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 63,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,794,000 | |
| Paving and Allowance Subtotal: | | | \$ | 4,940,000 | |
| Construction Contingency: | | | 15% | \$ | 741,000 |
| Mobilization | | | 8% | \$ | 395,000 |
| 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 | 15% | \$ 945,000 |
| 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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 Surrey Dr | | |
| Impact Fee Class: | 4 Lane - Enhanced | | |
| Ultimate Class: | 6 Lane - Enhanced | | |
| Length (lf): | 3,446 | | |
| Service Area(s): | C | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 25,058 | cy | \$ 15.00 | \$ 376,000 |
| 203 | 12" Asphalt (Type C) | 13,646 | ton | \$ 72.00 | \$ 983,000 |
| 303 | 16" Base | 9,189 | cy | \$ 55.00 | \$ 505,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 22,208 | sy | \$ 6.00 | \$ 133,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 4,135 | gal | \$ 6.00 | \$ 25,000 |
| 603 | 10' Concrete Sidewalk | 68,920 | sf | \$ 5.50 | \$ 379,000 |
| 703 | Machine Laid Curb & Gutter | 13,784 | lf | \$ 16.00 | \$ 221,000 |
| 803 | Turn Lanes and Median Openings | 2,088 | sy | \$ 134.62 | \$ 281,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,903,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 145,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 58,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 871,000 | |
| ✓ Illumination | | 10% | \$ | 290,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ 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: | \$ | 1,654,000 | |
| Paving and Allowance Subtotal: | | | \$ | 4,557,000 | |
| Construction Contingency: | | | 15% | \$ | 684,000 |
| Mobilization | | | 8% | \$ | 365,000 |
| Prep ROW | | | 4% | \$ | 182,000 |
| Construction Cost TOTAL: | | | \$ | 5,800,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 5,800,000 |
| Engineering/Survey/Testing: | | 16% | \$ 928,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 870,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 7,600,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| Project Information: | | Description: | Project No. C-21 |
|--------------------------|-----------------------------|---|------------------|
| Name: | Gattis School Rd (2) | This project consists of the reconstruction of existing pavement to a 6 lane divided arterial. | |
| Limits: | Windy Park Dr to Red Bud Ln | | |
| Impact Fee Class: | 6 Lane - Enhanced | | |
| Ultimate Class: | 6 Lane - Enhanced | | |
| Length (lf): | 14,903 | | |
| Service Area(s): | C | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|--------------------------------|---------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 105 | Unclassified Street Excavation | 146,822 | cy | \$ 15.00 | \$ 2,202,000 |
| 205 | 12" Asphalt (Type C) | 83,059 | ton | \$ 72.00 | \$ 5,980,000 |
| 305 | 16" Base | 55,932 | cy | \$ 55.00 | \$ 3,076,000 |
| 405 | 10" Lime Stabilization (with Lime @ 45#/sy) | 132,471 | sy | \$ 6.00 | \$ 795,000 |
| 505 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 25,170 | gal | \$ 6.00 | \$ 151,000 |
| 605 | 10' Concrete Sidewalk | 298,060 | sf | \$ 5.50 | \$ 1,639,000 |
| 705 | Machine Laid Curb & Gutter | 59,612 | lf | \$ 16.00 | \$ 954,000 |
| 805 | Turn Lanes and Median Openings | 9,032 | sy | \$ 134.62 | \$ 1,216,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 16,013,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 801,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 320,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 4,804,000 |
| ✓ | Illumination | | | 10% | \$ 1,601,000 |
| ✓ | Special Drainage Structures | Bridge Crossing | | | \$ 3,900,000 |
| ✓ | Water | Minor Adjustments | | 2% | \$ 320,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 320,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 641,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 320,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: | \$ 13,027,000 |
| | | | | Paving and Allowance Subtotal: | \$ 29,040,000 |
| Construction Contingency: | | | | 15% | \$ 4,356,000 |
| Mobilization | | | | 8% | \$ 2,323,000 |
| Prep ROW | | | | 4% | \$ 1,162,000 |
| Construction Cost TOTAL: | | | | \$ 36,900,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|----------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 36,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 5,904,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 5,535,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 48,300,000 |

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.

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

Kimley-Horn and Associates, Inc.
 updated: 6/5/2018

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

| Roadway Construction Cost Projection | | | | | |
|--|--|---|------|------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 104 | Unclassified Street Excavation | 12,320 | cy | \$ 15.00 | \$ 185,000 |
| 204 | Asphalt (Type C) | 0 | ton | \$ 72.00 | \$ - |
| 304 | Base | 0 | cy | \$ 55.00 | \$ - |
| 404 | Lime Stabilization (with Lime @ 45#/sy) | 0 | sy | \$ 6.00 | \$ - |
| 504 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 0 | gal | \$ 6.00 | \$ - |
| 604 | Concrete Sidewalk | 0 | sf | \$ 5.50 | \$ - |
| 704 | Machine Laid Curb & Gutter | 13,130 | lf | \$ 16.00 | \$ 210,000 |
| 804 | Turn Lanes and Median Openings | 3,979 | sy | \$ 134.62 | \$ 536,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 931,000 |
| 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: \$ | | | | 1,672,000 | |
| Construction Contingency: | | | | 15% | \$ 251,000 |
| Mobilization | | | | 5% | \$ 84,000 |
| Prep ROW | | | | \$3,000 / STA | \$ 20,000 |
| Construction Cost TOTAL: \$ | | | | 2,100,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,100,000 |
| Engineering/Survey/Testing: | | 16% | \$ 336,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | No ROW Acquisition Costs included | 0% | \$ - |
| Impact Fee Project Cost TOTAL: | | | \$ 2,400,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|--|--|------|-----------------------------------|------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 108 | Unclassified Street Excavation | 21,457 | cy | \$ 15.00 | \$ 322,000 |
| 208 | 5" Asphalt (Type C) | 12,139 | ton | \$ 72.00 | \$ 874,000 |
| 308 | 10" Base | 8,174 | cy | \$ 55.00 | \$ 450,000 |
| 408 | 10" Lime Stabilization (with Lime @ 45#/sy) | 19,360 | sy | \$ 6.00 | \$ 116,000 |
| 508 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 3,678 | gal | \$ 6.00 | \$ 22,000 |
| 608 | 10' Concrete Sidewalk | 43,560 | sf | \$ 5.50 | \$ 240,000 |
| 708 | Machine Laid Curb & Gutter | 8,712 | lf | \$ 16.00 | \$ 139,000 |
| 808 | Turn Lanes and Median Openings | 1,320 | sy | \$ 134.62 | \$ 178,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 2,341,000 |
| 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% | \$ 47,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 702,000 |
| ✓ | Illumination | | | 10% | \$ 234,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 47,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 47,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 94,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 47,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 1,218,000 |
| | | | | Paving and Allowance Subtotal: \$ | 3,559,000 |
| Construction Contingency: | | | | 15% | \$ 534,000 |
| Mobilization | | | | 8% | \$ 285,000 |
| Prep ROW | | | | 4% | \$ 142,000 |
| Construction Cost TOTAL: \$ | | | | 4,600,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|-----------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,600,000 |
| Engineering/Survey/Testing: | | 16% | \$ 736,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | New Roadway Alignment | 30% | \$ 1,380,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 6,700,000 |

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | | |
| Length (lf): | 5,351 | | |
| Service Area(s): | C | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|----------------------------|---------------------|------------|---------------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 106 | Unclassified Street Excavation | 20,083 | cy | \$ 15.00 | \$ 301,000 |
| 206 | 12" Asphalt (Type C) | 4,578 | ton | \$ 72.00 | \$ 330,000 |
| 306 | 16" Base | 7,399 | cy | \$ 55.00 | \$ 407,000 |
| 406 | 10" Lime Stabilization (with Lime @ 45#/sy) | 19,026 | sy | \$ 6.00 | \$ 114,000 |
| 506 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 3,330 | gal | \$ 6.00 | \$ 20,000 |
| 606 | 10' Concrete Sidewalk | 107,020 | sf | \$ 5.50 | \$ 589,000 |
| 706 | Machine Laid Curb & Gutter | 10,702 | lf | \$ 16.00 | \$ 171,000 |
| 806 | Turn Lanes and Median Openings | 0 | sy | \$ 134.62 | \$ - |
| Paving Construction Cost Subtotal: | | | | | \$ 1,932,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 97,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 39,000 | |
| ✓ Roadway Drainage | Standard Internal System | 60% | \$ | 1,159,000 | |
| ✓ Illumination | | 10% | \$ | 193,000 | |
| ✓ Special Drainage Structures | Minor Stream Crossing | | \$ | 200,000 | |
| ✓ Water | Minor Adjustments | 2% | \$ | 39,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 39,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 77,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 39,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ 1,882,000 | | |
| Paving and Allowance Subtotal: | | | \$ 3,814,000 | | |
| Construction Contingency: | | | 15% | \$ | 572,000 |
| Mobilization | | | 8% | \$ | 305,000 |
| Prep ROW | | | 4% | \$ | 153,000 |
| Construction Cost TOTAL: | | | \$ 4,900,000 | | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|---------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,900,000 |
| Engineering/Survey/Testing: | | 16% | \$ 784,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 735,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 6,400,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated:

6/5/2018

| Project Information: | | Description: | Project No. | C-25 |
|----------------------|---|---|-------------|------|
| Name: | Roundville Ln | This project consists of the reconstruction of existing pavement to a 3 lane collector. | | |
| Limits: | A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd | | | |
| Impact Fee Class: | 3 Lane - Proposed | | | |
| Ultimate Class: | 3 Lane - Proposed | | | |
| Length (lf): | 2,058 | | | |
| Service Area(s): | C | | | |

| Roadway Construction Cost Projection | |
|--------------------------------------|--------------|
| Construction Cost TOTAL: | \$ 2,699,826 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 2,699,826 |
| Engineering/Survey/Testing: | | - | \$ 493,431 |
| Other | | - | \$ 25,000 |
| ROW/Easement Acquisition: | Existing Alignment | - | \$ 61,000 |
| Overall Project Cost Total: | | | \$ 3,279,257 |
| City Contribution: | | | \$ 1,134,412 |
| Impact Fee Project Cost (35%): | | | \$ 1,134,412 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 | 2,116 | cy | \$ 15.00 | \$ 32,000 |
| 203 | 12" Asphalt (Type C) | 1,152 | ton | \$ 72.00 | \$ 83,000 |
| 303 | 16" Base | 776 | cy | \$ 55.00 | \$ 43,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 1,875 | sy | \$ 6.00 | \$ 11,000 |
| 503 | Surface Treatment (0.2 gal/sy,Prime Coat AE-P) | 349 | gal | \$ 6.00 | \$ 2,000 |
| 603 | 10' Concrete Sidewalk | 5,820 | sf | \$ 5.50 | \$ 32,000 |
| 703 | Machine Laid Curb & Gutter | 1,164 | lf | \$ 16.00 | \$ 19,000 |
| 803 | Turn Lanes and Median Openings | 176 | sy | \$ 134.62 | \$ 24,000 |
| Paving Construction Cost Subtotal: \$ | | | | | 246,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | | Notes | | Allowance | Item Cost |
| ✓ | Traffic Control | Construction Phase Traffic Control | | 5% | \$ 12,000 |
| ✓ | Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | | 2% | \$ 5,000 |
| ✓ | Roadway Drainage | Standard Internal System | | 30% | \$ 74,000 |
| ✓ | Illumination | | | 10% | \$ 25,000 |
| | Special Drainage Structures | None Anticipated | | | \$ - |
| ✓ | Water | Minor Adjustments | | 2% | \$ 5,000 |
| ✓ | Sewer | Minor Adjustments | | 2% | \$ 5,000 |
| ✓ | Turf and Erosion Control | | | 4% | \$ 10,000 |
| ✓ | Landscaping and Irrigation | | | 2% | \$ 5,000 |
| | Miscellaneous: | | | 0% | \$ - |
| **Allowances based on % of Paving Construction Cost Subtotal | | | | Allowance Subtotal: \$ | 141,000 |
| | | | | Paving and Allowance Subtotal: \$ | 387,000 |
| Construction Contingency: | | | | 15% | \$ 58,000 |
| Mobilization | | | | 8% | \$ 31,000 |
| Prep ROW | | | | 4% | \$ 15,000 |
| Construction Cost TOTAL: \$ | | | | | 500,000 |

| Impact Fee Project Cost Summary | | | |
|---------------------------------------|--------------------|-----------|-------------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 80,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 75,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 700,000 |

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.

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

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

| 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 Way | | | |
| Impact Fee Class: | 4 Lane - Enhanced | | | |
| Ultimate Class: | 4 Lane - Enhanced | | | |
| Length (lf): | 2,636 | | | |
| Service Area(s): | C,ETJ/Other | | | |

| Roadway Construction Cost Projection | | | | | |
|--|---|---------------------|-----------|------------|--------------|
| No. | Item Description | Quantity | Unit | Unit Price | Item Cost |
| 103 | Unclassified Street Excavation | 19,168 | cy | \$ 15.00 | \$ 288,000 |
| 203 | 12" Asphalt (Type C) | 10,439 | ton | \$ 72.00 | \$ 752,000 |
| 303 | 16" Base | 7,029 | cy | \$ 55.00 | \$ 387,000 |
| 403 | 10" Lime Stabilization (with Lime @ 45#/sy) | 16,988 | sy | \$ 6.00 | \$ 102,000 |
| 503 | Surface Treatment (0.2 gal/sy, Prime Coat AE-P) | 3,163 | gal | \$ 6.00 | \$ 19,000 |
| 603 | 10' Concrete Sidewalk | 52,720 | sf | \$ 5.50 | \$ 290,000 |
| 703 | Machine Laid Curb & Gutter | 10,544 | lf | \$ 16.00 | \$ 169,000 |
| 803 | Turn Lanes and Median Openings | 1,598 | sy | \$ 134.62 | \$ 215,000 |
| Paving Construction Cost Subtotal: | | | | | \$ 2,222,000 |
| Major Construction Component Allowances**: | | | | | |
| Item Description | Notes | Allowance | Item Cost | | |
| ✓ Traffic Control | Construction Phase Traffic Control | 5% | \$ | 111,000 | |
| ✓ Pavement Markings/Signs/Posts | Includes Striping/Signs for Shared Paths | 2% | \$ | 44,000 | |
| ✓ Roadway Drainage | Standard Internal System | 30% | \$ | 667,000 | |
| ✓ Illumination | | 10% | \$ | 222,000 | |
| Special Drainage Structures | None Anticipated | | \$ | - | |
| ✓ Water | Minor Adjustments | 2% | \$ | 44,000 | |
| ✓ Sewer | Minor Adjustments | 2% | \$ | 44,000 | |
| ✓ Turf and Erosion Control | | 4% | \$ | 89,000 | |
| ✓ Landscaping and Irrigation | | 2% | \$ | 44,000 | |
| Miscellaneous: | | 0% | \$ | - | |
| **Allowances based on % of Paving Construction Cost Subtotal | | Allowance Subtotal: | \$ | 1,265,000 | |
| Paving and Allowance Subtotal: | | | \$ | 3,487,000 | |
| Construction Contingency: | | | 15% | \$ | 523,000 |
| Mobilization | | | 8% | \$ | 279,000 |
| Prep ROW | | | 4% | \$ | 139,000 |
| Construction Cost TOTAL: | | | \$ | 4,500,000 | |

| Impact Fee Project Cost Summary | | | |
|---------------------------------|--------------------|-----------|--------------|
| Item Description | Notes: | Allowance | Item Cost |
| Construction: | | - | \$ 4,500,000 |
| Engineering/Survey/Testing: | | 16% | \$ 720,000 |
| Previous City contribution | | | |
| Other | | | |
| ROW/Easement Acquisition: | Existing Alignment | 15% | \$ 675,000 |
| Impact Fee Project Cost TOTAL: | | | \$ 5,900,000 |

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of 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 - 2018 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area A

11/19/2018

| 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 240' W of Lagoona Dr | 1.10 | 4 | 4 Lane - Enhanced (1/2) | 129 | 100% | 810 | 3569 | 142 | 3,427 | \$ 7,800,000 | \$ 7,800,000 |
| A-2 | New Hope Rd (2) | 240' W of Lagoona Dr to Mayfield Ranch Blvd | 0.23 | 4 | 4 Lane - Enhanced (1/2) | 129 | 50% | 810 | 375 | 15 | 360 | \$ 1,900,000 | \$ 950,000.00 |
| A-3 | New Hope Rd (3) | Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr | 0.93 | 4 | 4 Lane - Proposed | New | 50% | 810 | 1501 | 0 | 1501 | \$ 9,300,000 | \$ 4,650,000 |
| A-4, B-1 | Westinghouse Rd | IH 35 SBFR to IH 35 NBFR | 0.19 | 6 | 6 Lane - Enhanced | n/a | 50% | 900 | 519 | 0 | 519 | \$ 9,031,296 | \$ 4,515,648 |
| A-5 | Wyoming Springs Dr (1) | New Hope Dr (Future) to Blue Ridge Dr | 0.23 | 4 | 4 Lane - Enhanced (1/2) | n/a | 100% | 810 | 730 | 0 | 730 | \$ 1,700,000 | \$ 1,700,000 |
| A-6 | Wyoming Springs Dr (2) | Blue Ridge Dr to RM 1431 | 0.72 | 4 | 4 Lane - Proposed | New | 100% | 810 | 2338 | 0 | 2,338 | \$ 9,100,000 | \$ 9,100,000 |
| 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 | 1,545 | 1,082 | \$ 2,880,000 | \$ 1,440,000 |
| 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 | \$ 3,020,000 | \$ 3,020,000 |
| A-9 | RM 1431 (3) | 5195' E of Stone Oak St to IH 35 SBFR | 1.34 | 6 | 6 Lane - Enhanced | 3177 | 100% | 900 | 7235 | 4,256 | 2,979 | \$ 3,840,000 | \$ 3,840,000 |
| A-10 | Wyoming Springs Dr (3) | 390' N of GoldenOak Cir to Alondra Way | 0.13 | 4 | 4 Lane - Enhanced (1/2) | 505 | 100% | 810 | 431 | 67 | 364 | \$ 1,000,000 | \$ 1,000,000 |
| A-11 | Arterial L (1) | Wyoming Springs Dr to Chisholm Trl Rd (Future) | 2.15 | 4 | 4 Lane - Proposed | New | 100% | 810 | 6982 | 0 | 6,982 | \$ 27,400,000 | \$ 27,400,000 |
| A-12 | Creek Bend Blvd (1) | RM 1431 to West End Pl | 0.80 | 4 | 4 Lane - Proposed | New | 100% | 810 | 2590 | 0 | 2,590 | \$ 10,500,000 | \$ 10,500,000 |
| A-13 | Creek Bend Blvd (2) | West End Pl to Camino Del Verdes Pl | 0.79 | 4 | 4 Lane - Enhanced (1/2) | 307 | 100% | 810 | 2555 | 242 | 2,313 | \$ 5,900,000 | \$ 5,900,000 |
| A-14 | Chisholm Trl Rd (1) | RM 1431 to CR 173 | 0.80 | 4 | 4 Lane - Proposed | New | 100% | 810 | 2608 | 0 | 2,608 | \$ 11,200,000 | \$ 11,200,000 |
| A-15, B-11 | Arterial L (2) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 4 | 4 Lane - Proposed | New | 50% | 810 | 123 | 0 | 123 | \$ 5,700,000 | \$ 2,850,000 |
| A-16 | CR 173 | IH 35 SBFR to 3250' N of Wolle Ln | 0.10 | 4 | 4 Lane - Enhanced | 242 | 100% | 810 | 330 | 25 | 305 | \$ 1,300,000 | \$ 1,300,000 |
| A-17 | Chisholm Trl Rd (2) | 3250' N of Wolle Ln to 1980' N of Wolle Ln | 0.24 | 4 | 4 Lane - Enhanced | 242 | 100% | 810 | 781 | 58 | 723 | \$ 2,900,000 | \$ 2,900,000 |
| A-18 | Chisholm Trl Rd (3) | 1980' N of Wolle Ln to FM 3406 | 0.48 | 4 | 4 Lane - Enhanced (AM) | 536 | 100% | 810 | 1566 | 259 | 1,307 | \$ 900,000 | \$ 900,000 |
| A-19 | Sam Bass Rd (1) | 230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr | 0.23 | 6 | 6 Lane - Enhanced | 1712 | 50% | 900 | 624 | 198 | 426 | \$ 3,500,000 | \$ 1,750,000 |
| A-20 | Sam Bass Rd (2) | 390' W of Wyoming Springs Dr to FM 3406 | 0.30 | 6 | 6 Lane - Enhanced | 1712 | 100% | 900 | 1605 | 509 | 1,096 | \$ 4,500,000 | \$ 4,500,000 |
| A-21 | Sam Bass Rd (3) | FM 3406 to Desert Willow Dr | 0.35 | 4 | 4 Lane - Enhanced | 447 | 50% | 810 | 569 | 78 | 491 | \$ 4,200,000 | \$ 2,100,000 |
| A-22 | Sam Bass Rd (4) | Desert Willow Dr to Creek Bend Blvd | 0.19 | 4 | 4 Lane - Enhanced | 447 | 100% | 810 | 608 | 84 | 524 | \$ 2,200,000 | \$ 2,200,000 |
| A-23 | Sam Bass Rd (5) | Creek Bend Blvd to Hairy Man Dr | 1.86 | 4 | 4 Lane - Enhanced | 1164 | 100% | 810 | 6038 | 2,169 | 3,869 | \$ 2,500,000 | \$ 2,500,000 |
| A-24 | Sam Bass Rd (6) | Hairy Man Rd to 700' E of Hairy Man Rd | 0.21 | 4 | 4 Lane - Enhanced | 1164 | 50% | 810 | 345 | 124 | 221 | \$ 1,600,000 | \$ 800,000 |
| A-25 | FM 3406 | Sam Bass Rd to IH 35 SBFR | 1.65 | 6 | 6 Lane - Enhanced | 2025 | 100% | 900 | 8888 | 3,333 | 5,555 | \$ 6,980,000 | \$ 6,980,000 |
| A-26 | Wyoming Springs Dr (4) | Sam Bass Rd to Brushy Creek | 0.39 | 4 | 4 Lane - Proposed | New | 100% | 810 | 1262 | 0 | 1,262 | \$ 8,500,000 | \$ 8,500,000 |
| A-27 | Chisholm Trl Rd (4) | FM 3406 to Sam Bass Rd | 1.33 | 4 | 4 Lane - Enhanced (AM) | 649 | 100% | 810 | 4295 | 860 | 3,435 | \$ 2,600,000 | \$ 2,600,000 |
| A-28 | Creek Bend Blvd (3) | Brushy Creek to Wyoming Springs Dr | 0.40 | 4 | 4 Lane - Enhanced | 1093 | 100% | 810 | 1303 | 439 | 864 | \$ 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 | \$ 6,000,000 | \$ 6,000,000 |
| 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 | \$ 800,000 | \$ 800,000 |
| A-31, C-1 | RM 620 | Deepwood Dr to IH 35 SBFR | 0.93 | 6 | 6 Lane - Enhanced | 2985 | 50% | 900 | 2517 | 1,391 | 1,126 | \$ 12,560,624 | \$ 6,280,312 |
| SUBTOTAL | | | | | | | | | 70,654 | 18,407 | 52,247 | \$ 182,324,222 | \$ 156,988,262 |
| AI-1 | Sam Bass Rd and FM 3406 | SIGNAL | - | - | Intersection Improvements | | 100% | | | | | \$ 295,000 | \$ 295,000 |
| AI-2 | Sam Bass Rd and Hairy Man Rd | INTERSECTION IMPROVEMENT | - | - | | | 75% | | | | | \$ 2,000,000 | \$ 1,500,000 |
| AI-3 | Sam Bass Rd and Chisholm Trl Rd | TURN LANES | - | - | | | 100% | | | | | \$ 139,000 | \$ 139,000 |
| AI-4, CI-1 | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | - | - | | | 50% | | | | | \$ 392,000 | \$ 196,000 |
| AI-5, CI-2 | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | - | - | | | 50% | | | | | \$ 588,000 | \$ 294,000 |
| - | Update ITS and Traffic Managemenet Infrastructure | - | - | - | | | 33% | | | | | \$ 20,900,000 | \$ 6,967,000 |
| SUBTOTAL | | | | | | | | | | | | \$ 24,314,000 | \$ 9,391,000 |

2018 Roadway Impact Fee Study Cost Per Service Area \$ 34,673

TOTAL COST IN SERVICE AREA A \$ 166,413,935

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 - 2018 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area B

7/31/2018

| 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 | 519 | 0 | 519 | \$ 9,031,296 | \$ 4,515,648 |
| B-2 | Westinghouse Rd (2) | 3895' E of A.W. Grimes to 6350' W of A.W. Grimes | 0.47 | 4 | 4 Lane - Enhanced | 477 | 50% | 810 | 754 | 111 | 643 | \$ 5,500,000 | \$ 2,750,000 |
| B-3 | N Mays St (1) | 1777' N of Teravista Pkwy to Teravista Pkwy | 0.34 | 4 | 4 Lane - Existing | 426 | 100% | 810 | 1090 | 143 | 947 | \$ 1,889,219 | \$ 1,889,219 |
| B-4 | University Blvd (1) | University Oaks Blvd to 335' W of Sunrise Dr | 0.49 | 6 | 6 Lane - Enhanced | 2,626 | 100% | 900 | 2661 | 1294 | 1367 | \$ 8,900,000 | \$ 8,900,000 |
| B-5 | University Blvd (2) | 335' W of Sunrise Dr to A.W. Grimes Blvd | 2.03 | 6 | 6 Lane - Enhanced | 2,036 | 50% | 900 | 5473 | 2064 | 3409 | \$ 30,700,000 | \$ 15,350,000 |
| B-6 | University Blvd (3) | A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd | 0.36 | 4 | 4 Lane - Enhanced | 1,350 | 100% | 810 | 1179 | 491 | 688 | \$ 4,800,000 | \$ 4,800,000 |
| B-7 | University Blvd (4) | 1830' E of A.W. Grimes Blvd to Lunata Way | 0.78 | 4 | 4 Lane - Enhanced | 1,350 | 50% | 810 | 1256 | 523 | 733 | \$ 9,700,000 | \$ 4,850,000 |
| B-8 | University Blvd (5) | Lunata Way to SH 130 SBFR | 2.47 | 4 | 4 Lane - Enhanced | 1,350 | 100% | 810 | 7997 | 3332 | 4665 | \$ 29,300,000 | \$ 29,300,000 |
| B-9 | N Mays St (2) | University Blvd to 2000' S of University Blvd | 0.38 | 4 | 4 Lane - Enhanced | 585 | 100% | 810 | 1229 | 222 | 1007 | \$ 5,800,000 | \$ 5,800,000 |
| B-10 | N Mays St (3) | 2000' S of University Blvd to Paloma Dr | 0.88 | 4 | 4 Lane - Proposed | New | 100% | 810 | 2844 | 0 | 2844 | \$ 24,800,000 | \$ 24,800,000 |
| A-15, B-11 | Arterial L (1) | Chisholm Trl Rd (Future) to IH 35 NBFR | 0.08 | 4 | 4 Lane - Proposed | New | 50% | 810 | 123 | 0 | 123 | \$ 5,700,000 | \$ 2,850,000 |
| B-12 | Arterial L (2) | IH 35 NBFR to Cypress Blvd | 0.69 | 4 | 4 Lane - Proposed | New | 100% | 810 | 2236 | 0 | 2236 | \$ 21,200,000 | \$ 21,200,000 |
| B-13 | N Mays St (4) | Paloma Dr to 540' N of Steam Way | 0.27 | 4 | 4 Lane - Enhanced | 416 | 100% | 810 | 860 | 110 | 750 | \$ 3,100,000 | \$ 3,100,000 |
| B-14 | Sunrise Rd (1) | University Blvd to Hidden Valley Dr | 0.23 | 4 | 4 Lane - Existing | 1,325 | 100% | 810 | 755 | 309 | 446 | \$ 979,190 | \$ 979,190 |
| B-15 | Sunrise Rd (2) | Hidden Valley Dr to 325' S of Eagles Nest St | 0.54 | 4 | 4 Lane - Enhanced (AM) | 1,325 | 100% | 810 | 1754 | 717 | 1037 | \$ 1,000,000 | \$ 1,000,000 |
| B-16 | Sunrise Rd (3) | 325' S of Eagles Nest St to Applegate Cir | 0.30 | 4 | 4 Lane - Enhanced (AM) | 1,325 | 50% | 810 | 484 | 198 | 286 | \$ 600,000 | \$ 300,000 |
| B-17 | Sunrise Rd (4) | Applegate Cir to Lake Dr | 0.20 | 4 | 4 Lane - Enhanced (AM) | 1,325 | 100% | 810 | 660 | 270 | 390 | \$ 500,000 | \$ 500,000 |
| B-18 | Sunrise Rd (5) | Lake Dr to 545' S of Lake Dr | 0.10 | 4 | 4 Lane - Enhanced (AM) | 1,325 | 50% | 810 | 167 | 68 | 99 | \$ 200,000 | \$ 100,000 |
| B-19 | Sunrise Rd (6) | 545' S of Lake Dr to Old Settlers Blvd | 0.40 | 4 | 4 Lane - Enhanced (AM) | 1,325 | 100% | 810 | 1287 | 526 | 761 | \$ 800,000 | \$ 800,000 |
| B-20 | College Park (1) | Satellite View to Avery Nelson Blvd | 0.75 | 4 | 4 Lane - Enhanced (1/2) | 448 | 100% | 810 | 2423 | 335 | 2088 | \$ 5,400,000 | \$ 5,400,000 |
| B-21 | Avery Nelson | Gulf Way to College Park | 0.41 | 3 | 3 Lane - Proposed | New | 100% | 410 | 500 | 0 | 500 | \$ 2,800,000 | \$ 2,800,000 |
| 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 | \$ 11,500,000 | \$ 11,500,000 |
| B-23 | Seton Pkwy | 2400' N of Avery Nelson Blvd to Avery Nelson Blvd | 0.45 | 3 | 3 Lane - Existing | n/a | 100% | 410 | 558 | 0 | 558 | \$ 2,043,320 | \$ 2,043,320 |
| B-24 | Medical Center Pkwy | Seton Pkwy to A.W. Grimes Blvd | 0.18 | 4 | 4 Lane - Existing | n/a | 100% | 810 | 584 | 0 | 584 | \$ 810,679 | \$ 810,679 |
| B-25 | CR 112 (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 | \$ 8,000,000 | \$ 8,000,000 |
| B-26 | CR 112 (2) | 3580' E of A.W. Grimes Blvd to CR 117 | 0.43 | 4 | 4 Lane - Enhanced | 522 | 50% | 810 | 689 | 111 | 578 | \$ 5,000,000 | \$ 2,500,000 |
| B-27 | Kenney Fort Blvd (1) | CR 117 to Old Settlers Blvd | 1.06 | 4 | 4 Lane - Proposed | New | 100% | 810 | 3435 | 0 | 3435 | \$ 13,700,000 | \$ 13,700,000 |
| B-28 | Red Bud Ln (1) | Guadalajara St to 160' N of Margarita Loop | 0.35 | 4 | 4 Lane - Enhanced (1/2) | 871 | 100% | 810 | 1146 | 308 | 838 | \$ 2,600,000 | \$ 2,600,000 |
| B-29 | Red Bud Ln (2) | 160' N of Margarita Loop to CR 117 | 0.35 | 4 | 4 Lane - Enhanced (1/2) | 871 | 50% | 810 | 566 | 152 | 414 | \$ 3,000,000 | \$ 1,500,000 |
| B-30 | Red Bud Ln (3) | CR 117 to Old Settlers Blvd | 0.34 | 4 | 4 Lane - Enhanced | 871 | 100% | 810 | 1097 | 295 | 802 | \$ 4,100,000 | \$ 4,100,000 |
| B-31 | Old Settlers Blvd (1) | N Mays St to Sunrise Rd | 1.33 | 6 | 6 Lane - Enhanced (1/3) | 2,545 | 100% | 900 | 7205 | 3396 | 3809 | \$ 6,800,000 | \$ 6,800,000 |
| B-32 | Old Settlers Blvd (2) | Sunrise Rd to A.W. Grimes Blvd | 1.13 | 6 | 6 Lane - Enhanced | 2,086 | 100% | 900 | 6090 | 2353 | 3737 | \$ 18,100,000 | \$ 18,100,000 |
| B-33 | Old Settlers Blvd (3) | Red Bud Ln to CR 110 | 0.46 | 4 | 4 Lane - Proposed | New | 100% | 810 | 1483 | 0 | 1483 | \$ 5,800,000 | \$ 5,800,000 |
| B-34 | Spur 379 (N Mays St) | 540' N of Steam Way to Northwest Dr | 1.43 | 4 | 4 Lane - Enhanced (AM) | 1,173 | 100% | 810 | 4617 | 1672 | 2945 | \$ 2,700,000 | \$ 2,700,000 |
| B-35 | Sunrise Rd (7) | Old Settlers Blvd to Country Aire Dr | 0.28 | 4 | 4 Lane - Enhanced (AM) | 1,266 | 100% | 810 | 911 | 356 | 555 | \$ 600,000 | \$ 600,000 |
| B-36 | FM 1460 (A.W. Grimes Blvd) (1) | Old Settlers Blvd to 375' S of Chandler Creek Blvd | 0.35 | 6 | 6 Lane - Enhanced | 2,045 | 100% | 900 | 1888 | 715 | 1173 | \$ 1,000,000 | \$ 1,000,000 |
| B-37 | 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 | 2,045 | 50% | 900 | 539 | 204 | 335 | \$ 1,000,000 | \$ 500,000 |
| B-38 | FM 1460 (A.W. Grimes Blvd) (3) | 1250' N of Tiger Trl to US 79 | 1.25 | 6 | 6 Lane - Enhanced | 2,297 | 100% | 900 | 6751 | 2872 | 3879 | \$ 3,940,000 | \$ 3,940,000 |
| B-39 | Kenney Fort Blvd (2) | Old Settler's Blvd to 2540' S of Old Settler's Blvd | 0.30 | 6 | 6 Lane - Proposed (1/2) | n/a | 100% | 900 | 1602 | 0 | 1602 | \$ 2,600,000 | \$ 2,600,000 |
| B-40 | Kenney Fort Blvd (3) | Old Settler's Blvd to 2540' S of Old Settler's Blvd | 0.18 | 6 | 6 Lane - Proposed | n/a | 50% | 900 | 496 | 0 | 496 | \$ 2,800,000 | \$ 1,400,000 |
| B-41 | Kenney Fort Blvd (4) | 2540' S of Old Settlers Blvd to Chandler Creek Blvd | 0.95 | 6 | 6 Lane - Proposed | New | 100% | 900 | 5124 | 0 | 5124 | \$ 15,200,000 | \$ 15,200,000 |
| B-42 | Kenney Fort Blvd (5) | Chandler Creek Blvd to Joe DiMaggio Blvd | 0.30 | 6 | 6 Lane - Enhanced | 458 | 100% | 900 | 1601 | 136 | 1465 | \$ 5,800,000 | \$ 5,800,000 |
| B-43 | Red Bud Ln (4) | Old Settlers Blvd to 170' N of Joseph St | 0.45 | 4 | 4 Lane - Enhanced | 1,400 | 100% | 810 | 1446 | 625 | 821 | \$ 5,200,000 | \$ 5,200,000 |
| B-44 | Red Bud Ln (5) | 170' N of Joseph St to 160' S of Covered Wagon Trl | 0.18 | 4 | 4 Lane - Enhanced | 1,400 | 50% | 810 | 294 | 127 | 167 | \$ 2,200,000 | \$ 1,100,000 |
| B-45 | Red Bud Ln (6) | 160' S of Covered Wagon Trl to US 79 | 0.41 | 4 | 4 Lane - Enhanced | 1,400 | 100% | 810 | 1314 | 568 | 746 | \$ 4,700,000 | \$ 4,700,000 |
| B-46, C-6 | US 79 (1) | N Mays St to 200' E of Red Bud Ln | 4.32 | 6 | 6 Lane - Enhanced | 3,142 | 50% | 900 | 11668 | 6789 | 4879 | \$ 13,340,000 | \$ 6,670,000 |
| B-47 | US 79 (2) | 200' E of Red Bud Ln to 1690' E of Red Bud Ln | 0.28 | 6 | 6 Lane - Enhanced | 2,936 | 50% | 900 | 761 | 414 | 347 | \$ 900,000 | \$ 450,000 |
| SUBTOTAL | | | | | | | | | 104,987 | 32,160 | 72,827 | \$ 316,133,704 | \$ 271,298,056 |
| BI-1 | N Mays St and University Blvd | TURN LANES | - | - | Intersection Improvements | | 100% | | | | | \$ 784,000 | \$ 784,000 |
| BI-2 | Sunrise Rd and University Blvd | TURN LANES | - | - | | | 100% | | | | | \$ 1,063,000 | \$ 1,063,000 |
| BI-3 | N Mays St and Steam Way | TURN LANES | - | - | | | 100% | | | | | \$ 170,235 | \$ 170,235 |
| BI-4, CI-8 | A.W. Grimes Blvd and Palm Valley Blvd | OTHER & TURN LANES | - | - | | | 50% | | | | | \$ 2,041,000 | \$ 1,020,500 |
| - | Update ITS and Traffic Managemnet Infrastructure | - | - | - | | | 33% | | | | | \$ 20,900,000 | \$ 6,966,667 |
| SUBTOTAL | | | | | | | | | | | | \$ 24,958,235 | \$ 10,004,402 |

2018 Roadway Impact Fee Study Cost Per Service Area \$ 34,673

TOTAL COST IN SERVICE AREA B \$ 281,337,131

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 - 2018 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

7/31/2018

| 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-31, C-1 | RM 620 | Deepwood Dr to IH 35 SBFR | 0.93 | 6 | 6 Lane - Enhanced | 2985 | 50% | 900 | 2517 | 1,391 | 1,126 | \$ 12,560,624 | \$ 6,280,312 |
| C-2 | CR 172 (1) | McNeil Dr to Lynda Sue St | 0.20 | 4 | 4 Lane - Enhanced | 1624 | 50% | 810 | 323 | 162 | 161 | \$ 2,400,000 | \$ 1,200,000 |
| 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 | \$ 1,000,000 | \$ 500,000 |
| C-4 | Hesters Crossing Rd | Dry Creek Dr to IH 35 SBFR | 0.32 | 4 | 4 Lane - Enhanced (AM) | 1749 | 100% | 810 | 1038 | 560 | 478 | \$ 700,000 | \$ 700,000 |
| 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 | \$ 5,000,000 | \$ 2,500,000 |
| B-46, C-6 | US 79 (1) | N Mays St to 200' E of Red Bud Ln | 4.32 | 6 | 6 Lane - Enhanced | 3142 | 50% | 900 | 11668 | 6789 | 4879 | \$ 13,340,000 | \$ 6,670,000 |
| C-7 | McNeil Extension | S Mays St to Georgetown St | 0.52 | 3 | 3 Lane - Proposed | New | 100% | 410 | 636 | 0 | 636 | \$ 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 | 2243 | 1017 | 1226 | \$ 1,400,000 | \$ 1,400,000 |
| C-9 | Kenney Fort Blvd (1) | US 79 to Forest Creek Blvd | 0.95 | 6 | 6 Lane - Existing | 613 | 100% | 900 | 5154 | 585 | 4569 | \$ 23,375,873 | \$ 23,375,873 |
| 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 | 5639 | 0 | 5639 | \$ 24,500,000 | \$ 24,500,000 |
| C-11 | Red Bud Ln (1) | Forest Ridge Blvd to 265' S of Forest Ridge Blvd | 0.05 | 4 | 4 Lane - Enhanced (AM) | 1478 | 50% | 810 | 81 | 37 | 44 | \$ 100,000 | \$ 50,000 |
| C-12 | Red Bud Ln (2) | 265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln | 0.11 | 4 | 4 Lane - Enhanced | 1478 | 100% | 810 | 347 | 158 | 189 | \$ 1,300,000 | \$ 1,300,000 |
| C-13 | Red Bud Ln (3) | 280' S of Woodlawn Ln to 130' S of Old Oaks Dr | 0.10 | 4 | 4 Lane - Enhanced | 1478 | 50% | 810 | 170 | 78 | 92 | \$ 1,300,000 | \$ 650,000 |
| C-14 | Red Bud Ln (4) | 130' S of Old Oaks Dr to 315' S of Country Dr | 0.11 | 4 | 4 Lane - Enhanced | 1478 | 100% | 810 | 344 | 157 | 187 | \$ 1,300,000 | \$ 1,300,000 |
| C-15 | Red Bud Ln (5) | 315' S of Country Dr to Wildflower Trl | 0.10 | 4 | 4 Lane - Enhanced | 1478 | 50% | 810 | 169 | 77 | 92 | \$ 1,300,000 | \$ 650,000 |
| C-16 | Red Bud Ln (6) | Wildflower Trl to 295' S of Wildflower Trl | 0.06 | 4 | 4 Lane - Enhanced | 1478 | 100% | 810 | 180 | 82 | 98 | \$ 700,000 | \$ 700,000 |
| C-17 | Red Bud Ln (7) | 295' S of Wildflower Trl to 840' N of Forest Creek Dr | 0.55 | 4 | 4 Lane - Enhanced | 1478 | 50% | 810 | 892 | 407 | 485 | \$ 7,700,000 | \$ 3,850,000 |
| 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 | 1478 | 100% | 810 | 725 | 331 | 394 | \$ 2,600,000 | \$ 2,600,000 |
| C-19 | Red Bud Ln (9) | 340' S of Forest Creek Dr to Gattis School Rd | 0.71 | 4 | 4 Lane - Enhanced | 1540 | 50% | 810 | 1146 | 545 | 601 | \$ 8,300,000 | \$ 4,150,000 |
| C-20 | Gattis School Rd (1) | S Mays St to Surrey Dr | 0.65 | 4 | 4 Lane - Enhanced | 1888 | 100% | 810 | 2115 | 1232 | 883 | \$ 7,600,000 | \$ 7,600,000 |
| C-21 | Gattis School Rd (2) | Windy Park Dr to Red Bud Ln | 2.82 | 6 | 6 Lane - Enhanced | 2037 | 100% | 900 | 15242 | 5750 | 9492 | \$ 48,300,000 | \$ 48,300,000 |
| C-22 | S Mays St / Dell Way | Gattis School Rd to Greenlawn Blvd | 1.24 | 4 | 4 Lane - Enhanced (AM) | 1253 | 100% | 810 | 4029 | 1558 | 2471 | \$ 2,400,000 | \$ 2,400,000 |
| C-23 | Kenney Fort Blvd (3) | 830' S of Gattis School Rd to SH 45 | 0.41 | 6 | 6 Lane - Proposed | New | 50% | 900 | 1114 | 0 | 1114 | \$ 6,700,000 | \$ 3,350,000 |
| C-24 | Greenlawn Blvd | IH 35 NBFR to SH 45 EBFR | 1.86 | 6 | 6 Lane - Enhanced (1/3) | 1026 | 100% | 900 | 10064 | 1912 | 8152 | \$ 6,400,000 | \$ 6,400,000 |
| C-25 | Roundville Ln | A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd | 0.21 | 3 | 3 Lane - Proposed | n/a | 100% | 410 | 262 | 0 | 262 | \$ 1,134,412 | \$ 1,134,412 |
| 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 | \$ 700,000 | \$ 700,000 |
| 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 | \$ 5,900,000 | \$ 2,950,000 |
| SUBTOTAL | | | | | | | | | 72,412 | 23,729 | 48,683 | \$ 192,810,529 | \$ 160,010,217 |
| AI-4, CI-1 | Deepwood Dr and Round Rock Ave (RM 620) | TURN LANES | - | - | Intersection Improvements | | 50% | | | | | \$ 392,000 | \$ 196,000 |
| AI-5, CI-2 | IH 35 Blvd and Round Rock Ave (RM 620) | TURN LANES | - | - | | | 50% | | | | | \$ 588,000 | \$ 294,000 |
| CI-3 | IH 35 and Hesters Crossing Rd | TURN LANES | - | - | | | 100% | | | | | \$ 196,000 | \$ 196,000 |
| CI-4 | IH 35 and Louis Henna Blvd (SH 45 FR) | TURN LANES & SIGNAL | - | - | | | 100% | | | | | \$ 2,037,000 | \$ 2,037,000 |
| CI-5 | Mays St and Liberty Ave | SIGNAL | - | - | | | 100% | | | | | \$ 353,000 | \$ 353,000 |
| CI-6 | Mays St and Gattis School Rd | TURN LANES | - | - | | | 100% | | | | | \$ 1,847,503 | \$ 1,847,503 |
| CI-7 | Greenlawn Blvd and Louis Henna Blvd (SH 45 FR) | OTHER | - | - | | | 100% | | | | | \$ 784,000 | \$ 784,000 |
| BI-4, CI-8 | A.W. Grimes Blvd and Palm Valley Blvd | OTHER & TURN LANES | - | - | | | 50% | | | | | \$ 2,041,000 | \$ 1,020,500 |
| CI-9 | A.W. Grimes Blvd and Gattis School Rd | TURN LANES | - | - | | | 100% | | | | | \$ 1,921,000 | \$ 1,921,000 |
| CI-10 | Red Bud Ln and Gattis School Rd | TURN LANES | - | - | | | 100% | | | | | \$ 1,595,000 | \$ 1,595,000 |
| - | Update ITS and Traffic Managemenet Infrastructure | - | - | - | | | 33% | | | | | \$ 20,900,000 | \$ 6,966,667 |
| SUBTOTAL | | | | | | | | | | | | \$ 32,654,503 | \$ 17,210,670 |

2018 Roadway Impact Fee Study Cost Per Service Area \$ 34,673

TOTAL COST IN SERVICE AREA C \$ 177,255,560

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 - 2018 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area A

7/31/2018

| 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 | 3250' N of Wolle Ln | 1980' N of Wolle Ln | 1,272 | 0.24 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 27 | 215 | 100% | 410 | 410 | 99 | 99 | 7 | 52 | 92 | 47 | | |
| Chisholm Trl Rd | 1980' N of Wolle Ln | FM 3406 | 2,552 | 0.48 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 252 | 284 | 100% | 770 | 770 | 744 | 744 | 122 | 137 | 623 | 607 | | |
| Chisholm Trl Rd | FM 3406 | Sam Bass Rd | 7,000 | 1.33 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 401 | 248 | 100% | 770 | 770 | 2,042 | 2,042 | 532 | 329 | 1,510 | 1,713 | | |
| 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 | |
| CR 173 | IH 35 SBFR | 3250' N of Wolle Ln | 538 | 0.10 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 27 | 215 | 100% | 410 | 410 | 42 | 42 | 3 | 22 | 39 | 20 | | |
| Creek Bend Blvd | West End Pl | Camino Del Verdes Pl | 4,163 | 0.79 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 177 | 130 | 100% | 410 | 410 | 323 | 323 | 140 | 102 | 184 | 221 | | |
| Creek Bend Blvd | Brushy Creek | Wyoming Springs Dr | 2,123 | 0.40 | 0 | 0 | 4D | 4 Lane - Existing | 4D | 717 | 376 | 100% | 810 | 810 | 0 | 0 | 288 | 151 | -288 | -151 | 288 | 151 |
| Creek Bend Blvd/Bright Wa | Camino Del Verdes Pl | FM 3406 | 688 | 0.13 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 177 | 130 | 100% | 810 | 810 | 211 | 211 | 23 | 17 | 188 | 194 | | |
| Creek Bend Blvd/Bright Wa | FM 3406 | Sam Bass Rd | 1,997 | 0.38 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 244 | 319 | 100% | 810 | 810 | 613 | 613 | 92 | 121 | 520 | 492 | | |
| Creek Bend Blvd/Bright Wa | Sam Bass Rd | Hairy Man Rd | 1,719 | 0.33 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 717 | 376 | 100% | 810 | 810 | 527 | 527 | 233 | 122 | 294 | 405 | | |
| Deepwood Dr | 350' N of RM 620 | RM 620 | 346 | 0.07 | 1 | 1 | 2U | 4 Lane - Proposed | 4D | n/a | n/a | 100% | 410 | 410 | 27 | 27 | | | | | | |
| FM 3406 | Chisholm Trl | IH 35 SBFR | 588 | 0.11 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 765 | 1,260 | 100% | 770 | 770 | 172 | 172 | 85 | 140 | 86 | 31 | | |
| FM 3406 | Creek Bend Dr | Chisholm Trl | 5,165 | 0.98 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 765 | 1,260 | 100% | 770 | 770 | 1,506 | 1,506 | 748 | 1,233 | 758 | 274 | | |
| FM 3406 | IH 35 SBFR | IH 35 NBFR | 661 | 0.13 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | n/a | n/a | 50% | 770 | 770 | 96 | 96 | | | | | | |
| FM 3406 | Sam Bass Rd | Creek Bend Blvd | 2,937 | 0.56 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 735 | 1,140 | 100% | 770 | 770 | 857 | 857 | 409 | 634 | 448 | 223 | | |
| 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 | IH 35 SBFR | IH 35 NBFR | 416 | 0.08 | 3 | 3 | 6U | 6 Lane - Existing | 6U | n/a | n/a | 100% | 770 | 770 | 182 | 182 | | | | | | |
| FM 620 | 445' S of Smyers Ln | Wyoming Springs Dr | 3,197 | 0.61 | 3 | 3 | 6D | 6 Lane - Existing | 6D | 1,787 | 1,476 | 50% | 900 | 900 | 817 | 817 | 541 | 447 | 276 | 371 | | |
| FM 620 | Wyoming Springs Dr | Deepwood Dr | 4,881 | 0.92 | 3 | 3 | 6D | 6 Lane - Existing | 6D | 1,787 | 1,476 | 50% | 900 | 900 | 1,248 | 1,248 | 826 | 682 | 422 | 566 | | |
| Hairy Man Rd | Creek Bend Blvd | Sam Bass Rd | 2,281 | 0.43 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 50% | 410 | 410 | 89 | 89 | | | | | | |
| New Hope Dr | Sam Bass Rd | 240' W of Lagoona Dr | 5,816 | 1.10 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 73 | 56 | 100% | 410 | 410 | 452 | 452 | 80 | 62 | 371 | 390 | | |
| New Hope Dr | 240' W of Lagoona Dr | Mayfield Ranch Blvd | 1,223 | 0.23 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 73 | 56 | 50% | 410 | 410 | 47 | 47 | 8 | 6 | 39 | 41 | | |
| 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 | 50% | 770 | 770 | 1,267 | 1,267 | 1,280 | 1,333 | -13 | -67 | 13 | 67 |
| RM 1431 | 5195' E of Stone Oak St | 1470' W of IH 35 SBFR | 5,605 | 1.06 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 1,556 | 1,621 | 50% | 680 | 680 | 722 | 722 | 826 | 860 | -104 | -139 | 104 | 139 |
| RM 1431 | 1470' W of IH 35 SBFR | IH 35 SBFR | 1,469 | 0.28 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,556 | 1,621 | 100% | 770 | 770 | 428 | 428 | 433 | 451 | -4 | -23 | 4 | 23 |
| RM 620 | Deepwood Dr | Chisholm Trl Rd | 4,012 | 0.76 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,293 | 1,692 | 50% | 770 | 770 | 585 | 585 | 491 | 643 | 94 | -58 | | 58 |
| Sam Bass Rd | Chisholm Trl | IH 35 SBFR | 609 | 0.12 | 2 | 2 | 5U | 4 Lane - Existing | 5U | 637 | 527 | 100% | 770 | 770 | 178 | 178 | 73 | 61 | 104 | 117 | | |
| Sam Bass Rd | Creek Bend Blvd | Hairy Man Rd | 1,121 | 0.21 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 637 | 527 | 100% | 410 | 410 | 87 | 87 | 135 | 112 | -48 | -25 | 48 | 25 |
| Sam Bass Rd | 700' E of Hairy Man Rd | Deepwood Dr (Future) | 3,112 | 0.59 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 637 | 527 | 100% | 410 | 410 | 242 | 242 | 375 | 311 | -134 | -69 | 134 | 69 |
| Sam Bass Rd | Hairy Man Rd | 700' E of Hairy Man Rd | 703 | 0.13 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 637 | 527 | 50% | 410 | 410 | 27 | 27 | 42 | 35 | -15 | -8 | 15 | 8 |
| Sam Bass Rd | Deepwood Dr (Future) | Wonder Dr | 2,608 | 0.49 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 637 | 527 | 100% | 410 | 410 | 203 | 203 | 315 | 260 | -112 | -58 | 112 | 58 |
| Sam Bass Rd | Wonder Dr | Chisholm Trl | 597 | 0.11 | 1 | 2 | 3U | 4 Lane - Enhanced | 3U | 637 | 527 | 100% | 510 | 510 | 58 | 115 | 72 | 60 | -14 | 56 | 14 | |
| Sam Bass Rd | 230' W of Tonkawa Trl | 390' W of Wyoming Spring | 1,221 | 0.23 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 694 | 1,018 | 50% | 680 | 680 | 157 | 157 | 80 | 118 | 77 | 40 | | |
| Sam Bass Rd | 390' W of Wyoming Spring | Wyoming Springs Dr | 391 | 0.07 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 694 | 1,018 | 100% | 680 | 680 | 101 | 101 | 51 | 75 | 49 | 25 | | |
| Sam Bass Rd | FM 3406 | 75' E of Desert Willow Dr | 1,853 | 0.35 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 228 | 219 | 50% | 410 | 410 | 72 | 72 | 40 | 38 | 32 | 34 | | |
| Sam Bass Rd | 75' E of Desert Willow Dr | Creek Bend Blvd | 991 | 0.19 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 228 | 219 | 100% | 410 | 410 | 77 | 77 | 43 | 41 | 34 | 36 | | |
| Sam Bass Rd | Wyoming Springs Dr | Sam Bass Rd | 1,178 | 0.22 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 694 | 1,018 | 100% | 680 | 680 | 303 | 303 | 155 | 227 | 149 | 76 | | |
| US 79 | IH 35 SBFR | IH 35 NBFR | 541 | 0.10 | 2 | 4 | 6D | 6 Lane - Existing | 6D | n/a | n/a | 50% | 900 | 900 | 92 | 184 | | | | | | |
| 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 | | |
| Wyoming Springs Dr | Cloud Peak Ln | 300' S of Falcon Dr | 776 | 0.15 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 636 | 886 | 50% | 810 | 810 | 119 | 119 | 47 | 65 | 72 | 54 | | |
| Wyoming Springs Dr | 390' N of Goldenoak Cir | Alondra Way | 703 | 0.13 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 319 | 186 | 100% | 410 | 410 | 55 | 55 | 42 | 25 | 12 | 30 | | |
| 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 | | |
| Wyoming Springs Dr | Goldenoak Cir | 390' N of Goldenoak Cir | 379 | 0.07 | 2 | 2 | 4D | 4 Lane - Enhanced | 4D | 319 | 186 | 100% | 810 | 810 | 116 | 116 | 23 | 13 | 93 | 103 | | |
| Wyoming Springs Dr | New Hope Dr | Blue Ridge Dr | 1,190 | 0.23 | 0 | 0 | 2U | 4 Lane - Enhanced | 4D | n/a | n/a | 100% | 410 | 410 | 0 | 0 | | | | | | |
| SUBTOTAL | | | 97,625 | 18.49 | | | | | | | | | | | 17,965 | 18,115 | 10,321 | 10,705 | 7,158 | 6,832 | 796 | 650 |
| | | | | | | | | | | | | | | | | 36,080 | 21,026 | 13,990 | 1,446 | | | |

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 - 2018 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area B

7/31/2018

| 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 ³ | | 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 |
| Arterial L | Cypress Blvd | Sunrise Rd | 1,520 | 0.29 | 2 | 2 | 4D | 4 Lane - Existing | 4D | n/a | n/a | 100% | 810 | 810 | 466 | 466 | | | | | | |
| Avery Nelson | Settlement Dr | 740' E of Cisco Trl | 3,411 | 0.65 | 2 | 2 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 530 | 530 | | | | | | |
| Avery Nelson | College Park Dr | A.W. Grime Blvd | 2,075 | 0.39 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 275 | 173 | 100% | 810 | 810 | 637 | 637 | 108 | 68 | 529 | 569 | | |
| 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 | | |
| 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 | | |
| Bowman Rd | IH 35 NBFR | Onion Creek Village Dr | 582 | 0.11 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 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 | 598 | 440 | 100% | 510 | 510 | 595 | 595 | 698 | 513 | -103 | 82 | 103 | |
| 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 | | |
| 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 | | |
| 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 | | |
| CR 111/Westinghouse Rd | 3895' E of A.W. Grimes | 6350' W of A.W. Grimes | 2,456 | 0.47 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 234 | 243 | 50% | 410 | 410 | 95 | 95 | 54 | 57 | 41 | 39 | | |
| CR 112 | 3580' E of A.W. Grimes Bl | CR 117 | 2,244 | 0.43 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 351 | 171 | 50% | 410 | 410 | 87 | 87 | 75 | 36 | 13 | 51 | | |
| CR 112 | A.W. Grimes Blvd | 3580' E of A.W. Grimes Bl | 3,580 | 0.68 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 351 | 171 | 100% | 410 | 410 | 278 | 278 | 238 | 116 | 40 | 162 | | |
| CR 114/Chandler Rd | CR 110 | CR 118 | 6,343 | 1.20 | 0 | 0 | 2U | 6 Lane - Enhanced | 6D | n/a | n/a | 100% | 410 | 410 | 0 | 0 | | | | | | |
| CR 114/Chandler Rd | CR 118 | SH 130 SBFR | 604 | 0.11 | 0 | 0 | 5U | 6 Lane - Enhanced | 6D | n/a | n/a | 100% | 770 | 770 | 0 | 0 | | | | | | |
| 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 | | |
| CR 117 | CR 112 | Kenney Fort Blvd | 1,624 | 0.31 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 79 | 94 | 50% | 410 | 410 | 63 | 63 | 12 | 14 | 51 | 49 | | |
| CR 117 | 840' W of Marshall Trl | Red Bud Ln | 2,498 | 0.47 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 79 | 94 | 50% | 410 | 410 | 97 | 97 | 19 | 22 | 78 | 75 | | |
| CR 117 | Kenney Fort Blvd | San Felipe St | 912 | 0.17 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 79 | 94 | 50% | 410 | 410 | 35 | 35 | 7 | 8 | 29 | 27 | | |
| CR 117 | 160' N of Bluffstone Dr | 440' S of Bluffstone Dr | 602 | 0.11 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 79 | 94 | 50% | 410 | 410 | 23 | 23 | 5 | 5 | 19 | 18 | | |
| CR 117 | 1100' E of Athea Ln | 1795' E of Athea Ln | 694 | 0.13 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 50% | 410 | 410 | 27 | 27 | | | | | | |
| CR 117 | Red Bud Ln | 1100' E of Athea Ln | 1,767 | 0.33 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 137 | 137 | | | | | | |
| 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 | | | | | | |
| Eagles Nest St | University Blvd | Settlement Dr | 4,508 | 0.85 | 2 | 2 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 700 | 700 | | | | | | |
| FM 1460 (A.W. Grimes Blvd | 175' S of Lantana Dr | US 79 | 3,966 | 0.75 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,150 | 1,147 | 100% | 770 | 770 | 1,157 | 1,157 | 864 | 862 | 293 | 295 | | |
| FM 1460 (A.W. Grimes Blvd | Tiger Trl | 175' S of Lantana Dr | 1,382 | 0.26 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,150 | 1,147 | 100% | 770 | 770 | 403 | 403 | 301 | 300 | 102 | 103 | | |
| FM 1460 (A.W. Grimes Blvd | 1250' N of Tiger Trl | Tiger Trl | 1,253 | 0.24 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,050 | 995 | 100% | 770 | 770 | 365 | 365 | 249 | 236 | 116 | 129 | | |
| FM 1460 (A.W. Grimes Blvd | A.W. Grimes Blvd | Chandler Creek Blvd | 1,471 | 0.28 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,050 | 995 | 100% | 770 | 770 | 429 | 429 | 293 | 277 | 137 | 152 | | |
| FM 1460 (A.W. Grimes Blvd | Avery Nelson Pkwy | 3030' S of Avery Nelson P | 3,028 | 0.57 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 797 | 917 | 100% | 810 | 810 | 929 | 929 | 457 | 526 | 472 | 403 | | |
| FM 1460 (A.W. Grimes Blvd | Chandler Creek Blvd | 375' S of Chandler Creek | 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 | 1250' N of Tiger Trl | 1,055 | 0.20 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,050 | 995 | 50% | 770 | 770 | 154 | 154 | 105 | 99 | 49 | 54 | | |
| 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 P | 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 | | |
| FM 1460 (A.W. Grimes Blvd | Avery Nelson 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 | | |
| FM 3406 | IH 35 NBFR | N Mays St | 682 | 0.13 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,525 | 1,020 | 100% | 810 | 810 | 209 | 209 | 197 | 132 | 12 | 78 | | |
| FM 3406 | N Mays St | Sunrise Rd | 7,045 | 1.33 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,525 | 1,020 | 100% | 810 | 810 | 2,162 | 2,162 | 2,035 | 1,361 | 127 | 801 | | |
| FM 3406 | IH 35 SBFR | IH 35 NBFR | 661 | 0.13 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | n/a | n/a | 50% | 770 | 770 | 96 | 96 | | | | | | |
| FM 3406 | Sunrise Rd | Settlement Dr | 558 | 0.11 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,212 | 874 | 100% | 770 | 770 | 163 | 163 | 128 | 92 | 35 | 70 | | |
| FM 3406 | Settlement Dr | 1020' W of A.W. Grimes B | 4,377 | 0.83 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,212 | 874 | 100% | 770 | 770 | 1,277 | 1,277 | 1,005 | 725 | 272 | 552 | | |
| FM 3406 | 1020' W of A.W. Grimes B | A.W. Grimes Blvd | 1,020 | 0.19 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,212 | 874 | 100% | 770 | 770 | 298 | 298 | 234 | 169 | 63 | 129 | | |
| Joe Dimaggio Blvd | Kenney Fort Blvd | US 79 | 1,512 | 0.29 | 2 | 2 | 5U | 4 Lane - Existing | 5U | n/a | n/a | 100% | 770 | 770 | 441 | 441 | | | | | | |
| Kenney Fort Blvd | Chandler Creek Blvd | Joe DiMaggio Blvd | 1,565 | 0.30 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 236 | 222 | 100% | 410 | 410 | 122 | 122 | 70 | 66 | 52 | 56 | | |
| Kenney Fort Blvd | Old Settler's Blvd | 2540' S of Old Settler's Bl | 1,566 | 0.30 | 0 | 0 | 3U | 6 Lane - Proposed | 6D | n/a | n/a | 100% | 510 | 510 | 0 | 0 | | | | | | |
| Kenney Fort Blvd | Old Settler's Blvd | 2540' S of Old Settler's Bl | 970 | 0.18 | 0 | 0 | 3U | 6 Lane - Proposed | 6D | n/a | n/a | 50% | 510 | 510 | 0 | 0 | | | | | | |
| 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 | 472 | 476 | | |
| Medical Center Pkwy | Seton Pkwy | A.W. Grimes Blvd | 951 | 0.18 | 0 | 0 | 4D | 4 Lane - Existing | 4D | n/a | n/a | 100% | 810 | 810 | 0 | 0 | | | | | | |
| N Mays St | University Blvd | 2000' S of University Blvd | 2,002 | 0.38 | 1 | 1 | 3U | 4 Lane - Enhanced | 4D | 357 | 228 | 100% | 510 | 510 | 193 | 193 | 135 | 86 | 58 | 107 | | |
| 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 | 89 | 206 | | |
| N Mays St | 540' N of Steam Way | Old Settlers Blvd | 1,823 | 0.35 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 173 | 243 | 100% | 770 | 770 | 532 | 532 | 60 | 84 | 472 | 448 | | |
| 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 | 796 | | |
| N Mays St | 1775' N of Teravista Pkwy | Teravista Pkwy | 1,777 | 0.34 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 178 | 248 | 100% | 810 | 810 | 545 | 545 | 60 | 83 | 485 | 462 | | |
| 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 | | |
| Old Settlers Blvd | A.W. Grimes Blvd | Kenney Fort Blvd (Future) | 6,013 | 1.14 | 2 | 2 | 4D | 6 Lane - Enhanced | 4D | 1,033 | 582 | 100% | 810 | 810 | 1,845 | 1,845 | 1,176 | 663 | 668 | 1,182 | | |
| Red Bud Ln | Guadajajara St | 160' N of Margarita Loop | 1,867 | 0.35 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 532 | 339 | 100% | 410 | 410 | 145 | 145 | 188 | 120 | -43 | 25 | 43 | |
| Red Bud Ln | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-----------------------------|-----------------------------|---------|-------|---|---|----|-------------------|----|-------|-------|------|-----|-----|-------|--------|--------|--------|--------|--------|--------|-------|-------|
| Sunrise Rd | 545' S of Lake Dr | Old Settlers Blvd | 2,098 | 0.40 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 100% | 770 | 770 | 612 | 612 | 250 | 276 | 362 | 336 | | | |
| Sunrise Rd | Hidden Valley Dr | Eagles Nest St | 2,534 | 0.48 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 100% | 770 | 770 | 739 | 739 | 302 | 334 | 437 | 406 | | | |
| Sunrise Rd | Eagles Nest St | 325' S of Eagles Nest St | 324 | 0.06 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 100% | 770 | 770 | 95 | 95 | 39 | 43 | 56 | 52 | | | |
| Sunrise Rd | Applegate Cir | Lake Dr | 1,075 | 0.20 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 100% | 770 | 770 | 314 | 314 | 128 | 142 | 185 | 172 | | | |
| Sunrise Rd | 325' S of Eagles Nest St | Applegate Cir | 1,576 | 0.30 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 50% | 770 | 770 | 230 | 230 | 94 | 104 | 136 | 126 | | | |
| Sunrise Rd | Lake Dr | 545' S of Lake Dr | 543 | 0.10 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 630 | 695 | 50% | 770 | 770 | 79 | 79 | 32 | 36 | 47 | 43 | | | |
| Sunrise Rd | University Blvd | Hidden Valley Dr | 1,231 | 0.23 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 630 | 695 | 100% | 810 | 810 | 378 | 378 | 147 | 162 | 231 | 216 | | | |
| Sunrise Rd | Old Settlers Blvd | Country Aire Dr | 1,485 | 0.28 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 592 | 674 | 100% | 770 | 770 | 433 | 433 | 167 | 190 | 267 | 244 | | | |
| 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 | | | |
| Teravista Pkwy | Oakmont Dr | Centerbrook Pl | 1,062 | 0.20 | 2 | 2 | 4D | 4 Lane - Enhanced | 4D | 630 | 489 | 50% | 810 | 810 | 163 | 163 | 63 | 49 | 100 | 114 | | | |
| Terra Vista 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 | 121 | | | |
| University Blvd | Kenney Fort Blvd (Future) | CR 110 | 5,246 | 0.99 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 731 | 619 | 100% | 410 | 410 | 407 | 407 | 726 | 615 | -319 | -208 | 319 | 208 | |
| University Blvd | 1830' E of A.W. Grimes Blvd | Lunata Way | 4,093 | 0.78 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 731 | 619 | 50% | 410 | 410 | 159 | 159 | 283 | 240 | -124 | -81 | 124 | 81 | |
| University Blvd | A.W. Grimes Blvd | 1830' E of A.W. Grimes Blvd | 1,922 | 0.36 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 731 | 619 | 100% | 410 | 410 | 149 | 149 | 266 | 225 | -117 | -76 | 117 | 76 | |
| University Blvd | Lunata Way | Kenney Fort Blvd (Future) | 839 | 0.16 | 1 | 1 | 2U | 6 Lane - Enhanced | 6D | 731 | 619 | 100% | 410 | 410 | 65 | 65 | 116 | 98 | -51 | -33 | 51 | 33 | |
| University Blvd | Oakmont Dr | 335' W of Sunrise Dr | 1,652 | 0.31 | 2 | 2 | 5U | 6 Lane - Existing | 6D | 1,546 | 1,080 | 100% | 770 | 770 | 482 | 482 | 484 | 338 | -2 | 144 | 2 | | |
| University Blvd | IH 35 NBFR | Oakmont Dr | 950 | 0.18 | 2 | 2 | 5U | 6 Lane - Existing | 5U | 1,163 | 1,051 | 100% | 770 | 770 | 277 | 277 | 209 | 189 | 68 | 88 | | | |
| University Blvd | 335' W of Sunrise Dr | Sunrise Dr | 336 | 0.06 | 2 | 2 | 5U | 6 Lane - Existing | 6D | 1,546 | 1,080 | 50% | 770 | 770 | 49 | 49 | 49 | 34 | 0 | 15 | 0 | | |
| University Blvd | Eagles Nest St | College Park Dr | 2,847 | 0.54 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,149 | 887 | 50% | 770 | 770 | 415 | 415 | 310 | 239 | 105 | 176 | | | |
| University Blvd | College Park Dr | A.W. Grimes Blvd | 3,222 | 0.61 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,149 | 887 | 50% | 770 | 770 | 470 | 470 | 351 | 271 | 119 | 199 | | | |
| University Blvd | Sunrise Rd | Teravista Club Dr | 3,784 | 0.72 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,021 | 1,328 | 50% | 770 | 770 | 552 | 552 | 366 | 476 | 186 | 76 | | | |
| University Blvd | Teravista Club Dr | Eagles Nest St | 514 | 0.10 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,021 | 1,328 | 50% | 770 | 770 | 75 | 75 | 50 | 65 | 25 | 10 | | | |
| 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 | | |
| US 79 | 200' E of Red Bud Ln | 1690' E of Red Bud Ln | 1,488 | 0.28 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,717 | 1,219 | 50% | 810 | 810 | 228 | 228 | 242 | 172 | -14 | 57 | 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 | | |
| US 79 | 1825' W of A.W. Grimes Blvd | Joe DiMaggio Blvd | 4,249 | 0.80 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,801 | 1,341 | 50% | 810 | 810 | 652 | 652 | 725 | 540 | -73 | 112 | 73 | | |
| 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 | | |
| US 79 | IH 35 NBFR | N Mays St | 1,409 | 0.27 | 2 | 2 | 6D | 6 Lane - Existing | 6D | 1,330 | 1,348 | 100% | 900 | 900 | 480 | 480 | 355 | 360 | 125 | 121 | | | |
| US 79 | N Mays St | Georgetown St | 3,883 | 0.74 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,617 | 1,405 | 50% | 770 | 770 | 566 | 566 | 595 | 517 | -28 | 50 | 28 | | |
| 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 | | |
| US 79 | IH 35 SBFR | IH 35 NBFR | 541 | 0.10 | 2 | 4 | 6D | 6 Lane - Existing | 6D | n/a | n/a | 50% | 900 | 900 | 92 | 184 | | | | | | | |
| 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 | | |
| 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 | 258 | 258 | 301 | 233 | -42 | 25 | 42 | | |
| SUBTOTAL | | | 218,513 | 41.39 | | | | | | | | | | | | 39,784 | 40,012 | 23,405 | 19,863 | 12,359 | 16,036 | 1,463 | 581 |
| | | | | | | | | | | | | | | | | 79,796 | | 43,268 | | 28,395 | | | 2,044 |

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 - 2018 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area C

7/31/2018

| 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 |
| 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 | | |
| A. W. Grimes | US 79 | Gattis School Rd | 8,204 | 1.55 | 3 | 3 | 6D | 6 Lane - Existing | 6D | 1,636 | 1,158 | 100% | 900 | 900 | 4,195 | 4,195 | 2,542 | 1,799 | 1,653 | 2,396 | | |
| 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 | | |
| Brown St | Round Rock Ave | McNeil Dr | 1,558 | 0.30 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 121 | 121 | | | | | | |
| CR 168/Gattis School Rd | South Crossing Dr | Doublecreek Dr | 2,090 | 0.40 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 1,207 | 830 | 100% | 680 | 680 | 538 | 538 | 478 | 329 | 61 | 210 | | |
| CR 168/Gattis School Rd | A.W. Grimes Blvd | South Crossing Dr | 1,414 | 0.27 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,207 | 830 | 100% | 810 | 810 | 434 | 434 | 323 | 222 | 111 | 212 | | |
| CR 168/Gattis School Rd | Kenney Fort Blvd | Via Sonoma Trl | 2,747 | 0.52 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,256 | 812 | 100% | 770 | 770 | 801 | 801 | 653 | 422 | 148 | 379 | | |
| CR 168/Gattis School Rd | Via Sonoma Trl | High Country Rd | 2,108 | 0.40 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 1,256 | 812 | 100% | 680 | 680 | 543 | 543 | 501 | 324 | 42 | 219 | | |
| CR 168/Gattis School Rd | Short Trl | S Mays St | 354 | 0.07 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 27 | 27 | | | | | | |
| CR 168/Gattis School Rd | S Mays St | Greenlawn Blvd | 3,446 | 0.65 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 978 | 910 | 100% | 680 | 680 | 888 | 888 | 638 | 594 | 249 | 294 | | |
| CR 168/Gattis School Rd | IH 35 NBFR | Short Trl | 240 | 0.05 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 19 | 19 | | | | | | |
| CR 168/Gattis School Rd | S Mays St | Greenlawn Blvd | 3,446 | 0.65 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 978 | 910 | 100% | 680 | 680 | 888 | 888 | 638 | 594 | 249 | 294 | | |
| CR 168/Gattis School Rd | Doublecreek Dr | Kenney Fort Blvd | 4,140 | 0.78 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 1,256 | 812 | 100% | 680 | 680 | 1,066 | 1,066 | 985 | 637 | 82 | 430 | | |
| CR 168/Gattis School Rd | Greenlawn Dr | Windy Park Dr | 1,489 | 0.28 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 1,093 | 870 | 100% | 680 | 680 | 384 | 384 | 308 | 245 | 75 | 138 | | |
| CR 168/Gattis School Rd | Windy Park Dr | A.W. Grimes Blvd | 1,256 | 0.24 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,093 | 870 | 100% | 810 | 810 | 385 | 385 | 260 | 207 | 125 | 178 | | |
| CR 168/Gattis School Rd | High Country Rd | Red Bud Ln | 1,148 | 0.22 | 0 | 0 | 5U | 6 Lane - Enhanced | 6D | 1,198 | 865 | 100% | 770 | 770 | 0 | 0 | 260 | 188 | -260 | -188 | 260 | 188 |
| 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 172 | McNeil Dr | Lynda Sue St | 1,053 | 0.20 | 2 | 2 | 4U | 4 Lane - Enhanced | 4D | 1,056 | 568 | 50% | 680 | 680 | 136 | 136 | 105 | 57 | 30 | 79 | | |
| 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 | 175' N of Dragon Dr | McNeil Dr | 5,178 | 0.98 | 1 | 1 | 2U | 2 Lane - Existing | 2U | 334 | 293 | 100% | 410 | 410 | 402 | 402 | 328 | 287 | 75 | 115 | | |
| Deepwood Dr | RM 620 | 960' N of Dragon Dr | 2,414 | 0.46 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 334 | 293 | 50% | 810 | 810 | 370 | 370 | 76 | 67 | 294 | 303 | | |
| 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 | | |
| Dell Way | S Mays St | Greenlawn Blvd | 3,957 | 0.75 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 835 | 418 | 100% | 770 | 770 | 1,154 | 1,154 | 626 | 313 | 528 | 841 | | |
| Double Creek Dr | Gattis School Rd | SH 45 WBFR | 3,225 | 0.61 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 260 | 264 | 100% | 810 | 810 | 989 | 989 | 159 | 161 | 831 | 828 | | |
| Doublecreek Blvd | Forest Creek Dr | Gattis School Rd | 3,477 | 0.66 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 536 | 282 | 100% | 810 | 810 | 1,067 | 1,067 | 353 | 186 | 714 | 881 | | |
| FM 1325 | SH 45 EBFR | 810' S of SH 45 EBFR | 811 | 0.15 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 1,086 | 761 | 100% | 810 | 810 | 249 | 249 | 167 | 117 | 82 | 132 | | |
| FM 1325 | SH 45 WBFR | SH 45 EBFR | 328 | 0.06 | 2 | 2 | 6U | 4 Lane - Existing | 6U | n/a | n/a | 100% | 770 | 770 | 96 | 96 | | | | | | |
| 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 | IH 35 SBFR | IH 35 NBFR | 416 | 0.08 | 3 | 3 | 6U | 6 Lane - Existing | 6U | n/a | n/a | 100% | 770 | 770 | 182 | 182 | | | | | | |
| Forest Creek | Doublecreek Dr | Kenny 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 | | |
| 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 | |
| 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 | |
| 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 | | |
| 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 | | |
| 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 | Pflugerville Pkwy | SH 45 EBFR | 2,260 | 0.43 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 837 | 189 | 100% | 810 | 810 | 693 | 693 | 358 | 81 | 335 | 613 | | |
| Greenlawn Blvd | SH 45 WBFR | SH 45 EBFR | 329 | 0.06 | 4 | 3 | 7U | 6 Lane - Existing | 8U | n/a | n/a | 100% | 860 | 860 | 214 | 161 | | | | | | |
| Greenlawn Blvd | IH 35 NBFR | Pflugerville Pkwy | 3,091 | 0.59 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 837 | 189 | 100% | 810 | 810 | 948 | 948 | 490 | 111 | 458 | 838 | | |
| Hesters Crossing | IH 35 NBFR | IH 35 SBFR | 577 | 0.11 | 3 | 3 | 7U | 4 Lane - Existing | 7U | n/a | n/a | 100% | 860 | 860 | 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 | 149 | 149 | 121 | 115 | 27 | 33 | | |
| Hesters Crossing Rd | Dry Creek Dr | IH 35 SBFR | 1,691 | 0.32 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 934 | 815 | 100% | 770 | 770 | 493 | 493 | 299 | 261 | 194 | 232 | | |
| Hesters Crossing Rd | La Frontera Blvd | Dry Creek Dr | 2,459 | 0.47 | 2 | 2 | 4D | 4 Lane - Existing | 4D | 934 | 815 | 100% | 810 | 810 | 754 | 754 | 435 | 380 | 319 | 375 | | |
| Hesters Crossing Rd | CR 172 | La Frontera Blvd | 1,605 | 0.30 | 2 | 2 | 4D | 4 Lane - Existing | 4D | n/a | n/a | 100% | 810 | 810 | 492 | 492 | | | | | | |
| High Country Blvd | Roundabout Ln | SH 45 WBFR | 4,037 | 0.76 | 1 | 1 | 3U | 2 Lane - Existing | 3U | 838 | 238 | 100% | 510 | 510 | 390 | 390 | 641 | 182 | -251 | 208 | 251 | |
| 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 | | |
| Kenney Fort Blvd | US 79 | Forest Creek Blvd | 5,039 | 0.95 | 3 | 3 | 6D | 6 Lane - Existing | 6D | 315 | 298 | 100% | 900 | 900 | 2,577 | 2,577 | 301 | 284 | 2,276 | 2,292 | | |
| 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 | | |
| Main St | Mays St | Georgetown St | 2,442 | 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 | n/a | n/a | 100% | 410 | 410 | 73 | 73 | | | | | | |
| McNeil Rd | 1275' S of W Messick Loop | CR 172 | 3,777 | 0.72 | 2 | 2 | 4U | 6 Lane - Enhanced | 6D | 894 | 660 | 50% | 680 | 680 | 486 | 486 | 320 | 236 | 167 | 250 | | |
| McNeil Rd | W Bagdad Ave | E Bagdad Ave | 95 | 0.02 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 7 | 7 | | | | | | |
| McNeil Rd | E Bagdad Ave | Blair St | 360 | 0.07 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | 410 | 410 | 28 | 28 | | | | | | |
| 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 | 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 | Deepwood Dr | IH 35 SBFR | 5,193 | 0.98 | 2 | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------------------------|---------------------------|---------|-------|---|---|----|-------------------|----|-------|-------|------|-----|-----|-------|-------|--------|--------|--------|--------|--------|--------|-------|-----|
| Red Bud Ln | 280' S of Woodlawn Ln | 130' S of Old Oaks Dr | 554 | 0.10 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 740 | 738 | 50% | 410 | 410 | 22 | 22 | 39 | 39 | -17 | -17 | 17 | 17 | | |
| Red Bud Ln | 130' S of Old Oaks Dr | 315' S of Country Dr | 561 | 0.11 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 740 | 738 | 100% | 410 | 410 | 44 | 44 | 79 | 78 | -35 | -35 | 35 | 35 | | |
| Red Bud Ln | 315' S of Country Dr | Wildflower Trl | 551 | 0.10 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 740 | 738 | 50% | 410 | 410 | 21 | 21 | 39 | 39 | -17 | -17 | 17 | 17 | | |
| Red Bud Ln | Wildflower Trl | 295' S of Wildflower Trl | 293 | 0.06 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 740 | 738 | 100% | 410 | 410 | 23 | 23 | 41 | 41 | -18 | -18 | 18 | 18 | | |
| Red Bud Ln | 840' N of Forest Creek Dr | Forest Creek Dr | 840 | 0.16 | 1 | 1 | 2U | 4 Lane - Enhanced | 4D | 740 | 738 | 100% | 410 | 410 | 65 | 65 | 118 | 117 | -53 | -52 | 53 | 52 | | |
| RM 620 | Deepwood Dr | Chisholm Trl Rd | 4,012 | 0.76 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,293 | 1,692 | 50% | 770 | 770 | 585 | 585 | 491 | 643 | 94 | -58 | | 58 | | |
| 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 | | | | |
| Roundville Ln | A.W. Grimes Blvd | 2060' W of A.W. Grimes B | 2,058 | 0.39 | 0 | 0 | 2U | 3 Lane - Proposed | 4D | n/a | n/a | 100% | 410 | 410 | 0 | 0 | | | | | | | | |
| 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 | | | | |
| 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 | | | | |
| S Mays St | Nash St | Gattis School Rd | 3,656 | 0.69 | 2 | 2 | 5U | 4 Lane - Enhanced | 4D | 752 | 717 | 100% | 770 | 770 | 1,066 | 1,066 | 521 | 496 | 546 | 570 | | | | |
| S Mays St | McNeil Rd | Nash St | 1,450 | 0.27 | 2 | 2 | 4U | 4 Lane - Enhanced | 4U | 752 | 717 | 100% | 680 | 680 | 373 | 373 | 207 | 197 | 167 | 177 | | | | |
| Schultz | 290' S of SH 45 EBFR | 255' S of Autumn Sage W | 2,636 | 0.50 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 276 | 186 | 50% | 410 | 410 | 102 | 102 | 69 | 46 | 33 | 56 | | | | |
| Schultz | SH 45 EBFR | 290' S of SH 45 EBFR | 291 | 0.06 | 1 | 1 | 2U | 4 Lane - Enhanced | 2U | 276 | 186 | 100% | 410 | 410 | 23 | 23 | 15 | 10 | 7 | 12 | | | | |
| 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 | | | |
| 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 | | | |
| US 79 | 1825' W of A.W. Grimes B | Joe DiMaggio Blvd | 4,249 | 0.80 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,801 | 1,341 | 50% | 810 | 810 | 652 | 652 | 725 | 540 | -73 | 112 | 73 | | | |
| US 79 | A.W. Grimes Blvd | 1825' W of A.W. Grimes B | 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 | | | |
| US 79 | IH 35 NBFR | N Mays St | 1,409 | 0.27 | 2 | 2 | 6D | 6 Lane - Existing | 6D | 1,330 | 1,348 | 100% | 900 | 900 | 480 | 480 | 355 | 360 | 125 | 121 | | | | |
| US 79 | N Mays St | Georgetown St | 3,883 | 0.74 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,617 | 1,405 | 50% | 770 | 770 | 566 | 566 | 595 | 517 | -28 | 50 | 28 | | | |
| 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 | | | |
| US 79 | Sunrise Rd | 1685' W of A.W. Grimes B | 2,193 | 0.42 | 2 | 2 | 5U | 6 Lane - Enhanced | 6D | 1,885 | 1,462 | 50% | | | | | | | | | | | | |
| US 79 | 1685' W of A.W. Grimes B | A.W. Grimes Blvd | 1,685 | 0.32 | 2 | 2 | 4D | 6 Lane - Enhanced | 6D | 1,885 | 1,462 | 50% | | | | | | | | | | | | |
| W Bagdad Ave | Brown St | Mays St | 698 | 0.13 | 1 | 1 | 2U | 2 Lane - Existing | 2U | n/a | n/a | 100% | | | | | | | | | | | | |
| W Pflugerville PKWY | Greenlawn Blvd | 1050' E of Greenlawn Blvd | 1,047 | 0.20 | 2 | 2 | 4D | 4 Lane - Existing | 4D | n/a | n/a | 100% | 810 | 810 | 321 | 321 | | | | | | | | |
| SUBTOTAL | | | 185,050 | 35.05 | | | | | | | | | | | | | 43,434 | 43,380 | 25,396 | 18,006 | 16,072 | 23,462 | 1,329 | 645 |
| | | | | | | | | | | | | | | | | | 86,814 | | 43,402 | | 39,534 | | 1,974 | |

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 | \$ 37,155,848 | Line 16, Maximum Fee Calculation Table |
| Principal Paid on Existing Debt Funded Project Costs | (290,195) | Page 4 of Appendix E - Service Area A |
| Financing Costs | 10,724,680 | See Detail Below |
| Existing Fund Balance | - | Page 1 of Appendix E - Service Area A |
| Interest Earnings | (4,125,954) | Page 5 of Appendix E - Service Area A |
| Pre Credit Recoverable Cost for Impact Fee | \$ 43,464,380 | Sum of Above |
| Credit for Ad Valorem Revenues | (273,155) | Page 8 of Appendix E - Service Area A |
| Maximum Recoverable Cost for Impact Fee | \$ 43,191,225 | |

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:

Represents the portion of principal paid for existing debt funded project costs as provided by the City.

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 | \$ 26,003,735 | (Page 3 of Appendix E - Service Area A) |
| Existing Annual Debt Service | 3,015,472 | (Page 3 of Appendix E - Service Area A) |
| Principal Component | (18,294,527) | (Page 4 of Appendix E - Service Area A) |
| Financing Costs | <u>\$ 10,724,680</u> | |

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. 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 | \$ 83,055,152 | Line 16, Maximum Fee Calculation Table |
| Principal Paid on Existing Debt Funded Project Costs | (125,808) | Page 4 of Appendix E - Service Area B |
| Financing Costs | 24,016,860 | See Detail Below |
| Existing Fund Balance | - | Page 1 of Appendix E - Service Area B |
| Interest Earnings | (9,711,073) | Page 5 of Appendix E - Service Area B |
| Pre Credit Recoverable Cost for Impact Fee | \$ 97,235,131 | Sum of Above |
| Credit for Ad Valorem Revenues | (1,116,621) | Page 8 of Appendix E - Service Area E |
| Maximum Recoverable Cost for Impact Fee | \$ 96,118,510 | |

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:

Represents the portion of principal paid for existing debt funded project costs as provided by the City.

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 | \$ 64,493,561 | (Page 3 of Appendix E - Service Area B) |
| Existing Annual Debt Service | - | (Page 3 of Appendix E - Service Area B) |
| Principal Component | (40,476,701) | (Page 4 of Appendix E - Service Area B) |
| Financing Costs | <u>\$ 24,016,860</u> | |

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. 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 | \$ 102,387,983 | Line 16, Maximum Fee Calculation Table |
| Principal Paid on Existing Debt Funded Project Costs | - | Page 4 of Appendix E - Service Area C |
| Financing Costs | 24,921,243 | See Detail Below |
| Existing Fund Balance | - | Page 1 of Appendix E - Service Area C |
| Interest Earnings | (9,934,786) | Page 5 of Appendix E - Service Area C |
| Pre Credit Recoverable Cost for Impact Fee | \$ 117,374,440 | Sum of Above |
| Credit for Ad Valorem Revenues | (1,553,766) | Page 8 of Appendix E - Service Area C |
| Maximum Recoverable Cost for Impact Fee | \$ 115,820,674 | |

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 | \$ 65,618,253 | (Page 3 of Appendix E - Service Area C) |
| Existing Annual Debt Service | - | (Page 3 of Appendix E - Service Area C) |
| Principal Component | (40,697,010) | (Page 4 of Appendix E - Service Area C) |
| Financing Costs | <u>\$ 24,921,243</u> | |

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. 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.



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

City of Round Rock - 2018 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⁾ | 1.71% |
| Annual Service Unit Growth ⁽²⁾ | 1,613 |
| Existing Fund Balance ⁽³⁾ | - |
| Portion of Projects Funded by Existing Debt ⁽⁴⁾ | \$ 2,456,979 |
| Non-debt Funded New Project Cost ⁽⁵⁾ | 18,571,126 |
| New Project Cost Funded Through New Debt ⁽⁶⁾ | 16,127,743 |
| Total Recoverable Project Cost ⁽⁷⁾ | \$ 37,155,848 |

II. New Debt Issues Assumptions

| <u>Year</u> | <u>Principal⁽⁸⁾</u> | <u>Interest⁽⁹⁾</u> | <u>Term</u> |
|-------------|--------------------------------|-------------------------------|-------------|
| 1 | \$ 1,612,774 | 4.00% | 20 |
| 2 | 1,612,774 | 4.50% | 20 |
| 3 | 1,612,774 | 4.75% | 20 |
| 4 | 1,612,774 | 5.00% | 20 |
| 5 | 1,612,774 | 5.00% | 20 |
| 6 | 1,612,774 | 5.25% | 20 |
| 7 | 1,612,774 | 5.25% | 20 |
| 8 | 1,612,774 | 5.50% | 20 |
| 9 | 1,612,774 | 5.50% | 20 |
| 10 | 1,612,774 | 5.75% | 20 |
| Total | \$ 16,127,743 | | |

III. Capital Expenditure Assumptions

| <u>Year</u> | <u>Annual Capital Expenditures⁽¹⁰⁾</u> |
|-------------|---|
| 1 | \$ 2,602,415 |
| 2 | 3,469,887 |
| 3 | 3,469,887 |
| 4 | 3,469,887 |
| 5 | 3,469,887 |
| 6 | 3,469,887 |
| 7 | 3,469,887 |
| 8 | 3,469,887 |
| 9 | 3,469,887 |
| 10 | 4,337,359 |
| Total | \$ 34,698,869 |

- (1) Money Market Earnings per City Staff As of March 2018
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) New Impact Fee, Balance Not Applicable
(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's Financial Advisor
(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 - 2018 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 | \$ 118,671 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 118,671 |
| 2 | 118,671 | 123,984 | - | - | - | - | - | - | - | - | 242,655 |
| 3 | 118,671 | 123,984 | 126,684 | - | - | - | - | - | - | - | 369,339 |
| 4 | 118,671 | 123,984 | 126,684 | 129,413 | - | - | - | - | - | - | 498,752 |
| 5 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | - | - | - | - | - | 628,165 |
| 6 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | - | - | - | - | 760,336 |
| 7 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | - | - | - | 892,506 |
| 8 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | - | - | 1,027,462 |
| 9 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | - | 1,162,418 |
| 10 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 11 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 12 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 13 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 14 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 15 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 16 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 17 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 18 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 19 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 20 | 118,671 | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,300,187 |
| 21 | - | 123,984 | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,181,516 |
| 22 | - | - | 126,684 | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 1,057,532 |
| 23 | - | - | - | 129,413 | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 930,848 |
| 24 | - | - | - | - | 129,413 | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 801,435 |
| 25 | - | - | - | - | - | 132,171 | 132,171 | 134,956 | 134,956 | 137,769 | 672,022 |
| 26 | - | - | - | - | - | - | 132,171 | 134,956 | 134,956 | 137,769 | 539,851 |
| 27 | - | - | - | - | - | - | - | 134,956 | 134,956 | 137,769 | 407,681 |
| 28 | - | - | - | - | - | - | - | - | 134,956 | 137,769 | 272,725 |
| 29 | - | - | - | - | - | - | - | - | - | 137,769 | 137,769 |
| | \$ 2,373,415 | \$ 2,479,677 | \$ 2,533,683 | \$ 2,588,264 | \$ 2,588,264 | \$ 2,643,411 | \$ 2,643,411 | \$ 2,699,117 | \$ 2,699,117 | \$ 2,755,376 | \$ 26,003,735 |

City of Round Rock - 2018 Roadway Impact Fee Study

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

II. Summary of Annual Expenses

| Year | New Annual Debt Service ⁽¹⁾ | Annual Capital Expenditures ⁽²⁾ | Annual Bond Proceeds ⁽²⁾ | Existing Annual Debt Service ⁽³⁾ | Annual Credit ⁽⁴⁾ | Total Expense |
|------|---|--|---|--|---------------------------------|------------------|
| 1 | \$ 118,671 | \$ 2,602,415 | \$ (1,612,774) | \$ 165,309 | \$ (1,367) | \$ 1,272,253 |
| 2 | 242,655 | 3,469,887 | (1,612,774) | 166,149 | (3,917) | 2,262,000 |
| 3 | 369,339 | 3,469,887 | (1,612,774) | 167,058 | (7,672) | 2,385,837 |
| 4 | 498,752 | 3,469,887 | (1,612,774) | 168,225 | (12,660) | 2,511,430 |
| 5 | 628,165 | 3,469,887 | (1,612,774) | 169,452 | (18,835) | 2,635,895 |
| 6 | 760,336 | 3,469,887 | (1,612,774) | 170,490 | (26,253) | 2,761,685 |
| 7 | 892,506 | 3,469,887 | (1,612,774) | 172,606 | (34,883) | 2,887,342 |
| 8 | 1,027,462 | 3,469,887 | (1,612,774) | 165,070 | (44,428) | 3,005,217 |
| 9 | 1,162,418 | 3,469,887 | (1,612,774) | 166,055 | (55,420) | 3,130,166 |
| 10 | 1,300,187 | 4,337,359 | (1,612,774) | 167,574 | (67,721) | 4,124,624 |
| 11 | 1,300,187 | - | - | 153,844 | - | 1,454,031 |
| 12 | 1,300,187 | - | - | 154,678 | - | 1,454,864 |
| 13 | 1,300,187 | - | - | 156,153 | - | 1,456,340 |
| 14 | 1,300,187 | - | - | 157,212 | - | 1,457,398 |
| 15 | 1,300,187 | - | - | 158,865 | - | 1,459,052 |
| 16 | 1,300,187 | - | - | 136,539 | - | 1,436,726 |
| 17 | 1,300,187 | - | - | 138,370 | - | 1,438,557 |
| 18 | 1,300,187 | - | - | 139,974 | - | 1,440,160 |
| 19 | 1,300,187 | - | - | 141,849 | - | 1,442,035 |
| 20 | 1,300,187 | - | - | - | - | 1,300,187 |
| 21 | 1,181,516 | - | - | - | - | 1,181,516 |
| 22 | 1,057,532 | - | - | - | - | 1,057,532 |
| 23 | 930,848 | - | - | - | - | 930,848 |
| 24 | 801,435 | - | - | - | - | 801,435 |
| 25 | 672,022 | - | - | - | - | 672,022 |
| 26 | 539,851 | - | - | - | - | 539,851 |
| 27 | 407,681 | - | - | - | - | 407,681 |
| 28 | 272,725 | - | - | - | - | 272,725 |
| 29 | 137,769 | - | - | - | - | 137,769 |
| | \$ 26,003,735 | \$ 34,698,869 | \$ (16,127,743) | \$ 3,015,472 | \$ (273,155) | \$ 47,317,179 |

City of Round Rock - 2018 Roadway Impact Fee Study

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

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

| | <u>GO 2002</u> | <u>GO 2004</u> | <u>GO 2007</u> | <u>CO 2014</u> | <u>TOTAL</u> |
|------|------------------|------------------|------------------|------------------|-------------------|
| 2002 | | | | | - |
| 2003 | - | | | | - |
| 2004 | 619 | - | | | 619 |
| 2005 | 1,688 | 759 | | | 2,446 |
| 2006 | 7,454 | 4,525 | | | 11,978 |
| 2007 | 9,704 | - | | | 9,704 |
| 2008 | 3,797 | 7,207 | - | | 11,004 |
| 2009 | 4,022 | 4,091 | 8,148 | | 16,262 |
| 2010 | 4,135 | 4,227 | 8,496 | | 16,858 |
| 2011 | 6,132 | 4,443 | 8,894 | | 19,469 |
| 2012 | 6,469 | 4,606 | 9,341 | | 20,416 |
| 2013 | 6,835 | 4,850 | 9,738 | | 21,423 |
| 2014 | 7,201 | 5,094 | 10,235 | | 22,529 |
| 2015 | 7,594 | 5,283 | 10,682 | - | 23,560 |
| 2016 | 8,016 | 5,500 | 11,179 | 11,609 | 36,304 |
| 2017 | 8,438 | 5,717 | 11,726 | 51,742 | 77,622 |
| | <u>\$ 82,104</u> | <u>\$ 56,301</u> | <u>\$ 88,439</u> | <u>\$ 63,350</u> | <u>\$ 290,195</u> |

IV. Summary of Debt Financing

| | |
|---|----------------------|
| Existing Debt Funded Project Costs ⁽⁵⁾ | 2,456,979 |
| -Less Principal PTD | 290,195 |
| Outstanding Debt Principal | 2,166,785 |
| New Project Costs Debt Principal ⁽⁵⁾ | 16,127,743 |
| Principal Component | \$ 18,294,527 |

(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 - 2018 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 | \$ 2,678 | 1,613 | \$ 4,319,122 | \$ 1,272,253 | \$ 3,046,869 | 26,051 | 3,072,920 |
| 2 | 2,678 | 1,613 | 4,319,122 | 2,262,000 | 2,057,123 | 70,135 | 5,200,178 |
| 3 | 2,678 | 1,613 | 4,319,122 | 2,385,837 | 1,933,285 | 105,453 | 7,238,916 |
| 4 | 2,678 | 1,613 | 4,319,122 | 2,511,430 | 1,807,693 | 139,241 | 9,185,850 |
| 5 | 2,678 | 1,613 | 4,319,122 | 2,635,895 | 1,683,227 | 171,470 | 11,040,547 |
| 6 | 2,678 | 1,613 | 4,319,122 | 2,761,685 | 1,557,437 | 202,109 | 12,800,093 |
| 7 | 2,678 | 1,613 | 4,319,122 | 2,887,342 | 1,431,781 | 231,123 | 14,462,997 |
| 8 | 2,678 | 1,613 | 4,319,122 | 3,005,217 | 1,313,905 | 258,551 | 16,035,453 |
| 9 | 2,678 | 1,613 | 4,319,122 | 3,130,166 | 1,188,957 | 284,372 | 17,508,782 |
| 10 | 2,678 | 1,613 | 4,319,122 | 4,124,624 | 194,498 | 301,063 | 18,004,344 |
| 11 | - | - | - | 1,454,031 | (1,454,031) | 295,442 | 16,845,755 |
| 12 | - | - | - | 1,454,864 | (1,454,864) | 275,623 | 15,666,514 |
| 13 | - | - | - | 1,456,340 | (1,456,340) | 255,446 | 14,465,620 |
| 14 | - | - | - | 1,457,398 | (1,457,398) | 234,901 | 13,243,123 |
| 15 | - | - | - | 1,459,052 | (1,459,052) | 213,983 | 11,998,053 |
| 16 | - | - | - | 1,436,726 | (1,436,726) | 192,883 | 10,754,210 |
| 17 | - | - | - | 1,438,557 | (1,438,557) | 171,597 | 9,487,250 |
| 18 | - | - | - | 1,440,160 | (1,440,160) | 149,919 | 8,197,008 |
| 19 | - | - | - | 1,442,035 | (1,442,035) | 127,839 | 6,882,812 |
| 20 | - | - | - | 1,300,187 | (1,300,187) | 106,579 | 5,689,205 |
| 21 | - | - | - | 1,181,516 | (1,181,516) | 87,183 | 4,594,873 |
| 22 | - | - | - | 1,057,532 | (1,057,532) | 69,530 | 3,606,871 |
| 23 | - | - | - | 930,848 | (930,848) | 53,719 | 2,729,742 |
| 24 | - | - | - | 801,435 | (801,435) | 39,826 | 1,968,133 |
| 25 | - | - | - | 672,022 | (672,022) | 27,909 | 1,324,021 |
| 26 | - | - | - | 539,851 | (539,851) | 18,025 | 802,195 |
| 27 | - | - | - | 407,681 | (407,681) | 10,232 | 404,746 |
| 28 | - | - | - | 272,725 | (272,725) | 4,589 | 136,611 |
| 29 | - | - | - | 137,769 | (137,769) | 1,158 | - |
| | | | 43,191,225 | 47,317,179 | | 4,125,954 | |

City of Round Rock - 2018 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 | 1.6214 | 1.0000 | 1,613 | 2,615 | \$ 1,272,253 | \$ 2,062,782 |
| 2 | 28 | 1.5941 | 1.0000 | 1,613 | 2,571 | 2,262,000 | 3,605,858 |
| 3 | 27 | 1.5673 | 1.0000 | 1,613 | 2,528 | 2,385,837 | 3,739,326 |
| 4 | 26 | 1.5410 | 1.0000 | 1,613 | 2,486 | 2,511,430 | 3,869,990 |
| 5 | 25 | 1.5150 | 1.0000 | 1,613 | 2,444 | 2,635,895 | 3,993,496 |
| 6 | 24 | 1.4896 | 1.0000 | 1,613 | 2,403 | 2,761,685 | 4,113,729 |
| 7 | 23 | 1.4645 | 1.0000 | 1,613 | 2,362 | 2,887,342 | 4,228,594 |
| 8 | 22 | 1.4399 | 1.0000 | 1,613 | 2,323 | 3,005,217 | 4,327,231 |
| 9 | 21 | 1.4157 | 1.0000 | 1,613 | 2,284 | 3,130,166 | 4,431,368 |
| 10 | 20 | 1.3919 | 1.0000 | 1,613 | 2,245 | 4,124,624 | 5,741,049 |
| 11 | 19 | 1.3685 | 1.0000 | - | - | 1,454,031 | 1,989,834 |
| 12 | 18 | 1.3455 | 1.0000 | - | - | 1,454,864 | 1,957,501 |
| 13 | 17 | 1.3229 | 1.0000 | - | - | 1,456,340 | 1,926,543 |
| 14 | 16 | 1.3006 | 1.0000 | - | - | 1,457,398 | 1,895,529 |
| 15 | 15 | 1.2788 | 1.0000 | - | - | 1,459,052 | 1,865,776 |
| 16 | 14 | 1.2573 | 1.0000 | - | - | 1,436,726 | 1,806,338 |
| 17 | 13 | 1.2361 | 1.0000 | - | - | 1,438,557 | 1,778,232 |
| 18 | 12 | 1.2153 | 1.0000 | - | - | 1,440,160 | 1,750,284 |
| 19 | 11 | 1.1949 | 1.0000 | - | - | 1,442,035 | 1,723,098 |
| 20 | 10 | 1.1748 | 1.0000 | - | - | 1,300,187 | 1,527,482 |
| 21 | 9 | 1.1551 | 1.0000 | - | - | 1,181,516 | 1,364,729 |
| 22 | 8 | 1.1356 | 1.0000 | - | - | 1,057,532 | 1,200,982 |
| 23 | 7 | 1.1166 | 1.0000 | - | - | 930,848 | 1,039,341 |
| 24 | 6 | 1.0978 | 1.0000 | - | - | 801,435 | 879,800 |
| 25 | 5 | 1.0793 | 1.0000 | - | - | 672,022 | 725,329 |
| 26 | 4 | 1.0612 | 1.0000 | - | - | 539,851 | 572,878 |
| 27 | 3 | 1.0433 | 1.0000 | - | - | 407,681 | 425,348 |
| 28 | 2 | 1.0258 | 1.0000 | - | - | 272,725 | 279,760 |
| 29 | 1 | 1.0086 | 1.0000 | - | - | 137,769 | 138,947 |
| | | | | | 24,260 | 47,317,179 | 64,961,153 |

| | |
|---|-----------------|
| Total Escalated Expense for Entire Period | \$ 64,961,153 |
| Less Future Value of Initial Fund Balance | - |
| Net Escalated Expense for Entire Period | \$ 64,961,153 |
| Total Escalated Service Units | 24,260 |
| Impact Fee for Service Area A | \$ 2,678 |

City of Round Rock - 2018 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 | \$ 7,800,000 | 100% | \$ 7,800,000 | \$ 1,740,275 | \$ - | \$ 870,138 | \$ 870,138 | \$ 1,740,275 |
| New Hope Rd (2) | A-2 | 1,900,000 | 50% | 950,000 | 211,957 | - | 105,978 | 105,978 | 211,957 |
| New Hope Rd (3) | A-3 | 9,300,000 | 50% | 4,650,000 | 1,037,472 | - | 518,736 | 518,736 | 1,037,472 |
| Westinghouse Rd | A-4, B-1 | 9,031,296 | 50% | 4,515,648 | 1,007,496 | - | - | 1,007,496 | 1,007,496 |
| Wyoming Springs Dr (1) | A-5 | 1,700,000 | 100% | 1,700,000 | 379,291 | - | 189,645 | 189,645 | 379,291 |
| Wyoming Springs Dr (2) | A-6 | 9,100,000 | 100% | 9,100,000 | 2,030,321 | - | 1,015,161 | 1,015,161 | 2,030,321 |
| RM 1431 (1) | A-7 | 2,880,000 | 50% | 1,440,000 | 321,282 | - | 160,641 | 160,641 | 321,282 |
| RM 1431 (2) | A-8 | 3,020,000 | 100% | 3,020,000 | 673,799 | - | 336,899 | 336,899 | 673,799 |
| RM 1431 (3) | A-9 | 3,840,000 | 100% | 3,840,000 | 856,751 | - | 428,375 | 428,375 | 856,751 |
| Wyoming Springs Dr (3) | A-10 | 1,000,000 | 100% | 1,000,000 | 223,112 | - | 111,556 | 111,556 | 223,112 |
| Arterial L (1) | A-11 | 27,400,000 | 100% | 27,400,000 | 6,113,275 | - | 3,056,638 | 3,056,638 | 6,113,275 |
| Creek Bend Blvd (1) | A-12 | 10,500,000 | 100% | 10,500,000 | 2,342,679 | - | 1,171,339 | 1,171,339 | 2,342,679 |
| Creek Bend Blvd (2) | A-13 | 5,900,000 | 100% | 5,900,000 | 1,316,362 | - | 658,181 | 658,181 | 1,316,362 |
| Chisholm Trl Rd (1) | A-14 | 11,200,000 | 100% | 11,200,000 | 2,498,857 | - | 1,249,429 | 1,249,429 | 2,498,857 |
| Arterial L (2) | A-15, B-11 | 5,700,000 | 50% | 2,850,000 | 635,870 | - | 317,935 | 317,935 | 635,870 |
| CR 173 | A-16 | 1,300,000 | 100% | 1,300,000 | 290,046 | - | 145,023 | 145,023 | 290,046 |
| Chisholm Trl Rd (2) | A-17 | 2,900,000 | 100% | 2,900,000 | 647,025 | - | 323,513 | 323,513 | 647,025 |
| Chisholm Trl Rd (3) | A-18 | 900,000 | 100% | 900,000 | 200,801 | - | 100,401 | 100,401 | 200,801 |
| Sam Bass Rd (1) | A-19 | 3,500,000 | 50% | 1,750,000 | 390,446 | - | 195,223 | 195,223 | 390,446 |
| Sam Bass Rd (2) | A-20 | 4,500,000 | 100% | 4,500,000 | 1,004,005 | - | 502,003 | 502,003 | 1,004,005 |
| Sam Bass Rd (3) | A-21 | 4,200,000 | 50% | 2,100,000 | 468,536 | - | 234,268 | 234,268 | 468,536 |
| Sam Bass Rd (4) | A-22 | 2,200,000 | 100% | 2,200,000 | 490,847 | - | 245,423 | 245,423 | 490,847 |
| Sam Bass Rd (5) | A-23 | 2,500,000 | 100% | 2,500,000 | 557,781 | - | 278,890 | 278,890 | 557,781 |
| Sam Bass Rd (6) | A-24 | 1,600,000 | 50% | 800,000 | 178,490 | - | 89,245 | 89,245 | 178,490 |
| FM 3406 | A-25 | 6,980,000 | 100% | 6,980,000 | 1,557,323 | - | 778,662 | 778,662 | 1,557,323 |
| Wyoming Springs Dr (5) | A-26 | 8,500,000 | 100% | 8,500,000 | 1,896,454 | - | 948,227 | 948,227 | 1,896,454 |
| Chisholm Trl Rd (4) | A-27 | 2,600,000 | 100% | 2,600,000 | 580,092 | - | 290,046 | 290,046 | 580,092 |
| Creek Bend Blvd (3) | A-28 | 11,012,302 | 100% | 11,012,302 | 2,456,979 | 2,456,979 | - | - | 2,456,979 |
| Deepwood Dr (1) | A-29 | 6,000,000 | 100% | 6,000,000 | 1,338,673 | - | 669,337 | 669,337 | 1,338,673 |
| Deepwood Dr (2) | A-30 | 800,000 | 100% | 800,000 | 178,490 | - | 89,245 | 89,245 | 178,490 |
| RM 620 | A-31, C-1 | 12,560,624 | 50% | 6,280,312 | 1,401,214 | - | - | 1,401,214 | 1,401,214 |
| Sam Bass Rd and FM 3406 | AI-1 | 295,000 | 100% | 295,000 | 65,818 | - | 32,909 | 32,909 | 65,818 |
| Sam Bass Rd and Hairy Man Rd | AI-2 | 2,000,000 | 75% | 1,500,000 | 334,668 | - | 167,334 | 167,334 | 334,668 |
| Sam Bass Rd and Chisholm Trl Rd | AI-3 | 139,000 | 100% | 139,000 | 31,013 | - | 15,506 | 15,506 | 31,013 |
| Deepwood Dr and Round Rock Ave (RM 620) | AI-4, CI-1 | 392,000 | 50% | 196,000 | 43,730 | - | 21,865 | 21,865 | 43,730 |
| IH 35 Blvd and Round Rock Ave (RM 620) | AI-5, CI-2 | 588,000 | 50% | 294,000 | 65,595 | - | 32,797 | 32,797 | 65,595 |
| Update ITS and Traffic Managemenet Infrastructure | - | 20,900,000 | 33% | 6,966,667 | 1,554,349 | - | 777,174 | 777,174 | 1,554,349 |
| Roadway Impact Fee Project | | 34,673 | 100% | 34,673 | 34,673 | - | - | 34,673 | 34,673 |
| Total | | \$ 206,672,895 | | \$ 166,413,602 | \$ 37,155,848 | \$ 2,456,979 | \$ 16,127,743 | \$ 18,571,126 | \$ 37,155,848 |

(1) 2018 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
2018 Roadway Impact Fee Study
City of Round Rock, Texas

Service Area A
Page 7 of 8

Appendix E - Plan for Awarding
the Impact Fee Credit

City of Round Rock - 2018 Roadway Impact Fee Study

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

| | |
|--|--------------------------|
| 2018 Vehicle Miles (All Service Areas) | 333,473 |
| Ten Year Growth in Vehicle Miles (Service Area A) ⁽¹⁾ | 16,130 |
| Annual Growth in Vehicle Miles | <u>10 years</u> 1,613 |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total |
|--|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|
| Total Debt Service Eligible for Impact Fees | \$ 283,979 | \$ 408,804 | \$ 536,397 | \$ 666,977 | \$ 797,617 | \$ 930,826 | \$ 1,065,112 | \$ 1,192,532 | \$ 1,328,473 | \$ 1,467,760 | \$ 8,678,479 |
| 2018 Vehicle Miles plus Service Area A Growth | 335,086 | 336,699 | 338,312 | 339,925 | 341,538 | 343,151 | 344,764 | 346,377 | 347,990 | 349,603 | |
| Total Debt Service Eligible for Impact Fees per Vehicle Mile | \$ 0.85 | \$ 1.21 | \$ 1.59 | \$ 1.96 | \$ 2.34 | \$ 2.71 | \$ 3.09 | \$ 3.44 | \$ 3.82 | \$ 4.20 | |
| Annual Growth in Service Area A Vehicle Miles (Cumulative) | 1,613 | 3,226 | 4,839 | 6,452 | 8,065 | 9,678 | 11,291 | 12,904 | 14,517 | 16,130 | |
| Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees | \$ 1,367 | \$ 3,917 | \$ 7,672 | \$ 12,660 | \$ 18,835 | \$ 26,253 | \$ 34,883 | \$ 44,428 | \$ 55,420 | \$ 67,721 | \$ 273,155 |
| Credit Amount | \$ 273,155 | | | | | | | | | | |

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2018 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⁾ | 1.71% |
| Annual Service Unit Growth ⁽²⁾ | 3,278 |
| Existing Fund Balance ⁽³⁾ | - |
| Portion of Projects Funded by Existing Debt ⁽⁴⁾ | \$ 603,043 |
| Non-debt Funded New Project Cost ⁽⁵⁾ | 42,452,643 |
| New Project Cost Funded Through New Debt ⁽⁶⁾ | 39,999,467 |
| Total Recoverable Project Cost ⁽⁷⁾ | \$ 83,055,152 |

II. New Debt Issues Assumptions

| <u>Year</u> | <u>Principal⁽⁸⁾</u> | <u>Interest⁽⁹⁾</u> | <u>Term</u> |
|-------------|--------------------------------|-------------------------------|-------------|
| 1 | \$ 3,999,947 | 4.00% | 20 |
| 2 | 3,999,947 | 4.50% | 20 |
| 3 | 3,999,947 | 4.75% | 20 |
| 4 | 3,999,947 | 5.00% | 20 |
| 5 | 3,999,947 | 5.00% | 20 |
| 6 | 3,999,947 | 5.25% | 20 |
| 7 | 3,999,947 | 5.25% | 20 |
| 8 | 3,999,947 | 5.50% | 20 |
| 9 | 3,999,947 | 5.50% | 20 |
| 10 | 3,999,947 | 5.75% | 20 |
| Total | \$ 39,999,467 | | |

III. Capital Expenditure Assumptions

| <u>Year</u> | <u>Annual Capital Expenditures⁽¹⁰⁾</u> |
|-------------|---|
| 1 | \$ 6,183,908 |
| 2 | 8,245,211 |
| 3 | 8,245,211 |
| 4 | 8,245,211 |
| 5 | 8,245,211 |
| 6 | 8,245,211 |
| 7 | 8,245,211 |
| 8 | 8,245,211 |
| 9 | 8,245,211 |
| 10 | 10,306,514 |
| Total | \$ 82,452,109 |

- (1) Money Market Earnings per City Staff As of March 2018
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) New Impact Fee, Balance Not Applicable
(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's Financial Advisor
(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 - 2018 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 | \$ 294,323 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 294,323 |
| 2 | 294,323 | 307,500 | - | - | - | - | - | - | - | - | 601,824 |
| 3 | 294,323 | 307,500 | 314,198 | - | - | - | - | - | - | - | 916,021 |
| 4 | 294,323 | 307,500 | 314,198 | 320,966 | - | - | - | - | - | - | 1,236,987 |
| 5 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | - | - | - | - | - | 1,557,953 |
| 6 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | - | - | - | - | 1,885,758 |
| 7 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | - | - | - | 2,213,563 |
| 8 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | - | - | 2,548,276 |
| 9 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | - | 2,882,989 |
| 10 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 11 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 12 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 13 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 14 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 15 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 16 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 17 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 18 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 19 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 20 | 294,323 | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 3,224,678 |
| 21 | - | 307,500 | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 2,930,355 |
| 22 | - | - | 314,198 | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 2,622,854 |
| 23 | - | - | - | 320,966 | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 2,308,657 |
| 24 | - | - | - | - | 320,966 | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 1,987,691 |
| 25 | - | - | - | - | - | 327,805 | 327,805 | 334,713 | 334,713 | 341,689 | 1,666,725 |
| 26 | - | - | - | - | - | - | 327,805 | 334,713 | 334,713 | 341,689 | 1,338,920 |
| 27 | - | - | - | - | - | - | - | 334,713 | 334,713 | 341,689 | 1,011,115 |
| 28 | - | - | - | - | - | - | - | - | 334,713 | 341,689 | 676,402 |
| 29 | - | - | - | - | - | - | - | - | - | 341,689 | 341,689 |
| | \$ 5,886,462 | \$ 6,150,010 | \$ 6,283,954 | \$ 6,419,321 | \$ 6,419,321 | \$ 6,556,095 | \$ 6,556,095 | \$ 6,694,257 | \$ 6,694,257 | \$ 6,833,789 | \$ 64,493,561 |

City of Round Rock - 2018 Roadway Impact Fee Study

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

II. Summary of Annual Expenses

| Year | New Annual Debt Service ⁽¹⁾ | Annual Capital Expenditures ⁽²⁾ | Annual Bond Proceeds ⁽²⁾ | Existing Annual Debt Service ⁽³⁾ | Annual Credit ⁽⁴⁾ | Total Expense |
|------|---|--|---|--|---------------------------------|------------------|
| 1 | \$ 294,323 | \$ 6,183,908 | \$ (3,999,947) | \$ - | \$ (2,865) | \$ 2,475,420 |
| 2 | 601,824 | 8,245,211 | (3,999,947) | - | (11,602) | 4,835,486 |
| 3 | 916,021 | 8,245,211 | (3,999,947) | - | (26,236) | 5,135,049 |
| 4 | 1,236,987 | 8,245,211 | (3,999,947) | - | (46,792) | 5,435,459 |
| 5 | 1,557,953 | 8,245,211 | (3,999,947) | - | (72,977) | 5,730,241 |
| 6 | 1,885,758 | 8,245,211 | (3,999,947) | - | (105,014) | 6,026,008 |
| 7 | 2,213,563 | 8,245,211 | (3,999,947) | - | (142,492) | 6,316,336 |
| 8 | 2,548,276 | 8,245,211 | (3,999,947) | - | (185,764) | 6,607,777 |
| 9 | 2,882,989 | 8,245,211 | (3,999,947) | - | (234,299) | 6,893,954 |
| 10 | 3,224,678 | 10,306,514 | (3,999,947) | - | (288,580) | 9,242,665 |
| 11 | 3,224,678 | - | - | - | - | 3,224,678 |
| 12 | 3,224,678 | - | - | - | - | 3,224,678 |
| 13 | 3,224,678 | - | - | - | - | 3,224,678 |
| 14 | 3,224,678 | - | - | - | - | 3,224,678 |
| 15 | 3,224,678 | - | - | - | - | 3,224,678 |
| 16 | 3,224,678 | - | - | - | - | 3,224,678 |
| 17 | 3,224,678 | - | - | - | - | 3,224,678 |
| 18 | 3,224,678 | - | - | - | - | 3,224,678 |
| 19 | 3,224,678 | - | - | - | - | 3,224,678 |
| 20 | 3,224,678 | - | - | - | - | 3,224,678 |
| 21 | 2,930,355 | - | - | - | - | 2,930,355 |
| 22 | 2,622,854 | - | - | - | - | 2,622,854 |
| 23 | 2,308,657 | - | - | - | - | 2,308,657 |
| 24 | 1,987,691 | - | - | - | - | 1,987,691 |
| 25 | 1,666,725 | - | - | - | - | 1,666,725 |
| 26 | 1,338,920 | - | - | - | - | 1,338,920 |
| 27 | 1,011,115 | - | - | - | - | 1,011,115 |
| 28 | 676,402 | - | - | - | - | 676,402 |
| 29 | 341,689 | - | - | - | - | 341,689 |
| | \$ 64,493,561 | \$ 82,452,109 | \$ (39,999,467) | \$ - | \$ (1,116,621) | \$ 105,829,583 |

City of Round Rock - 2018 Roadway Impact Fee Study

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

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

| | <u>GO 2002</u> | <u>CO 2014</u> | <u>TOTAL</u> |
|------|-------------------|------------------|-------------------|
| 2002 | | | - |
| 2003 | - | | - |
| 2004 | 861 | | 861 |
| 2005 | 2,349 | | 2,349 |
| 2006 | 10,376 | | 10,376 |
| 2007 | 13,508 | | 13,508 |
| 2008 | 5,286 | | 5,286 |
| 2009 | 5,599 | | 5,599 |
| 2010 | 5,755 | | 5,755 |
| 2011 | 8,535 | | 8,535 |
| 2012 | 9,005 | | 9,005 |
| 2013 | 9,514 | | 9,514 |
| 2014 | 10,023 | | 10,023 |
| 2015 | 10,571 | - | 10,571 |
| 2016 | 11,159 | 2,111 | 13,270 |
| 2017 | 11,746 | 9,410 | 21,155 |
| | <u>\$ 114,287</u> | <u>\$ 11,521</u> | <u>\$ 125,808</u> |

IV. Summary of Debt Financing

| | |
|---|----------------------|
| Existing Debt Funded Project Costs ⁽⁵⁾ | 603,043 |
| -Less Principal PTD | 125,808 |
| Outstanding Debt Principal | 477,235 |
| New Project Costs Debt Principal ⁽⁵⁾ | 39,999,467 |
| Principal Component | \$ 40,476,701 |

(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 - 2018 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 | \$ 2,933 | 3,278 | \$ 9,611,851 | \$ 2,475,420 | \$ 7,136,431 | 61,016 | 7,197,447 |
| 2 | 2,933 | 3,278 | 9,611,851 | 4,835,486 | 4,776,365 | 163,914 | 12,137,727 |
| 3 | 2,933 | 3,278 | 9,611,851 | 5,135,049 | 4,476,802 | 245,832 | 16,860,361 |
| 4 | 2,933 | 3,278 | 9,611,851 | 5,435,459 | 4,176,392 | 324,020 | 21,360,773 |
| 5 | 2,933 | 3,278 | 9,611,851 | 5,730,241 | 3,881,610 | 398,457 | 25,640,840 |
| 6 | 2,933 | 3,278 | 9,611,851 | 6,026,008 | 3,585,843 | 469,117 | 29,695,800 |
| 7 | 2,933 | 3,278 | 9,611,851 | 6,316,336 | 3,295,515 | 535,975 | 33,527,290 |
| 8 | 2,933 | 3,278 | 9,611,851 | 6,607,777 | 3,004,074 | 599,002 | 37,130,366 |
| 9 | 2,933 | 3,278 | 9,611,851 | 6,893,954 | 2,717,897 | 658,167 | 40,506,430 |
| 10 | 2,933 | 3,278 | 9,611,851 | 9,242,665 | 369,186 | 695,817 | 41,571,433 |
| 11 | - | - | - | 3,224,678 | (3,224,678) | 683,301 | 39,030,056 |
| 12 | - | - | - | 3,224,678 | (3,224,678) | 639,843 | 36,445,221 |
| 13 | - | - | - | 3,224,678 | (3,224,678) | 595,642 | 33,816,185 |
| 14 | - | - | - | 3,224,678 | (3,224,678) | 550,686 | 31,142,193 |
| 15 | - | - | - | 3,224,678 | (3,224,678) | 504,960 | 28,422,475 |
| 16 | - | - | - | 3,224,678 | (3,224,678) | 458,453 | 25,656,250 |
| 17 | - | - | - | 3,224,678 | (3,224,678) | 411,151 | 22,842,723 |
| 18 | - | - | - | 3,224,678 | (3,224,678) | 363,040 | 19,981,085 |
| 19 | - | - | - | 3,224,678 | (3,224,678) | 314,106 | 17,070,512 |
| 20 | - | - | - | 3,224,678 | (3,224,678) | 264,335 | 14,110,169 |
| 21 | - | - | - | 2,930,355 | (2,930,355) | 216,229 | 11,396,043 |
| 22 | - | - | - | 2,622,854 | (2,622,854) | 172,447 | 8,945,636 |
| 23 | - | - | - | 2,308,657 | (2,308,657) | 133,231 | 6,770,210 |
| 24 | - | - | - | 1,987,691 | (1,987,691) | 98,776 | 4,881,295 |
| 25 | - | - | - | 1,666,725 | (1,666,725) | 69,220 | 3,283,790 |
| 26 | - | - | - | 1,338,920 | (1,338,920) | 44,705 | 1,989,575 |
| 27 | - | - | - | 1,011,115 | (1,011,115) | 25,377 | 1,003,837 |
| 28 | - | - | - | 676,402 | (676,402) | 11,382 | 338,817 |
| 29 | - | - | - | 341,689 | (341,689) | 2,872 | - |
| | | | 96,118,510 | 105,829,583 | | 9,711,073 | |

City of Round Rock - 2018 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 | 1.6214 | 1.0000 | 3,278 | 5,314 | \$ 2,475,420 | \$ 4,013,550 |
| 2 | 28 | 1.5941 | 1.0000 | 3,278 | 5,225 | 4,835,486 | 7,708,257 |
| 3 | 27 | 1.5673 | 1.0000 | 3,278 | 5,137 | 5,135,049 | 8,048,168 |
| 4 | 26 | 1.5410 | 1.0000 | 3,278 | 5,051 | 5,435,459 | 8,375,776 |
| 5 | 25 | 1.5150 | 1.0000 | 3,278 | 4,966 | 5,730,241 | 8,681,565 |
| 6 | 24 | 1.4896 | 1.0000 | 3,278 | 4,882 | 6,026,008 | 8,976,172 |
| 7 | 23 | 1.4645 | 1.0000 | 3,278 | 4,800 | 6,316,336 | 9,250,453 |
| 8 | 22 | 1.4399 | 1.0000 | 3,278 | 4,719 | 6,607,777 | 9,514,578 |
| 9 | 21 | 1.4157 | 1.0000 | 3,278 | 4,640 | 6,893,954 | 9,759,755 |
| 10 | 20 | 1.3919 | 1.0000 | 3,278 | 4,562 | 9,242,665 | 12,864,830 |
| 11 | 19 | 1.3685 | 1.0000 | - | - | 3,224,678 | 4,412,956 |
| 12 | 18 | 1.3455 | 1.0000 | - | - | 3,224,678 | 4,338,763 |
| 13 | 17 | 1.3229 | 1.0000 | - | - | 3,224,678 | 4,265,817 |
| 14 | 16 | 1.3006 | 1.0000 | - | - | 3,224,678 | 4,194,098 |
| 15 | 15 | 1.2788 | 1.0000 | - | - | 3,224,678 | 4,123,585 |
| 16 | 14 | 1.2573 | 1.0000 | - | - | 3,224,678 | 4,054,257 |
| 17 | 13 | 1.2361 | 1.0000 | - | - | 3,224,678 | 3,986,095 |
| 18 | 12 | 1.2153 | 1.0000 | - | - | 3,224,678 | 3,919,079 |
| 19 | 11 | 1.1949 | 1.0000 | - | - | 3,224,678 | 3,853,189 |
| 20 | 10 | 1.1748 | 1.0000 | - | - | 3,224,678 | 3,788,407 |
| 21 | 9 | 1.1551 | 1.0000 | - | - | 2,930,355 | 3,384,752 |
| 22 | 8 | 1.1356 | 1.0000 | - | - | 2,622,854 | 2,978,634 |
| 23 | 7 | 1.1166 | 1.0000 | - | - | 2,308,657 | 2,577,738 |
| 24 | 6 | 1.0978 | 1.0000 | - | - | 1,987,691 | 2,182,049 |
| 25 | 5 | 1.0793 | 1.0000 | - | - | 1,666,725 | 1,798,937 |
| 26 | 4 | 1.0612 | 1.0000 | - | - | 1,338,920 | 1,420,833 |
| 27 | 3 | 1.0433 | 1.0000 | - | - | 1,011,115 | 1,054,934 |
| 28 | 2 | 1.0258 | 1.0000 | - | - | 676,402 | 693,851 |
| 29 | 1 | 1.0086 | 1.0000 | - | - | 341,689 | 344,611 |
| | | | | | 49,296 | 105,829,583 | 144,565,691 |

| | |
|---|-----------------|
| Total Escalated Expense for Entire Period | \$ 144,565,691 |
| Less Future Value of Initial Fund Balance | - |
| Net Escalated Expense for Entire Period | \$ 144,565,691 |
| Total Escalated Service Units | 49,296 |
| Impact Fee for Service Area B | \$ 2,933 |

City of Round Rock - 2018 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 | 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 |
| Westinghouse Rd (1) | A-4, B-1 | \$ 9,031,296 | 50% | \$ 4,515,648 | \$ 1,332,698 | \$ - | \$ - | \$ 1,332,698 | \$ 1,332,698 |
| Westinghouse Rd (2) | B-2 | 5,500,000 | 50% | 2,750,000 | 811,604 | - | 405,802 | 405,802 | 811,604 |
| N Mays St (1) | B-3 | 1,889,219 | 100% | 1,889,219 | 557,563 | - | - | 557,563 | 557,563 |
| University Blvd (1) | B-4 | 8,900,000 | 100% | 8,900,000 | 2,626,647 | - | 1,313,324 | 1,313,324 | 2,626,647 |
| University Blvd (2) | B-5 | 30,700,000 | 50% | 15,350,000 | 4,530,228 | - | 2,265,114 | 2,265,114 | 4,530,228 |
| University Blvd (3) | B-6 | 4,800,000 | 100% | 4,800,000 | 1,416,619 | - | 708,309 | 708,309 | 1,416,619 |
| University Blvd (4) | B-7 | 9,700,000 | 50% | 4,850,000 | 1,431,375 | - | 715,688 | 715,688 | 1,431,375 |
| University Blvd (5) | B-8 | 29,300,000 | 100% | 29,300,000 | 8,647,276 | - | 4,323,638 | 4,323,638 | 8,647,276 |
| N Mays St (2) | B-9 | 5,800,000 | 100% | 5,800,000 | 1,711,748 | - | 855,874 | 855,874 | 1,711,748 |
| N Mays St (3) | B-10 | 24,800,000 | 100% | 24,800,000 | 7,319,196 | - | 3,659,598 | 3,659,598 | 7,319,196 |
| Arterial L (1) | A-15, B-11 | 5,700,000 | 50% | 2,850,000 | 841,117 | - | 420,559 | 420,559 | 841,117 |
| Arterial L (2) | B-12 | 21,200,000 | 100% | 21,200,000 | 6,256,732 | - | 3,128,366 | 3,128,366 | 6,256,732 |
| N Mays St (4) | B-13 | 3,100,000 | 100% | 3,100,000 | 914,900 | - | 457,450 | 457,450 | 914,900 |
| Sunrise Rd (1) | B-14 | 979,190 | 100% | 979,190 | 288,987 | - | - | 288,987 | 288,987 |
| Sunrise Rd (2) | B-15 | 1,000,000 | 100% | 1,000,000 | 295,129 | - | 147,564 | 147,564 | 295,129 |
| Sunrise Rd (3) | B-16 | 600,000 | 50% | 300,000 | 88,539 | - | 44,269 | 44,269 | 88,539 |
| Sunrise Rd (4) | B-17 | 500,000 | 100% | 500,000 | 147,564 | - | 73,782 | 73,782 | 147,564 |
| Sunrise Rd (5) | B-18 | 200,000 | 50% | 100,000 | 29,513 | - | 14,756 | 14,756 | 29,513 |
| Sunrise Rd (6) | B-19 | 800,000 | 100% | 800,000 | 236,103 | - | 118,052 | 118,052 | 236,103 |
| College Park (1) | B-20 | 5,400,000 | 100% | 5,400,000 | 1,593,696 | - | 796,848 | 796,848 | 1,593,696 |
| Avery Nelson | B-21 | 2,800,000 | 100% | 2,800,000 | 826,361 | - | 413,180 | 413,180 | 826,361 |
| College Park (2) | B-22 | 11,500,000 | 100% | 11,500,000 | 3,393,982 | - | 1,696,991 | 1,696,991 | 3,393,982 |
| Seton Pkwy | B-23 | 2,043,320 | 100% | 2,043,320 | 603,043 | 603,043 | - | - | 603,043 |
| Medical Center Pkwy | B-24 | 810,679 | 100% | 810,679 | 239,255 | - | - | 239,255 | 239,255 |
| CR 112 (1) | B-25 | 8,000,000 | 100% | 8,000,000 | 2,361,031 | - | 1,180,516 | 1,180,516 | 2,361,031 |
| CR 112 (2) | B-26 | 5,000,000 | 50% | 2,500,000 | 737,822 | - | 368,911 | 368,911 | 737,822 |
| Kenney Fort Blvd (1) | B-27 | 13,700,000 | 100% | 13,700,000 | 4,043,266 | - | 2,021,633 | 2,021,633 | 4,043,266 |
| Red Bud Ln (1) | B-28 | 2,600,000 | 100% | 2,600,000 | 767,335 | - | 383,668 | 383,668 | 767,335 |
| Red Bud Ln (2) | B-29 | 3,000,000 | 50% | 1,500,000 | 442,693 | - | 221,347 | 221,347 | 442,693 |
| Red Bud Ln (3) | B-30 | 4,100,000 | 100% | 4,100,000 | 1,210,028 | - | 605,014 | 605,014 | 1,210,028 |
| Old Settlers Blvd (1) | B-31 | 6,800,000 | 100% | 6,800,000 | 2,006,876 | - | 1,003,438 | 1,003,438 | 2,006,876 |
| Old Settlers Blvd (2) | B-32 | 18,100,000 | 100% | 18,100,000 | 5,341,833 | - | 2,670,916 | 2,670,916 | 5,341,833 |
| Old Settlers Blvd (3) | B-33 | 5,800,000 | 100% | 5,800,000 | 1,711,748 | - | 855,874 | 855,874 | 1,711,748 |
| Spur 379 (N Mays St) | B-34 | 2,700,000 | 100% | 2,700,000 | 796,848 | - | 398,424 | 398,424 | 796,848 |
| Sunrise Rd (7) | B-35 | 600,000 | 100% | 600,000 | 177,077 | - | 88,539 | 88,539 | 177,077 |
| FM 1460 (A.W. Grimes Blvd) (1) | B-36 | 1,000,000 | 100% | 1,000,000 | 295,129 | - | 147,564 | 147,564 | 295,129 |
| FM 1460 (A.W. Grimes Blvd) (2) | B-37 | 1,000,000 | 50% | 500,000 | 147,564 | - | 73,782 | 73,782 | 147,564 |
| FM 1460 (A.W. Grimes Blvd) (3) | B-38 | 3,940,000 | 100% | 3,940,000 | 1,162,808 | - | 581,404 | 581,404 | 1,162,808 |
| Kenney Fort Blvd (2) | B-39 | 2,600,000 | 100% | 2,600,000 | 767,335 | - | 383,668 | 383,668 | 767,335 |
| Kenney Fort Blvd (3) | B-40 | 2,800,000 | 50% | 1,400,000 | 413,180 | - | 206,590 | 206,590 | 413,180 |
| Kenney Fort Blvd (4) | B-41 | 15,200,000 | 100% | 15,200,000 | 4,485,959 | - | 2,242,979 | 2,242,979 | 4,485,959 |
| Kenney Fort Blvd (5) | B-42 | 5,800,000 | 100% | 5,800,000 | 1,711,748 | - | 855,874 | 855,874 | 1,711,748 |
| Red Bud Ln (4) | B-43 | 5,200,000 | 100% | 5,200,000 | 1,534,670 | - | 767,335 | 767,335 | 1,534,670 |
| Red Bud Ln (5) | B-44 | 2,200,000 | 50% | 1,100,000 | 324,642 | - | 162,321 | 162,321 | 324,642 |
| Red Bud Ln (6) | B-45 | 4,700,000 | 100% | 4,700,000 | 1,387,106 | - | 693,553 | 693,553 | 1,387,106 |
| US 79 (1) | B-46, C-6 | 13,340,000 | 50% | 6,670,000 | 1,968,510 | - | 984,255 | 984,255 | 1,968,510 |
| US 79 (2) | B-47 | 900,000 | 50% | 450,000 | 132,808 | - | 66,404 | 66,404 | 132,808 |
| N Mays St and University Blvd | BI-1 | 784,000 | 100% | 784,000 | 231,381 | - | 115,691 | 115,691 | 231,381 |
| Sunrise Rd and University Blvd | BI-2 | 1,063,000 | 100% | 1,063,000 | 313,722 | - | 156,861 | 156,861 | 313,722 |
| N Mays St and Steam Way | BI-3 | 170,235 | 100% | 170,235 | 50,241 | - | 25,121 | 25,121 | 50,241 |
| A.W. Grimes Blvd and Palm Valley Blvd | BI-4, CI-8 | 2,041,000 | 50% | 1,020,500 | 301,179 | - | 150,590 | 150,590 | 301,179 |
| Update ITS and Traffic Managemenet Infrastructure | - | 20,900,000 | 33% | 6,966,667 | 2,056,065 | - | 1,028,032 | 1,028,032 | 2,056,065 |
| Roadway Impact Fee Project | | 34,673 | 100% | 34,673 | 34,673 | - | - | 34,673 | 34,673 |
| Total | | \$ 341,126,612 | | \$ 281,337,131 | \$ 83,055,152 | \$ 603,043 | \$ 39,999,467 | \$ 42,452,643 | \$ 83,055,152 |

(1) 2018 Roadway 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 - 2018 Roadway Impact Fee Study

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

| | |
|--|--------------------------|
| 2018 Vehicle Miles (All Service Areas) | 333,473 |
| Ten Year Growth in Vehicle Miles (Service Area B) ⁽¹⁾ | 32,776 |
| Annual Growth in Vehicle Miles | <u>10 years</u> 3,278 |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total |
|--|---------------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Total Debt Service Eligible for Impact Fees | \$ 294,323 | \$ 601,824 | \$ 916,021 | \$ 1,236,987 | \$ 1,557,953 | \$ 1,885,758 | \$ 2,213,563 | \$ 2,548,276 | \$ 2,882,989 | \$ 3,224,678 | \$ 17,362,372 |
| 2018 Vehicle Miles plus Service Area B Growth | 336,751 | 340,028 | 343,306 | 346,583 | 349,861 | 353,139 | 356,416 | 359,694 | 362,971 | 366,249 | |
| Total Debt Service Eligible for Impact Fees per Vehicle Mile | \$ 0.87 | \$ 1.77 | \$ 2.67 | \$ 3.57 | \$ 4.45 | \$ 5.34 | \$ 6.21 | \$ 7.08 | \$ 7.94 | \$ 8.80 | |
| Annual Growth in Service Area B Vehicle Miles (Cumulative) | 3,278 | 6,555 | 9,833 | 13,110 | 16,388 | 19,666 | 22,943 | 26,221 | 29,498 | 32,776 | |
| Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees | \$ 2,865 | \$ 11,602 | \$ 26,236 | \$ 46,792 | \$ 72,977 | \$ 105,014 | \$ 142,492 | \$ 185,764 | \$ 234,299 | \$ 288,580 | \$ 1,116,621 |
| Credit Amount | \$ 1,116,621 | | | | | | | | | | |

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2018 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⁾ | 1.71% |
| Annual Service Unit Growth ⁽²⁾ | 4,613 |
| Existing Fund Balance ⁽³⁾ | - |
| Portion of Projects Funded by Existing Debt ⁽⁴⁾ | \$ - |
| Non-debt Funded New Project Cost ⁽⁵⁾ | 61,690,973 |
| New Project Cost Funded Through New Debt ⁽⁶⁾ | 40,697,010 |
| Total Recoverable Project Cost ⁽⁷⁾ | \$ 102,387,983 |

II. New Debt Issues Assumptions

| <u>Year</u> | <u>Principal⁽⁸⁾</u> | <u>Interest⁽⁹⁾</u> | <u>Term</u> |
|-------------|--------------------------------|-------------------------------|-------------|
| 1 | \$ 4,069,701 | 4.00% | 20 |
| 2 | 4,069,701 | 4.50% | 20 |
| 3 | 4,069,701 | 4.75% | 20 |
| 4 | 4,069,701 | 5.00% | 20 |
| 5 | 4,069,701 | 5.00% | 20 |
| 6 | 4,069,701 | 5.25% | 20 |
| 7 | 4,069,701 | 5.25% | 20 |
| 8 | 4,069,701 | 5.50% | 20 |
| 9 | 4,069,701 | 5.50% | 20 |
| 10 | 4,069,701 | 5.75% | 20 |
| Total | \$ 40,697,010 | | |

III. Capital Expenditure Assumptions

| <u>Year</u> | <u>Annual Capital Expenditures⁽¹⁰⁾</u> |
|-------------|---|
| 1 | \$ 7,679,099 |
| 2 | 10,238,798 |
| 3 | 10,238,798 |
| 4 | 10,238,798 |
| 5 | 10,238,798 |
| 6 | 10,238,798 |
| 7 | 10,238,798 |
| 8 | 10,238,798 |
| 9 | 10,238,798 |
| 10 | 12,798,498 |
| Total | \$ 102,387,983 |

- (1) Money Market Earnings per City Staff As of March 2018
- (2) Derived from the 10-year Growth Projections Report, Table 7
- (3) New Impact Fee, Balance Not Applicable
- (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's Financial Advisor
- (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 - 2018 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 | \$ 299,456 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 299,456 |
| 2 | 299,456 | 312,863 | - | - | - | - | - | - | - | - | 612,319 |
| 3 | 299,456 | 312,863 | 319,677 | - | - | - | - | - | - | - | 931,996 |
| 4 | 299,456 | 312,863 | 319,677 | 326,563 | - | - | - | - | - | - | 1,258,559 |
| 5 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | - | - | - | - | - | 1,585,122 |
| 6 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | - | - | - | - | 1,918,644 |
| 7 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | - | - | - | 2,252,165 |
| 8 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | - | - | 2,592,715 |
| 9 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | - | 2,933,265 |
| 10 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 11 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 12 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 13 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 14 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 15 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 16 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 17 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 18 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 19 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 20 | 299,456 | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 3,280,913 |
| 21 | - | 312,863 | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 2,981,457 |
| 22 | - | - | 319,677 | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 2,668,594 |
| 23 | - | - | - | 326,563 | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 2,348,917 |
| 24 | - | - | - | - | 326,563 | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 2,022,354 |
| 25 | - | - | - | - | - | 333,521 | 333,521 | 340,550 | 340,550 | 347,648 | 1,695,790 |
| 26 | - | - | - | - | - | - | 333,521 | 340,550 | 340,550 | 347,648 | 1,362,269 |
| 27 | - | - | - | - | - | - | - | 340,550 | 340,550 | 347,648 | 1,028,748 |
| 28 | - | - | - | - | - | - | - | - | 340,550 | 347,648 | 688,198 |
| 29 | - | - | - | - | - | - | - | - | - | 347,648 | 347,648 |
| | \$ 5,989,115 | \$ 6,257,259 | \$ 6,393,538 | \$ 6,531,267 | \$ 6,531,267 | \$ 6,670,426 | \$ 6,670,426 | \$ 6,810,997 | \$ 6,810,997 | \$ 6,952,962 | \$ 65,618,253 |

City of Round Rock - 2018 Roadway Impact Fee Study

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

II. Summary of Annual Expenses

| Year | New Annual Debt Service ⁽¹⁾ | Annual Capital Expenditures ⁽²⁾ | Annual Bond Proceeds ⁽²⁾ | Existing Annual Debt Service ⁽³⁾ | Annual Credit ⁽⁴⁾ | Total Expense |
|------|---|--|---|--|---------------------------------|------------------|
| 1 | \$ 299,456 | \$ 7,679,099 | \$ (4,069,701) | \$ - | \$ (4,086) | \$ 3,904,768 |
| 2 | 612,319 | 10,238,798 | (4,069,701) | - | (16,483) | 6,764,933 |
| 3 | 931,996 | 10,238,798 | (4,069,701) | - | (37,133) | 7,063,960 |
| 4 | 1,258,559 | 10,238,798 | (4,069,701) | - | (65,982) | 7,361,674 |
| 5 | 1,585,122 | 10,238,798 | (4,069,701) | - | (102,535) | 7,651,685 |
| 6 | 1,918,644 | 10,238,798 | (4,069,701) | - | (147,028) | 7,940,713 |
| 7 | 2,252,165 | 10,238,798 | (4,069,701) | - | (198,812) | 8,222,450 |
| 8 | 2,592,715 | 10,238,798 | (4,069,701) | - | (258,313) | 8,503,499 |
| 9 | 2,933,265 | 10,238,798 | (4,069,701) | - | (324,728) | 8,777,634 |
| 10 | 3,280,913 | 12,798,498 | (4,069,701) | - | (398,668) | 11,611,042 |
| 11 | 3,280,913 | - | - | - | - | 3,280,913 |
| 12 | 3,280,913 | - | - | - | - | 3,280,913 |
| 13 | 3,280,913 | - | - | - | - | 3,280,913 |
| 14 | 3,280,913 | - | - | - | - | 3,280,913 |
| 15 | 3,280,913 | - | - | - | - | 3,280,913 |
| 16 | 3,280,913 | - | - | - | - | 3,280,913 |
| 17 | 3,280,913 | - | - | - | - | 3,280,913 |
| 18 | 3,280,913 | - | - | - | - | 3,280,913 |
| 19 | 3,280,913 | - | - | - | - | 3,280,913 |
| 20 | 3,280,913 | - | - | - | - | 3,280,913 |
| 21 | 2,981,457 | - | - | - | - | 2,981,457 |
| 22 | 2,668,594 | - | - | - | - | 2,668,594 |
| 23 | 2,348,917 | - | - | - | - | 2,348,917 |
| 24 | 2,022,354 | - | - | - | - | 2,022,354 |
| 25 | 1,695,790 | - | - | - | - | 1,695,790 |
| 26 | 1,362,269 | - | - | - | - | 1,362,269 |
| 27 | 1,028,748 | - | - | - | - | 1,028,748 |
| 28 | 688,198 | - | - | - | - | 688,198 |
| 29 | 347,648 | - | - | - | - | 347,648 |
| | \$ 65,618,253 | \$ 102,387,983 | \$ (40,697,010) | \$ - | \$ (1,553,766) | \$ 125,755,460 |

City of Round Rock - 2018 Roadway Impact Fee Study
Capital Improvement Plan for Impact Fees
Appendix E - Impact Fee Calculation Assumptions

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

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

IV. Summary of Debt Financing

| | |
|---|----------------------|
| Existing Debt Funded Project Costs ⁽⁵⁾ | - |
| -Less Principal PTD | - |
| Outstanding Debt Principal | - |
| New Project Costs Debt Principal ⁽⁵⁾ | 40,697,010 |
| Principal Component | \$ 40,697,010 |

(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 - 2018 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 | \$ 2,511 | 4,613 | \$ 11,582,067 | \$ 3,904,768 | \$ 7,677,299 | 65,641 | 7,742,940 |
| 2 | 2,511 | 4,613 | 11,582,067 | 6,764,933 | 4,817,134 | 173,591 | 12,733,666 |
| 3 | 2,511 | 4,613 | 11,582,067 | 7,063,960 | 4,518,107 | 256,376 | 17,508,148 |
| 4 | 2,511 | 4,613 | 11,582,067 | 7,361,674 | 4,220,393 | 335,474 | 22,064,016 |
| 5 | 2,511 | 4,613 | 11,582,067 | 7,651,685 | 3,930,382 | 410,899 | 26,405,297 |
| 6 | 2,511 | 4,613 | 11,582,067 | 7,940,713 | 3,641,355 | 482,664 | 30,529,316 |
| 7 | 2,511 | 4,613 | 11,582,067 | 8,222,450 | 3,359,617 | 550,776 | 34,439,709 |
| 8 | 2,511 | 4,613 | 11,582,067 | 8,503,499 | 3,078,568 | 615,241 | 38,133,518 |
| 9 | 2,511 | 4,613 | 11,582,067 | 8,777,634 | 2,804,433 | 676,061 | 41,614,013 |
| 10 | 2,511 | 4,613 | 11,582,067 | 11,611,042 | (28,974) | 711,352 | 42,296,390 |
| 11 | - | - | - | 3,280,913 | (3,280,913) | 695,216 | 39,710,694 |
| 12 | - | - | - | 3,280,913 | (3,280,913) | 651,001 | 37,080,783 |
| 13 | - | - | - | 3,280,913 | (3,280,913) | 606,030 | 34,405,900 |
| 14 | - | - | - | 3,280,913 | (3,280,913) | 560,289 | 31,685,276 |
| 15 | - | - | - | 3,280,913 | (3,280,913) | 513,766 | 28,918,130 |
| 16 | - | - | - | 3,280,913 | (3,280,913) | 466,448 | 26,103,665 |
| 17 | - | - | - | 3,280,913 | (3,280,913) | 418,321 | 23,241,073 |
| 18 | - | - | - | 3,280,913 | (3,280,913) | 369,371 | 20,329,531 |
| 19 | - | - | - | 3,280,913 | (3,280,913) | 319,583 | 17,368,202 |
| 20 | - | - | - | 3,280,913 | (3,280,913) | 268,944 | 14,356,234 |
| 21 | - | - | - | 2,981,457 | (2,981,457) | 220,000 | 11,594,777 |
| 22 | - | - | - | 2,668,594 | (2,668,594) | 175,454 | 9,101,637 |
| 23 | - | - | - | 2,348,917 | (2,348,917) | 135,555 | 6,888,275 |
| 24 | - | - | - | 2,022,354 | (2,022,354) | 100,498 | 4,966,419 |
| 25 | - | - | - | 1,695,790 | (1,695,790) | 70,427 | 3,341,056 |
| 26 | - | - | - | 1,362,269 | (1,362,269) | 45,485 | 2,024,271 |
| 27 | - | - | - | 1,028,748 | (1,028,748) | 25,819 | 1,021,343 |
| 28 | - | - | - | 688,198 | (688,198) | 11,581 | 344,726 |
| 29 | - | - | - | 347,648 | (347,648) | 2,922 | - |
| | | | 115,820,674 | 125,755,460 | | 9,934,786 | |

City of Round Rock - 2018 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 | 1.6214 | 1.0000 | 4,613 | 7,479 | \$ 3,904,768 | \$ 6,331,039 |
| 2 | 28 | 1.5941 | 1.0000 | 4,613 | 7,353 | 6,764,933 | 10,783,993 |
| 3 | 27 | 1.5673 | 1.0000 | 4,613 | 7,229 | 7,063,960 | 11,071,353 |
| 4 | 26 | 1.5410 | 1.0000 | 4,613 | 7,108 | 7,361,674 | 11,343,978 |
| 5 | 25 | 1.5150 | 1.0000 | 4,613 | 6,988 | 7,651,685 | 11,592,636 |
| 6 | 24 | 1.4896 | 1.0000 | 4,613 | 6,871 | 7,940,713 | 11,828,263 |
| 7 | 23 | 1.4645 | 1.0000 | 4,613 | 6,755 | 8,222,450 | 12,042,013 |
| 8 | 22 | 1.4399 | 1.0000 | 4,613 | 6,642 | 8,503,499 | 12,244,241 |
| 9 | 21 | 1.4157 | 1.0000 | 4,613 | 6,530 | 8,777,634 | 12,426,476 |
| 10 | 20 | 1.3919 | 1.0000 | 4,613 | 6,420 | 11,611,042 | 16,161,366 |
| 11 | 19 | 1.3685 | 1.0000 | - | - | 3,280,913 | 4,489,913 |
| 12 | 18 | 1.3455 | 1.0000 | - | - | 3,280,913 | 4,414,426 |
| 13 | 17 | 1.3229 | 1.0000 | - | - | 3,280,913 | 4,340,208 |
| 14 | 16 | 1.3006 | 1.0000 | - | - | 3,280,913 | 4,267,239 |
| 15 | 15 | 1.2788 | 1.0000 | - | - | 3,280,913 | 4,195,496 |
| 16 | 14 | 1.2573 | 1.0000 | - | - | 3,280,913 | 4,124,959 |
| 17 | 13 | 1.2361 | 1.0000 | - | - | 3,280,913 | 4,055,608 |
| 18 | 12 | 1.2153 | 1.0000 | - | - | 3,280,913 | 3,987,423 |
| 19 | 11 | 1.1949 | 1.0000 | - | - | 3,280,913 | 3,920,384 |
| 20 | 10 | 1.1748 | 1.0000 | - | - | 3,280,913 | 3,854,473 |
| 21 | 9 | 1.1551 | 1.0000 | - | - | 2,981,457 | 3,443,778 |
| 22 | 8 | 1.1356 | 1.0000 | - | - | 2,668,594 | 3,030,578 |
| 23 | 7 | 1.1166 | 1.0000 | - | - | 2,348,917 | 2,622,691 |
| 24 | 6 | 1.0978 | 1.0000 | - | - | 2,022,354 | 2,220,101 |
| 25 | 5 | 1.0793 | 1.0000 | - | - | 1,695,790 | 1,830,308 |
| 26 | 4 | 1.0612 | 1.0000 | - | - | 1,362,269 | 1,445,611 |
| 27 | 3 | 1.0433 | 1.0000 | - | - | 1,028,748 | 1,073,331 |
| 28 | 2 | 1.0258 | 1.0000 | - | - | 688,198 | 705,951 |
| 29 | 1 | 1.0086 | 1.0000 | - | - | 347,648 | 350,620 |
| | | | | | | 69,374 | 125,755,460 |
| | | | | | | | 174,198,454 |

| | |
|---|-----------------|
| Total Escalated Expense for Entire Period | \$ 174,198,454 |
| Less Future Value of Initial Fund Balance | - |
| Net Escalated Expense for Entire Period | \$ 174,198,454 |
| Total Escalated Service Units | 69,374 |
| Impact Fee for Service Area C | \$ 2,511 |

City of Round Rock - 2018 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 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 | | |
| RM 620 | A-31, C-1 | \$ 12,560,624 | 50% | \$ 6,280,312 | \$ 3,627,172 | \$ - | \$ - | \$ 3,627,172 | \$ 3,627,172 |
| CR 172 (1) | C-2 | 2,400,000 | 50% | 1,200,000 | 693,056 | - | 346,528 | 346,528 | 693,056 |
| CR 172 (2) | C-3 | 1,000,000 | 50% | 500,000 | 288,773 | - | 144,387 | 144,387 | 288,773 |
| Hesters Crossing Rd | C-4 | 700,000 | 100% | 700,000 | 404,283 | - | - | 404,283 | 404,283 |
| Bratton Ln | C-5 | 5,000,000 | 50% | 2,500,000 | 1,443,866 | - | 721,933 | 721,933 | 1,443,866 |
| US 79 (1) | B-46, C-6 | 13,340,000 | 50% | 6,670,000 | 3,852,235 | - | 1,926,118 | 1,926,118 | 3,852,235 |
| McNeil Extension | C-7 | 4,799,620 | 100% | 4,799,620 | 2,772,004 | - | - | 2,772,004 | 2,772,004 |
| S Mays St | C-8 | 1,400,000 | 100% | 1,400,000 | 808,565 | - | 404,283 | 404,283 | 808,565 |
| Kenney Fort Blvd (1) | C-9 | 23,375,873 | 100% | 23,375,873 | 13,500,655 | - | - | 13,500,655 | 13,500,655 |
| Kenney Fort Blvd (2) | C-10 | 24,500,000 | 100% | 24,500,000 | 14,149,890 | - | 7,074,945 | 7,074,945 | 14,149,890 |
| Red Bud Ln (1) | C-11 | 100,000 | 50% | 50,000 | 28,877 | - | 14,439 | 14,439 | 28,877 |
| Red Bud Ln (2) | C-12 | 1,300,000 | 100% | 1,300,000 | 750,811 | - | 375,405 | 375,405 | 750,811 |
| Red Bud Ln (3) | C-13 | 1,300,000 | 50% | 650,000 | 375,405 | - | 187,703 | 187,703 | 375,405 |
| Red Bud Ln (4) | C-14 | 1,300,000 | 100% | 1,300,000 | 750,811 | - | 375,405 | 375,405 | 750,811 |
| Red Bud Ln (5) | C-15 | 1,300,000 | 50% | 650,000 | 375,405 | - | 187,703 | 187,703 | 375,405 |
| Red Bud Ln (6) | C-16 | 700,000 | 100% | 700,000 | 404,283 | - | 202,141 | 202,141 | 404,283 |
| Red Bud Ln (7) | C-17 | 7,700,000 | 50% | 3,850,000 | 2,223,554 | - | 1,111,777 | 1,111,777 | 2,223,554 |
| Red Bud Ln (8) | C-18 | 2,600,000 | 100% | 2,600,000 | 1,501,621 | - | 750,811 | 750,811 | 1,501,621 |
| Red Bud Ln (9) | C-19 | 8,300,000 | 50% | 4,150,000 | 2,396,818 | - | 1,198,409 | 1,198,409 | 2,396,818 |
| Gattis School Rd (1) | C-20 | 7,600,000 | 100% | 7,600,000 | 4,389,354 | - | 2,194,677 | 2,194,677 | 4,389,354 |
| Gattis School Rd (2) | C-21 | 48,300,000 | 100% | 48,300,000 | 27,895,498 | - | 13,947,749 | 13,947,749 | 27,895,498 |
| S Mays St / Dell Way | C-22 | 2,400,000 | 100% | 2,400,000 | 1,386,112 | - | 693,056 | 693,056 | 1,386,112 |
| Kenney Fort Blvd (3) | C-23 | 6,700,000 | 50% | 3,350,000 | 1,934,781 | - | 967,390 | 967,390 | 1,934,781 |
| Greenlawn Blvd | C-24 | 6,400,000 | 100% | 6,400,000 | 3,696,298 | - | 1,848,149 | 1,848,149 | 3,696,298 |
| Roundville Ln | C-25 | 1,134,412 | 100% | 1,134,412 | 655,176 | - | - | 655,176 | 655,176 |
| Schultz (1) | C-26 | 700,000 | 100% | 700,000 | 404,283 | - | 202,141 | 202,141 | 404,283 |
| Schultz (2) | C-27 | 5,900,000 | 50% | 2,950,000 | 1,703,762 | - | 851,881 | 851,881 | 1,703,762 |
| Deepwood Dr and Round Rock Ave (RM 620) | AI-4, CI-1 | 392,000 | 50% | 196,000 | 113,199 | - | 56,600 | 56,600 | 113,199 |
| IH 35 Blvd and Round Rock Ave (RM 620) | AI-5, CI-2 | 588,000 | 50% | 294,000 | 169,799 | - | 84,899 | 84,899 | 169,799 |
| IH 35 and Hesters Crossing Rd | CI-3 | 196,000 | 100% | 196,000 | 113,199 | - | 56,600 | 56,600 | 113,199 |
| IH 35 and Louis Henna Blvd (SH 45 FR) | CI-4 | 2,037,000 | 100% | 2,037,000 | 1,176,462 | - | 588,231 | 588,231 | 1,176,462 |
| Mays St and Liberty Ave | CI-5 | 353,000 | 100% | 353,000 | 203,874 | - | 101,937 | 101,937 | 203,874 |
| Mays St and Gattis School Rd | CI-6 | 1,847,503 | 100% | 1,847,503 | 1,067,019 | - | 533,509 | 533,509 | 1,067,019 |
| Greenlawn Blvd and Louis Henna Blvd (SH 45 FR) | CI-7 | 784,000 | 100% | 784,000 | 452,796 | - | 226,398 | 226,398 | 452,796 |
| A.W. Grimes Blvd and Palm Valley Blvd | BI-4, CI-8 | 2,041,000 | 50% | 1,020,500 | 589,386 | - | 294,693 | 294,693 | 589,386 |
| A.W. Grimes Blvd and Gattis School Rd | CI-9 | 1,921,000 | 100% | 1,921,000 | 1,109,467 | - | 554,733 | 554,733 | 1,109,467 |
| Red Bud Ln and Gattis School Rd | CI-10 | 1,595,000 | 100% | 1,595,000 | 921,187 | - | 460,593 | 460,593 | 921,187 |
| Update ITS and Traffic Management Infrastructure | - | 20,900,000 | 33% | 6,966,667 | 4,023,574 | - | 2,011,787 | 2,011,787 | 4,023,574 |
| Roadway Impact Fee Project | - | 34,673 | 100% | 34,673 | 34,673 | - | - | 34,673 | 34,673 |
| Total | | \$ 225,499,705 | | \$ 177,255,560 | \$ 102,387,983 | \$ - | \$ 40,697,010 | \$ 61,690,973 | \$ 102,387,983 |

(1) 2018 Roadway Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

2018 Roadway Impact Fee Study
City of Round Rock, Texas

Service Area C
Page 7 of 9

Appendix E - Plan for Awarding
Impact Fee Credit

City of Round Rock - 2018 Roadway Impact Fee Study

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

| | |
|--|----------|
| 2018 Vehicle Miles (All Service Areas) | 333,473 |
| Ten Year Growth in Vehicle Miles (Service Area C) ⁽¹⁾ | 46,125 |
| | 10 years |
| Annual Growth in Vehicle Miles | 4,613 |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Total |
|--|--------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Total Debt Service Eligible for Impact Fees | \$ 299,456 | \$ 612,319 | \$ 931,996 | \$ 1,258,559 | \$ 1,585,122 | \$ 1,918,644 | \$ 2,252,165 | \$ 2,592,715 | \$ 2,933,265 | \$ 3,280,913 | \$ 17,665,151 |
| 2018 Vehicle Miles plus Service Area C Growth | 338,086 | 342,698 | 347,311 | 351,923 | 356,536 | 361,148 | 365,761 | 370,373 | 374,986 | 379,598 | |
| Total Debt Service Eligible for Impact Fees per Vehicle Mile | \$ 0.89 | \$ 1.79 | \$ 2.68 | \$ 3.58 | \$ 4.45 | \$ 5.31 | \$ 6.16 | \$ 7.00 | \$ 7.82 | \$ 8.64 | |
| Annual Growth in Service Area C Vehicle Miles (Cumulative) | 4,613 | 9,225 | 13,838 | 18,450 | 23,063 | 27,675 | 32,288 | 36,900 | 41,513 | 46,125 | |
| Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees | \$ 4,086 | \$ 16,483 | \$ 37,133 | \$ 65,982 | \$ 102,535 | \$ 147,028 | \$ 198,812 | \$ 258,313 | \$ 324,728 | \$ 398,668 | \$ 1,553,766 |
| Credit Amount | \$ 1,553,766 | | | | | | | | | | |

(1) Line 8 of the Max Fee Table Report