

**ORDINANCE NO. 22-T-12
ROADWAY CAPITAL RECOVERY FEES**

AN ORDINANCE OF THE CITY OF SCHERTZ, TEXAS, AMENDING THE CODE OF ORDINANCES OF THE CITY OF SCHERTZ, TEXAS BY AMENDING CHAPTER 78, ARTICLE VII: ROADWAY CAPITAL RECOVERY FEES; INCORPORATING AMENDED LAND USE ASSUMPTIONS AND AMENDED CAPITAL IMPROVEMENT PLANS FOR SUCH FACILITIES; PROVIDING FOR COLLECTION OF IMPACT FEES; PROVIDING FOR SEVERABILITY CLAUSE; AND PROVIDING FOR A PENALTY CLAUSE FOR VIOLATIONS OF THIS ORDINANCE.

WHEREAS, the City of Schertz is responsible for and committed to the provision of public facilities at levels necessary to cure any existing roadway facility deficiencies in already developed areas and insure the provisions of adequate roadway facilities in the future; and

WHEREAS, such facilities shall be provided by the City utilizing funds allocated in the capital budget and capital improvements programming processes and relying upon the funding sources indicated therein; and

WHEREAS, new residential and nonresidential development causes and imposes increased demands upon roadway facilities that would not otherwise occur; and

WHEREAS, planning projections indicate that such development will continue and will place ever-increasing demands on the City to provide necessary roadway facilities improvements and expansion; and

WHEREAS, to the extent that such new development places demands upon the roadway facility infrastructure, those demands should be satisfied by more equitably assigning responsibility for financing the provision of such facilities from the public at large to the developments actually creating the demands for them; and

WHEREAS, the amount of the roadway capital recovery fee to be imposed shall be determined by the cost of the additional roadway facilities needed to support such development, which roadway facilities shall be identified in a capital improvements program; and

WHEREAS, the City Council has previously approved land use assumptions and capital improvement plans for purposes of adopting roadway capital recovery fees and adopted Ordinance 18-M-13; and,

WHEREAS, the City Council, after careful consideration of the matter, and upon recommendations from the Capital Improvement Advisory Committee hereby finds and declares that roadway capital recovery fees imposed upon residential and nonresidential development to finance specified public roadway facilities, the demand for which is created by such development, is in the best interests of the general welfare of the City and

its residents, is equitable, and does not impose an unfair burden on such development; and

WHEREAS, the City Council after careful consideration of the matter and upon the recommendation of the Capital Improvements Advisory Committee find the need to adopt amended land use assumptions and an amended capital improvements plan establishing new maximum assessable impact fees; and

WHEREAS, the City Council finds that in all things the City has complied with said Chapter 395 of the Texas Local Government Code as the applicable state statute in the notice, adoption, promulgation and methodology necessary to adopt amended Roadway Capital Recovery Fees;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS:

Section 1. The Code of Ordinances of the City of Schertz is hereby amended by amending Chapter 78 Article VII Roadway Capital Recovery Fees as set forth in Exhibit A and incorporated herein by reference.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Ordinance for all purposes and are adopted as a part of the judgment and findings of the Council.

Section 3. All ordinances and codes, or parts thereof, which are in conflict or inconsistent with any provision of this Ordinance are hereby repealed to the extent of such conflict, and the provisions of this Ordinance shall be and remain controlling as to the matters resolved herein.

Section 4. This Ordinance shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Ordinance or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Ordinance and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City hereby declares that this Ordinance would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Ordinance is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Ordinance, was given, all as required by Chapter 551, as amended, Texas Government Code.

Section 7. This Ordinance shall be effective upon the date of final adoption hereof and any publication required by law.

PASSED ON FIRST READING, the 5th day of April, 2022.

PASSED, APPROVED and ADOPTED ON SECOND READING, the 12th day of April, 2022.

CITY OF SCHERTZ, TEXAS

Ralph Gutierrez, Mayor

ATTEST:

City Secretary, Brenda Dennis

(CITY SEAL)

EXHIBIT A: Code Amendment

EXHIBIT B: 2021 Roadway Impact Fee Program Amendment Technical Memorandum

Exhibit A

ARTICLE VII. ROADWAY CAPITAL RECOVERY FEES

Sec. 78-170. Short title.

This article be known and cited as the Schertz Roadway Capital Recovery Fees Article.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-171. Purpose.

This article is intended to ensure the provision of adequate roadway facilities to serve new development in the city by requiring each development to pay its share of the costs of such improvements necessitated by and attributable to such new development.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-172. Authority.

This article is adopted pursuant to V.T.C.A., Local Government Code ch. 395 and the City Charter. The provisions of this article shall not be construed to limit the power of the city to utilize all powers and procedures authorized under V.T.C.A., Local Government Code ch. 395, or other methods authorized under state law or pursuant to other city powers to accomplish the purposes set forth herein, either in substitution or in conjunction with this article. Guidelines may be developed by ordinance, resolution, or otherwise to implement and administer this article.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-173. Definitions.

Assessment means the determination of the amount of the maximum capital recovery fee per service unit which can be imposed on new development pursuant to this article. The amount of the capital recovery fee per service unit is a measure of the traffic impact on system facilities created by the new development.

Capital improvement means a roadway facility with a life expectancy of three or more years, to be owned and operated by or on behalf of the city (including the city's share of costs for roadways and associated improvements designated as a numbered highway on the official federal or state highway system). "Capital improvement" applies to a newly constructed roadway facility or to the expansion of an existing roadway facility necessary to serve new development.

Capital improvements plan for roadway capital recovery fees identifies the capital improvements or facility expansions and associated costs for each roadway service area that are necessitated by and which are attributable to new development within the service area, for a period not to exceed ten years, which capital improvements are to be financed in whole or in part through the imposition of roadway capital recovery fees pursuant to this article. The capital improvements plan for roadway capital recovery fees is set out in the adopted "Schertz Roadway Impact Fee Capital Improvements Plan Final Report" adopted by resolution of the city council, and attached to Ord. No. 18-M-13 as exhibit B and the 2021 Roadway Impact Fee Program Amendment Technical Memorandum attached to Ordinance 22-T-12 as Exhibit A.

Capital recovery fee or roadway capital recovery fee (also referred to as roadway impact fee) means a charge or assessment imposed by the city, pursuant to this article, against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development. "Capital recovery fees" or "roadway capital recovery fees" do not include road escrow payments for site-related facilities imposed under facility agreements in existence on the effective date of this article. The term also does not include dedication of rights-of-way or easements or construction or dedication of drainage facilities, streets, sidewalks, or curbs if the dedication or construction is required by the subdivision ordinance and is necessitated by and attributable to the new development.

Capital recovery plan or Impact fee plan means the plan that identifies the calculation of the maximum assessable capital recovery fee for each service area based on the adopted capital improvements plan and land use assumptions. The capital recovery plan is set out in the "2017 Schertz Roadway Impact Fee Final Report" and attached to Ord. No. 18-M-13 as exhibit C and the 2021 Roadway Impact Fee Program Amendment Technical Memorandum attached to Ord. 22-T-12 as Exhibit A.

City means the City of Schertz, Texas.

Credit means:

- (1) When used in the context of determining the maximum assessable capital recovery fee per service unit, an amount equal to:
 - a. That portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan; or
 - b. In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan; or
- (2) When used in the context of determining the offset for system facilities, the amount of the reduction of an capital recovery fee designed to fairly reflect the value of any construction of, contributions to, or dedications of a system facility agreed to or required by the city as a condition of development approval, pursuant to rules herein established or pursuant to city council-approved administrative guidelines which value shall be credited on a vehicle mile basis against roadway facilities capital recovery fees otherwise due from the development and which credits are hereinafter referred to as an "offset" or "offsets" to avoid confusion.

Development unit or development units is the expression of the magnitude of the transportation demand created by each land use planned within a particular development and is used to compute the number of service units consumed by each individual land use application.

Final plat recordation or recordation of a final plat means the point at which the applicant has complied with all conditions precedent to recording an approved final plat (minor plat or record plat) in the county, including the final completion of and acceptance by the city of any infrastructure or other improvements required by the subdivision ordinance or any other ordinance and the plat is filed for record with the county clerk's office.

Land use assumptions means and includes a description of the service areas and the projections of population and employment growth and associated changes in land uses, densities and intensities adopted by the city, as may be amended from time to time, in each service area over a ten-year period upon which the roadway improvements plan is based. The land use assumptions are set out in the adopted document "Schertz Roadway Impact Fee Land Use Assumptions Final Report" adopted by resolution of the city council, and attached to Ord. No. 18-M-13 as exhibit D and the 2021 Roadway Impact Fee Program Amendment Technical Memorandum attached to Ord. 22-T-12 as Exhibit A.

Land use vehicle-mile equivalency table or LUVMET is a table that provides the standardized measure of consumption or use of roadway facilities attributable to a new development based on the land use category of the

development and historical data and trends applicable to the city during the previous ten years. The LUVMET recognizes and expresses the magnitude of the transportation demand created by different land use categories within a particular development and allow different uses of land to more accurately bear the cost and expense of the impacts generated by such uses. The LUVMET expresses the number of service units consumed by each individual land use application as "vehicle miles (per development unit)." The applicable LUVMET is included by reference as Table 7 of the capital recovery plan. For land use categories with no applicability to those on Table 7, the applicant may petition for the use of an appropriate vehicle-mile equivalent by submitting a trip generation study including trip rates and lengths reflecting specific conditions of the proposed land use and local trip lengths. The study must include enough data to be statistically valid and approval will be at the discretion of the city manager or designee.

New development means a project involving the subdivision of land and/or the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure, or any use or extension of the use of land which has the effect of increasing the requirements for capital improvements, measured by an increase in the number of service units to be generated by such activity, and which requires either the approval and filing with the county of a plat pursuant to the city's subdivision ordinance or the issuance of a building permit.

Offset or offsets means the amount of the reduction of an capital recovery fee designed to fairly reflect the value of any construction of, contributions to, or dedications of a system facility agreed to or required by the city as a condition of development approval, pursuant to rules herein established, using the values established in the capital recovery plan, or pursuant to city council-approved administrative guidelines which value shall be credited on a vehicle mile basis against roadway facilities capital recovery fees otherwise due from the development.

Preliminary plat approval means the point at which the applicant has complied with all conditions of approval and the plat has been approved by the planning and zoning commission.

Recoup means to reimburse the city for capital improvements which the city has previously installed or caused to be installed.

Roadway means any freeway, expressway or arterial or collector streets or roads designated in the city's adopted master thoroughfare plan, as may be amended from time to time. The term includes the city's share of costs for roadways designated as a numbered highway on the official federal or state highway system.

Roadway facility means an improvement or appurtenance to a roadway which includes, but is not limited to, rights-of-way, whether conveyed by deed or easement; intersection improvements; traffic signals; turn lanes; drainage facilities associated with the roadway; street lighting or curbs. "Roadway facility" also includes any improvement or appurtenance to an intersection with a roadway officially enumerated in the federal or state highway system. "Roadway facility" includes the city's share of costs for roadways and associated improvements designated as a numbered highway on the official federal or state highway system, including local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, drainage appurtenances, and rights-of-way. "Roadway facility" excludes those improvements or appurtenances to a roadway which are site-related facilities.

Roadway service area or roadway benefits area means the geographic area(s) within the city's corporate limits, which do not exceed six miles and within which geographic area(s) roadway capital recovery fees for capital improvements will be collected for new development occurring within such area, and within which fees so collected will be expended for those capital improvements identified in the capital improvements plan to be located within the roadway service area. "Roadway service area" does not include any land outside the city limits. Roadway service areas are shown on Figure 1 of the 2021 Roadway Impact Fee Program Amendment Technical Memorandum that is part of the capital recovery plan.

Service unit means one vehicle mile of travel in the afternoon peak hour of traffic and is also referred to as a "vehicle mile."

Service unit equivalent means the amount of capacity created by contribution of a capital improvement on behalf of a new development, expressed in vehicle miles.

Single family residential lot means a lot platted to accommodate a single family or a duplex dwelling unit, as authorized under the city's zoning regulations.

Site-related facility means an improvement or facility which is constructed for the primary use or benefit of a new development and/or which is for the primary purpose of safe and adequate provision of roadway facilities to serve the new development and which is not included in the roadway improvements plan and for which the developer or property owner is solely responsible under the subdivision, and/or other applicable, regulations.

System facility means a capital improvement which is designated in the capital improvements plan and which is not a site-related facility. A system facility may include a capital improvement which is located off-site, within, or on and along the perimeter of the new development site.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-174. Applicability.

The provisions of this article apply to all new developments within the corporate boundaries of the city. The provisions of this article apply uniformly within each roadway benefit area.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-175. Roadway capital recovery fees per service unit.

- (a) The maximum assessable capital recovery fee per service unit (post-credit) for any use in each service area platted on or before April 12, 2022 shall be as calculated and documented in the capital recovery plan as follows:
- (1) The capital recovery fee per service unit in Service Area 1 is \$1,647.53.
 - (2) The capital recovery fee per service unit in Service Area 2 is \$1,327.89.
 - (3) The capital recovery fee per service unit in Service Area 3 is \$1,044.48.
 - (4) The capital recovery fee per service unit in Service Area 4 is \$2,392.72.
- (b) The maximum assessable capital recovery fee per service unit (post-credit) for any use in each service area platted on or after April 13, 2022 shall be as calculated and documented in the capital recovery plan per the 2021 Roadway Impact Fee Program Amendment Technical Memorandum as follows:
- (1) The capital recovery fee per service unit in Service Area 1 is \$1,614.54.
 - (2) The capital recovery fee per service unit in Service Area 2 is \$1,350.25.
 - (3) The capital recovery fee per service unit in Service Area 3 is \$1,061.26.
 - (4) The capital recovery fee per service unit in Service Area 4 is \$2,386.93.
- (c) The assessable capital recovery fee per service unit set forth herein that is assessed to new development, as may be amended from time to time, is declared to be the roughly proportionate measure of the impact(s) generated by a new unit of development on the city's transportation system. To the extent that the capital recovery fee per service unit collected is less than the maximum assessable capital recovery fee per service

unit (post credit), as calculated and documented in the capital recovery plan, such difference is hereby declared to be founded on policies unrelated to the measurement of the actual impacts of the development on the city's transportation system. The maximum assessable capital recovery fee per service unit may be used in evaluating any claim by an applicant, developer, or property owner that the dedication, construction, or contribution of a capital improvement imposed as a condition of development approval pursuant to the city's regulations is not roughly proportionate to the impact(s) of the new development on the city's transportation system.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-176. Assessment of capital recovery fees.

- (a) Assessment of the capital recovery fee per service unit for any new development shall be made as follows:
- (1) Assessment of capital recovery fee shall be made at the time of recordation of a final plat and shall be the amount of the maximum assessable capital recovery fee per service unit.
 - (2) Development on a lot for which a final plat has been recorded prior to the effective date of this article (March 27, 2018) shall not be charged a capital recovery fee for any complete building permit application submitted within 18 months from the effective date of this article (September 27, 2019).
 - (3) Development on a lot for which a preliminary plat was approved prior to the effective date of this article (March 27, 2018) shall not be charged a capital recovery fee for any complete building permit application submitted within one year from the effective date of this article (March 27, 2019).
 - (4) Any other development will be charged a capital recovery fee for a complete building permit application submitted after the date of adoption of the ordinance (March 27, 2018).
- (b) Following assessment of the capital recovery fee pursuant to subsection (a), the amount of the capital recovery fee assessed per service unit for that new development cannot be increased, unless the owner proposes to change the approved development by the submission of a new application for final plat approval or replat approval, in which case new assessment shall occur at the maximum assessable, applicable rate then in effect.
- (c) Following the vacating of any plat or submittal of any replat, a new assessment must be made in accordance with section 78-175.
- (d) Approval of an amending plat pursuant to Texas Local Government Code § 212.016 and the UDC is not subject to reassessment of a capital recovery fee hereunder provided that the use of the property remains the same.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-177. Payment and collection of capital recovery fees.

- (a) For all new developments, capital recovery fees shall be collected at the time of application for and in conjunction with the issuance of a building permit. The capital recovery fees to be paid and collected are as follows:
- (1) The capital recovery fee per service unit for residential use shall be \$600.00 beginning the effective date of this article (March 27, 2018) until the last day of the second year from the effective date of this article (March 26, 2020).

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- (2) The capital recovery fee per service unit for residential use shall be \$800.00 beginning on the first day of the third year from the effective date of this article (March 27, 2020) and continuing until the last day of the third year from the effective date of this article (March 26, 2021).
 - (3) The capital recovery fee per service unit for residential use shall be \$900.00 beginning on the first day of the fourth year from the effective date of this article (March 27, 2021) and continuing until the last day of the fourth year from the effective date of this article (March 26, 2022).
 - (4) The capital recovery fee per service unit for residential use shall be \$1,000.00 beginning on the first day of the fifth year from the effective date of this article (March 27, 2022) and continuing until a new rate is adopted.
- (b) The capital recovery fee per service unit for nonresidential use for all roadway service areas shall be as follows:
- (1) The capital recovery fee per service unit for nonresidential use shall be \$100.00 beginning the effective date of this article (March 27, 2018) until the last day of the third year from the effective date of this article (March 26, 2021).
 - (2) The capital recovery fee per service unit for nonresidential use shall be \$175.00 beginning on the first day of the fourth year from the effective date of this article (March 27, 2021) and continuing until a new rate is adopted.
- (c) The city reserves the right to enter into an agreement with a developer for a different time and manner of payment of capital recovery fees in which case the agreement shall determine the time and manner of payment.
- (d) The city shall compute the capital recovery fees to be paid and collected for the new development in the following manner:
- (1) Determine the number of development units for each land use category in the new development using Table 7 of the capital recovery plan.
 - (2) Multiply the number of development units for each land use category in the new development by the vehicle miles (per development unit) for each such land use category also found in Table 7 of the capital recovery plan to determine the number of service units attributable to the new development.
 - (3) If an offset agreement providing for offsets and credits against capital recovery fees exists, the number of service units attributable to the new development shall be reduced by subtracting available service unit equivalents as provided in section 78-178. If adequate service unit equivalents for offsets and credits are available in an amount equal to or greater than the number of service units generated (required) by this new development, no fee is paid, but the pool of available service unit equivalents shall be reduced accordingly.
 - (4) The amount of capital recovery fees to be collected shall be determined by multiplying the number of service units for the new development by the applicable capital recovery fee per service unit identified herein and shall be calculated at the time of application for and in conjunction with the issuance of a building permit.
- (e) If the building permit for which a capital recovery fee has been paid has expired, and a new application is thereafter filed, the capital recovery fees shall be computed using the LUVMET and the applicable capital recovery fee per service unit identified herein with credits for previous payment of fees being applied against any new fees due.
- (f) Whenever the property owner proposes to increase the number of service units for a development, the additional capital recovery fees collected for such new service units shall be determined by using the

LUVMET and applicable fee per service unit identified herein, and such additional fees shall be collected at the times prescribed by this section.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-178. Offsets and credits against capital recovery fees.

- (a) The city shall offset the reasonable value of any system facility which has been dedicated to and has been accepted by the city no more than 18 months prior to the effective date of this article (September 27, 2016), or offset the amount of any contributions to such facility, against the amount of the roadway capital recovery fees due, in accordance with the rules set forth in this section. The value of an offset must be stated in service units.
- (b) This subsection applies only to an offset associated with a capital improvement on the capital improvement plan contributed to the city no more than 18 months prior to the effective date of this article (September 27, 2016).
 - (1) For purposes of this subsection (b), an offset associated with a capital improvement on the roadway improvement plan contributed to the city no more than 18 months prior to the effective date of this article (September 27, 2016) is created at the time that the city accepts the system facility for dedication or as may be otherwise stipulated in a binding agreement for the facility pursuant to the city's subdivision regulations.
 - (2) At the time the offset is created, if no offset agreement exists, the developer shall apply for an offset agreement, and the agreement thereafter shall be enforced in accordance with the following terms, providing:
 - a. Identification of the plat with which the offset is to be associated;
 - b. The amount of the capacity created by the system facility, expressed in service unit equivalents;
 - c. A provision stating that the offset may be used to reduce capital recovery fees imposed on new developments contained within the land subject to the associated plat after the effective date of the agreement; and
 - d. A provision that the amount of the offset shall be determined by estimating the number of service unit equivalents of capacity supplied by the system facility (as set forth in the capital recovery plan), reduced by:
 - 1. The number of service units developed within the plat since the contribution of the system facility, using the LUVMET;
 - 2. The amount of the city's participation in the excess costs of the system facility (expressed in service unit equivalents); and
 - 3. The amount of any payments received from other new developments utilizing the system facility (expressed in service unit equivalents); and
 - e. A provision for reimbursement of any unused offsets consistent with subsection (b)(4) of this section.
 - f. A provision stating that in those instances where the city determines the unique characteristics of a roadway segment (such as drainage, topography, easements required, absence of roadway segments remaining in service area) and the projected cost to construct a section of roadway is not roughly proportionate to the dollar value of the vehicle mile credits which may be awarded for that roadway section, the city may consider, upon request of the developer, awarding capital recovery fee offsets based upon the developer's verified, actual costs of said roadway section.

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The developer may assign the offset agreement with the city's consent, but in no event shall the offsets provided for in the agreement be transferred to any development not subject to the plat associated with such offsets.

- (3) The developer may petition the city council for offsets for contribution of a capital improvement, including road right-of-way, which is not identified in the capital improvements plan, if the improvement will supply capacity to new developments other than to the development seeking the offset, at the time the facility is accepted by the city or a binding facilities agreement for the facility is executed pursuant to the city's subdivision regulations. If the petition is granted, the terms shall be incorporated into an offset agreement as provided in subsection (b)(2) hereof. The agreement shall also provide that the amount of the offset shall not exceed the capacity of the capital improvement that is estimated to be provided.
- (4) As provided in the offset agreement required by subsection (b)(2), hereof, the developer may apply for reimbursement of excess offsets following either completion of all development subject to the plat with which the offsets are associated or after ten years following execution of the offset agreement. The following rules apply to such reimbursement, and shall be incorporated into the offset agreement.
- a. The developer must apply for reimbursement within six months following either:
 1. Completion of all development subject to the plat with which the offsets are associated; or
 2. Ten years after the date of execution of the offset agreement.
 - b. The following terms shall be incorporated into the reimbursement agreement and the agreement shall be enforced in accordance with such terms:
 1. A provision stating that the amount to be reimbursed shall be equal to the number of unused offsets (expressed as a number of service units) multiplied by a fraction equal to the capital recovery fee per service unit to be collected, as set forth herein in effect on the date of execution of the offset agreement, divided by the maximum assessable capital recovery fee per service unit, as set forth herein and in the capital recovery plan in effect on the date of execution of the offset agreement;
 2. A provision stating that the amount to be reimbursed may be further equitably reduced, if fewer than 50 percent of the number of service units in the plat with which the system facility giving rise to the offset have been developed on the date of application for reimbursement;
 3. A provision stating that repayment shall be made within five years from the date of execution of the reimbursement agreement, from roadway capital recovery fees collected within the same roadway service area in which the property in question is located, subject to the availability of such funds;
 4. A provision that termination or reduction of the city's authority under state law to impose capital recovery fees for roadway facilities shall terminate or correspondingly reduce any obligation of the city to make payments under the offset agreement; and
 5. A provision stating that, in converting the offsets from service unit equivalents to a dollar value, the number of service unit equivalents shall be multiplied by the value of a service unit expressed in dollars using the rates set forth herein in effect at the time the offset agreement was executed.
 - c. Execution of a reimbursement agreement shall automatically terminate any offsets associated with a plat pursuant to an offset agreement. Thereafter, new development within the area subject to the plat shall pay roadway capital recovery fees in accordance with schedule 1 then in effect.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-179. Use of proceeds of roadway capital recovery fees.

- (a) The capital recovery fees collected within each roadway benefit area may be used to finance, pay for or to recoup the costs of any roadway facility identified in the capital improvements plan for the roadway benefit area, including the construction contract price, surveying and engineering fees, land acquisition costs (including land purchases, court awards and costs, attorney's fees, and expert witness fees), and amounts designated in any reimbursement agreements executed pursuant to this article.
- (b) Capital recovery fees may be used to pay for the contract services of an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.
- (c) Capital recovery fees also may be used to pay the principal sum and interest and other finance costs on bonds, notes or other obligations issued by or on behalf of the city to finance such capital improvement.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-180. Appeals.

- (a) The property owner or applicant for a new development may appeal the following administrative decisions to the city council:
 - (1) The applicability of a capital recovery fee to the new development;
 - (2) The amount of the capital recovery fee due;
 - (3) The availability of, the amount of, or the expiration of an offset or a credit;
 - (4) The application of an offset against a capital recovery fee due;
 - (5) The amount of the capital recovery fee in proportion to the benefit received by the new development; or
 - (6) The amount of a refund due, if any.
- (b) The appellant shall state the basis for the appeal in writing with particularity. The burden of proof shall be on the appellant to demonstrate that the amount of the fee or the amount of the offset was not calculated according to the rules set forth in this article or by administrative guideline adopted by the city council. The appellant shall submit any traffic study or other documents upon which he relies to the city with the request for appeal.
- (c) The appellant must file a notice of appeal with the city secretary within 30 days following the decision. If the notice of appeal is accompanied by a bond or other sufficient surety with offices for local presentment in a form satisfactory to the city attorney in an amount equal to the original determination of the capital recovery fee due, the development application may be processed while the appeal is pending.
- (d) The appellant shall promptly pay to the city the full amount of the capital recovery fee determined to be due by the city council regarding such appeal. Failure to promptly pay such capital recovery fee within five business days after the city council's determination on the appeal shall serve as authority for the city to present the bond or other surety to the bonding company or financial institution for performance with no other or further notice or contact with the appellant.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-181. Refunds.

- (a) Any capital recovery fee or portion thereof collected pursuant to this article which has not been expended within the applicable roadway service area for an authorized purpose within ten years from the date of payment shall be refunded, upon application, to the record owner of the property at the time the refund is paid or, if the capital recovery fee, was paid by another governmental entity, to such governmental entity, together with interest calculated from the date of collection to the date of refund at the statutory rate as set forth in the Texas Finance Code § 302.002 of or its successor statute. The application for refund pursuant to this section shall be submitted in writing within 60 days after the expiration of the ten-year period for expenditure of the fee. A capital recovery fee shall be considered expended on a first-in, first-out basis.
- (b) A capital recovery fee collected pursuant to this article shall be considered expended if the total expenditures for capital improvements authorized in this article within the roadway service area within ten years following the date of payment exceed the total fees collected for such improvements during that time period.
- (c) If a refund is due pursuant to subsections (a) or (b), the city shall prorate the refund by dividing the difference between the amount of expenditures and the amount of the fees collected by the total number of service units assumed within the roadway service area for the period to determine the refund due per service unit. The refund to the record owner shall be calculated by multiplying the refund due per service unit by the number of service units for the new development for which the fee was paid, and interest due shall be calculated upon that amount.
- (d) If the building permit for a new development for which a capital recovery fee has been paid has expired and a modified or new application has not been filed within six months of such expiration, the city shall, upon written application, refund the amount of the capital recovery fee to the applicant. The city may establish guidelines for refunding of capital recovery fees collected for which construction plans have been abandoned.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Sec. 78-182. Relief procedures.

- (a) Any person who has paid a capital recovery fee or an owner of land upon which an capital recovery fee has been paid may petition the city council to determine whether any duty required by this article has not been performed within the time so prescribed. The petition shall be in writing and shall state the nature of the unperformed duty and request that the act be performed within 60 days of the request. If the city council determines that the duty is required, pursuant to the ordinance and is late in being performed, it shall cause the duty to commence within 60 days of the date of the request and to continue until completion.
- (b) The city council may grant a variance or waiver from any requirement of this article, upon written request by a developer or owner of property subject to the ordinance, following a public hearing, and only upon finding that a strict application of such requirement would when regarded as a whole result in confiscation of the property.
- (c) If the city council grants a variance or waiver to the amount of the capital recovery fee due for a new development under this section, it may cause to be appropriated from other city funds the amount of the reduction in the capital recovery fee to the account, for the roadway benefit area, in which the property is located.

(Ord. No. 18-M-13 , § 1(Exh. A), 3-27-2018)

Exhibit B



Innovative approaches
Practical results
Outstanding service

TECHNICAL MEMORANDUM



2021 Roadway Impact Fee Program Amendment

March 2, 2022



Innovative approaches
Practical results
Outstanding service

TECHNICAL MEMORANDUM



**2021 Roadway Impact Fee
Program Amendment**



**FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144**

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TECHNICAL MEMORANDUM

In response to annexations which occurred in 2021, the City of Schertz authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis update on the City's roadway systems to incorporate revised city limit boundaries from recent annexations and programmed capital improvements consistent with the Master Thoroughfare Plan in these areas. This analysis of roadway systems serves as an interim update to the initial Impact Fee program adopted March 27, 2018 (Ordinance 18-M-13). The purpose of this technical memorandum is to update the service areas and capital improvements, as necessary, for the update of the unit cost to provide service (cost per roadway vehicle-mile). It was determined that there would be no change in Land Use Assumptions after a review of city growth rates and consultation with City Staff. The methodology used herein satisfies the requirements of the Texas Local Government Code Chapter 395 and is consistent with the methodological approach of the initial program in 2018.

Annexations occurred in Service Areas 1, 2 and 3. There were no changes made within Service Area 4. The analyses will focus on these service areas with documentation of all service areas located in the Appendices.

As part of the impact fee update, FNI conducted meetings with the city's Capital Improvements Advisory Committee (CIAC), City Staff, and the City Council. The CIAC's role included review and comment to (no change in) land use assumptions, Impact Fee Capital Improvements Plans (IFCIP), and comments to the City Council.

METHODOLOGY

To update the roadway impact fee program, a series of work tasks were undertaken and are described below.

1. Meetings were held with the City of Schertz Staff to review the annexations, changes in the impact fee CIP, and the methodology to be used in the update.
2. Roadway service area structure was updated for areas affected by annexations.
3. Vehicle-miles of travel in the PM peak hour were retained as the service unit measure for roadway impact fee calculations.
4. A roadway conditions inventory was updated for newly annexed roadways to include lane geometries, roadway classifications and segment lengths, as necessary, of facilities in the impact fee program.
5. Projected growth (service units) by service area over the ten-year planning period was retained using the initial Land Use Assumptions and Land Use Equivalency Table.
6. The roadway impact fee capital improvements program (IFCIP) was reviewed to incorporate additional projects in the annexed areas.
7. Roadway cost data of construction, engineering, and right-of-way for amended impact fee projects were compiled by service area.

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8. The cost of capacity provided, maximum cost per service unit, and cost attributable to new development were calculated for each service area.
9. A technical memorandum was prepared to document the procedures and findings of the analysis.

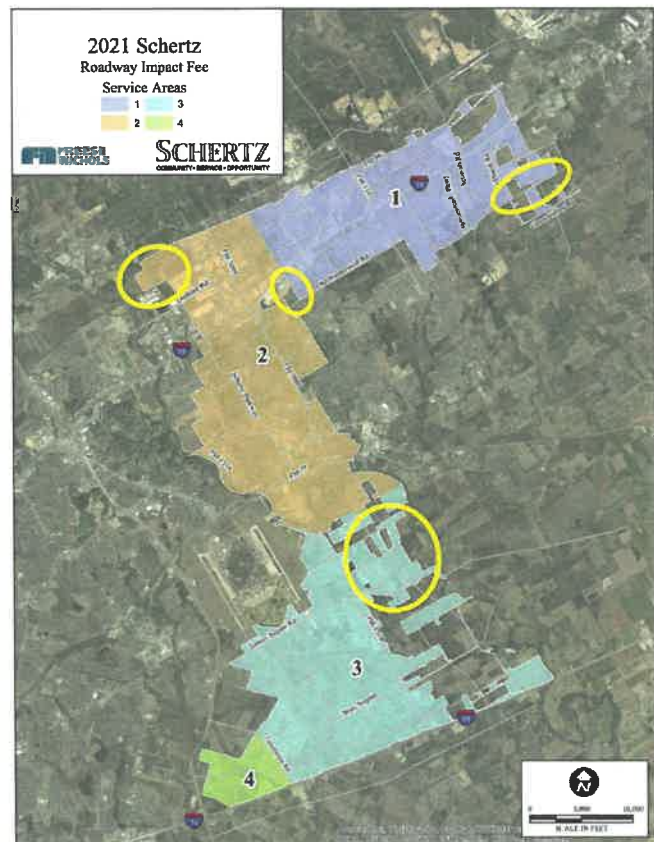
SERVICE AREAS

Roadway service areas define areas to be served by impact fee projects. More importantly, these geographic areas are defined to ensure that facility improvements are near new growth generating the need. Chapter 395 of the Texas Local Government Codes mandates that service areas for roadway programs be limited to a maximum six miles and within city limits.

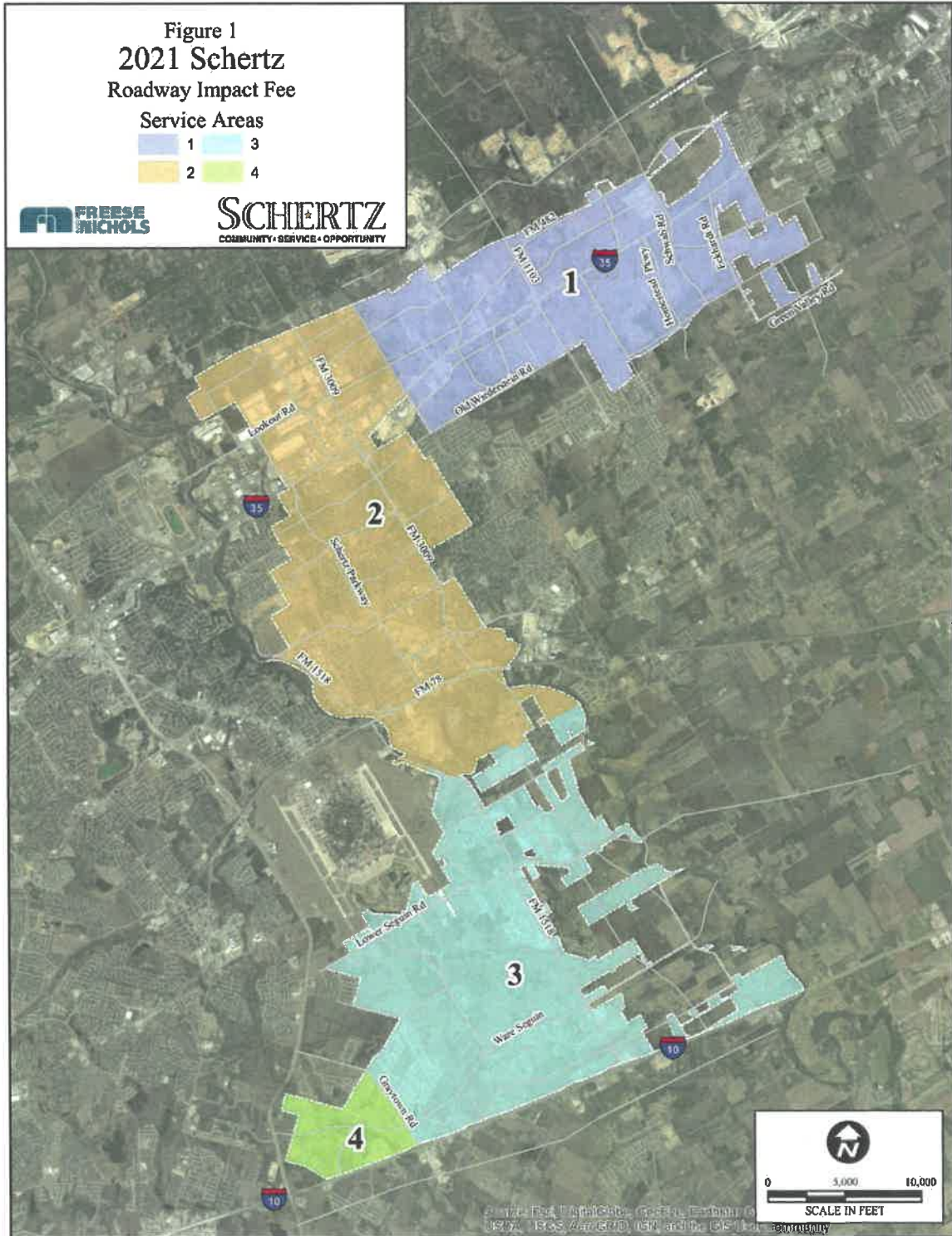
Schertz's service areas for roads were established in the City's initial impact fee program and were adjusted to incorporate the development annexations within Service Areas 1, 2, and 3 (highlighted in the image to the right). Figure 1 illustrates the amended roadway impact fee service area structure.

LAND USE ASSUMPTIONS

Growth defined in terms of land use assumptions, serve to determine the need and timing of capital improvements to serve future development. This ten-year forecast examined population and employment net growth between 2017 and 2027 and was rooted in analysis of historic growth trends over the past 3, 5, and ten-years and documented as part of the impact fee program implementation process. Given the recent nature of the land use assumptions analysis, the pandemic and economic slowdown, and resurgence/continued growth, the initial ten-year forecast was deemed acceptable for this programmatic update. Hence, no changes were made to the initial ten-year assumptions. **Table 1** and **Table 2**, summarize the forecasted population and employment growth which, in addition to the roadway impact fee capital improvement plan, will serve as basis for the cost per service unit calculation.



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Table 1: Initial Impact Fee Population Projections

TEN-YEAR POPULATION PROJECTION CITY OF SCHERTZ				
Roadway Service Areas	2017 Population	2027 Population	Pop. Added	Pct. Change
1	9,239	12,211	2,972	32%
2	28,280	32,169	3,889	14%
3	2,809	12,454	9,645	343%
4	11	68	57	518%
City Total	40,339	56,902	16,563	41%

Source: 2017 Schertz Roadway Impact Fee Study

Table 2: Initial Impact Fee Employment Projections

TEN-YEAR EMPLOYMENT PROJECTION CITY OF SCHERTZ				
Roadway Service Area	Total Employment (Employees)		Emp. Added	Pct. Change
	2017	2027		
1	2,206	3,812	1,606	73%
2	8,587	11,304	2,717	32%
3	408	1,111	703	172%
4	0	20	20	--
City Total	11,201	16,247	5,046	45%

Source: 2017 Schertz Roadway Impact Fee Study

Projected Vehicle-Miles of New Demand

Projected vehicle-miles of demand were calculated based on this net population and employment growth forecasted to occur over the 10-year planning period and the service unit generation for each of the population and employment data components. These values were retained from the 2017 Impact Fee Study, as summarized in **Table 3**.

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Table 3: Impact Fee 10-Year Projected Service Unit Growth

SERVICE AREA	PROJECTED 10-YEAR GROWTH (VEHICLE-MILES)
1	10,461
2	17,905
3	14,918
4	124
City Total	43,408

CAPITAL IMPROVEMENTS PLAN

The impact fee capital improvements plan is aimed at facilitating the implementation of the ultimate thoroughfare network. Projects incorporated into the impact fee program are rooted in the city's official Thoroughfare Plan.

Eligible Projects

Legislative mandate stipulates that the impact fee CIP contain only those roadways which are included on the City's official Thoroughfare Plan that are classified as arterial or collector status facilities. A review of the Thoroughfare Plan identified projects which were eligible for consideration by impact fees. Impact fee legislation also allows for the recoupment of costs for previously constructed facilities. Only costs incurred by the City may be considered for impact fees. Roadways constructed with private funding cannot be included for impact fee consideration. Additionally, state facilities are eligible for inclusion to the impact fee system; however, only costs incurred by the City may be eligible for consideration.

Eligible Costs

In general, those costs associated with the design, right-of-way acquisition, and construction and financing of all items necessary to implement the roadway projects identified in the capital improvements plan are eligible. It is important to note that upon completion of the capital improvements identified in the CIP, the city must recalculate the impact fee using the actual costs and make refunds if the actual cost is less than the impact fee paid by greater than 10 percent. To prevent this situation, conservative estimates of project cost are considered.

Only the cost necessitated by new development will be utilized for impact fee consideration. For example, if only 60% of the capacity provided by the impact fee CIP is needed over the ten-year window, then only 60% of the cost associated with those facilities is considered in the cost per service unit calculation.

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Capital Improvements Plan

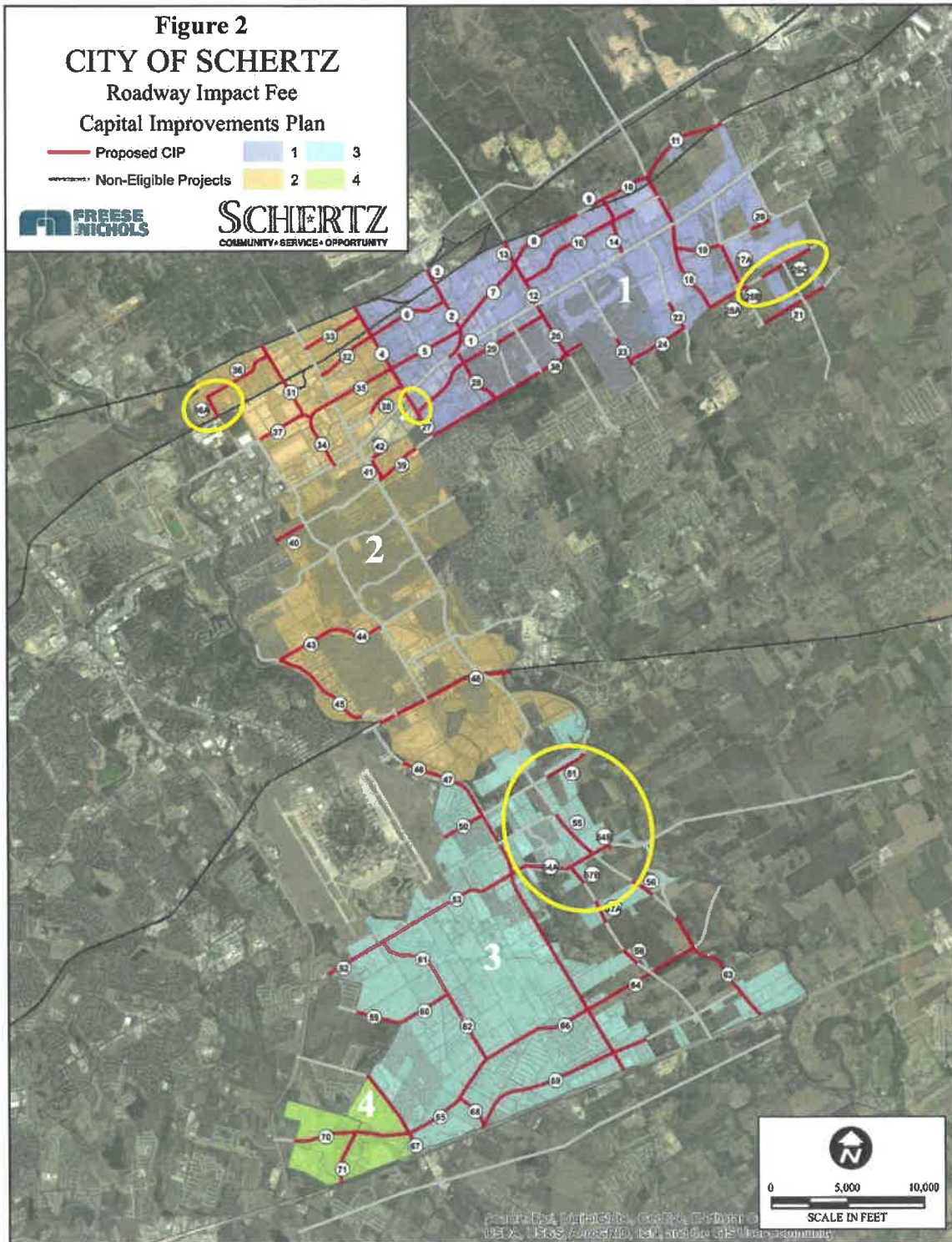
Using the initial impact fee program capital improvements plan as the base for this update, several projects were added to the capital improvement projects or modified. These project additions were coordinated through City Staff and are listed below in **Table 4**.

Table 4: IFCIP Project Additions/Modifications; 2021 Update

Service Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Thoroughfare Plan Description
1	25B/C	Big John Lane	Eckhardt	City Limits	New	0.06	2	Residential Collector
		<i>Comment: Incorporation of Parklands II Addition.</i>						
1	25C	Big John Lane	City Limits	Eastern City Limits	New	0.68	2	Residential Collector
		<i>Comment: Incorporation of Parklands II Addition.</i>						
1	27	N/S Connector(1) /Cibolo Valley	IH 35	Old Wiederstein Rd	New	0.55	4	Secondary Arterial
		<i>Comment: Amended project cost of \$1.3M per Development Agreement on Cibolo Valley Drive.</i>						
2	36A	E/W Connector (7)/Tejas Way	W City Limits	Doerr Lane	New	0.65	3	Commercial Collector A
		<i>Comment: Annexation of property and incorporation of thoroughfare extension.</i>						
3/X	51	RAF - Bumette	Schaefer Rd	E City Limits	New	0.55	4	Secondary Arterial
		<i>Comment: Annexation of Sadlebrook Addition.</i>						
3	54A	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	1.08	4	Secondary Arterial
		<i>Comment: Annexation of Sadlebrook Addition.</i>						
3	54B	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	0.23	4	Secondary Arterial
		<i>Comment: Annexation of Sadlebrook Addition.</i>						
3	55	N/S Connector (3)	S. of Schaefer/Raf Bumette	Lower Seguin Rd	New	0.66	4	Principal Arterial
		<i>Comment: Annexation of Sadlebrook Addition.</i>						
3	57B	N/S Connector (4)	Lower Seguin Rd	S City Limit/Carmel Ranch	New	0.24	2	Residential Collector
		<i>Comment: Annexation of Carmel Ranch Addition.</i>						

Project cost estimates were prepared for new additions to the program using a unit cost approach consistent with the methodology of the initial program. Project costs for the initially identified IFCIP program were unchanged unless a project was completed, in which then actual costs were input into the database. **Figure 2** and **Table 5** illustrate and list the capital improvement projects and their associated total cost for the impact fee system. The full list of IFCIP projects and cost for all service areas can be found in the Appendices.

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Table 5: IFCIP Project Listing

Serv Area	Project No.	Project Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type Rdwy	Pct. in Serv. Area	Total Project Cost
1	1	FM 2252	IH 35	FM 482	New	0.32	4	DA	100%	\$1,566,800
1	2	FM 2252	FM 482	Railroad Tracks	New	0.64	4	DA	100%	\$3,146,000
1/X	3	FM 2252	Railroad Tracks	N City Limits	New	0.22	4	DA	50%	\$509,850
1/2	4	N/S Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	\$3,202,650
1	5	E/W Connector (1)	N/S Connector (1)	FM 2252	New	0.99	4	DA	100%	\$5,513,000
1	6	E/W Connector (2)	N/S Connector (1)	FM 2252	New	0.99	2	UC	100%	\$4,269,000
1	7	FM 482	FM 2252	Hubertus Rd	New	1.05	4	DA	100%	\$5,456,100
1	8	FM 482	Hubertus Rd	Railroad Tracks	New	1.00	4	DA	100%	\$5,147,800
1	9	FM 482	800' W of Friesenhahn	Friesenhahn Ln	New	0.15	4	DA	100%	\$754,100
1/X	10	FM 482	Friesenhahn Ln	Schwab Rd	New	0.59	4	DA	50%	\$1,530,000
1	11	FM 482	Schwab Rd	E City Limits	New	1.20	4	DA	100%	\$6,205,500
1	12	Hubertus Rd	IH 35	FM 482	New	0.57	4	DA	100%	\$2,855,700
1	13	Hubertus Rd	FM 482	N City Limits	New	0.30	4	DA	100%	\$1,572,300
1	14	Friesenhahn Ln	IH 35	FM 482	New	0.72	3	SC	100%	\$1,343,600
1	15	Schwab Rd	IH 35	FM 482	New	0.63	6	DA	100%	\$4,374,700
1	16	E/W Connector (3)	Hubertus Rd	David Lack Blvd	New	1.59	3	SC	100%	\$6,110,000
1	17A	Eckhardt Rd	Froboese Ln	Green Valley Rd	New	1.11	2	UC	100%	\$3,727,100
1	18	Schwab Rd	IH 35	S City Limits	New	1.14	4	DA	100%	\$5,680,700
1	19	Froboese Ln	Schwab Rd	Eckhardt Rd	New	0.57	2	UC	100%	\$2,030,400
1	20	Froboese Ln	2200' E of Eckhardt	E City Limits	New	0.26	2	UC	100%	\$890,000
1	21	Green Valley Rd	W City Limits	E City Limits	New	0.87	4	DA	100%	\$4,199,500
1	22	Homestead Pkwy	End Ex Homestead Pkwy	S City Limits	New	0.33	2	UC	100%	\$1,178,500
1	23	Country Club Blvd	Scenic Links	S City Limits	New	0.35	2	UC	100%	\$1,257,100
1	24	E/W Connector (4)	Country Club Blvd	Homestead Pkwy	New	0.77	2	UC	100%	\$2,671,200
1	25A	E/W Connector (4)	Schwab Rd	Eckhardt Rd	New	0.45	2	UC	100%	\$1,602,000
1/X	25B	Big John Lane	Eckhardt Rd	City Limits	New	0.06	2	UC	50%	\$50,675
1/X	25C	E/W Connector (4)	City Limits	E. City Limits	New	0.68	2	UC	50%	\$608,625
1	26	FM 1103	IH 35	Old Wiederstein Rd	New	0.70	4	DA	100%	\$2,000,000
1	27	N/S Conn. (1)/Cibolo Valley	IH 35	Old Wiederstein Rd	New	0.55	4	DA	100%	\$1,300,000
1	28	N/S Connector (2)	IH 35	Old Wiederstein Rd	New	0.73	4	DA	100%	\$3,635,700
1	29	E/W Connector (5)	N/S Connector (1)	FM 1103	New	2.00	2	UC	100%	\$7,097,200
1/X	30	Old Wiederstein Rd	N/S Connector (1)	Cherry Tree Dr	New	2.17	4	DA	50%	\$5,143,600
Sub-total SA 1						24.96				\$96,629,400
2	31	Doerr Ln	N City Limits	Lookout Rd	New	0.91	3	SC	100%	\$3,249,900
2/1	4	N/S Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	\$3,130,900
2	32	E/W Connector (2)	FM 3009	N/S Connector (1)	New	0.81	2	UC	100%	\$3,386,200
2	33	E/W Connector (6)	FM 3009	N/S Connector (1)	New	0.81	2	UC	100%	\$3,386,100
2	34	Mid-Cities Pkwy	IH 35	FM 3009	New	0.98	3	SC	100%	\$3,293,700
2	35	E/W Connector (1)	FM 3009	N/S Connector (1)	New	0.81	4	DA	100%	\$4,190,900
2	36	E/W Conn. (7)/Tejas Way	W City Limits	Doerr Ln	Recoup	0.65	3	SC	100%	\$2,231,100
2	36A	Tejas Way	Existing Tejas Way	UP RR/City Limit	New	0.52	3	SC	100%	\$1,647,800
2	37	Lookout Rd	Tri-County Pkwy	Schertz Pkwy	New	0.74	3	SC	100%	\$2,743,600
2	38	Four Oaks Ln	End of Ex. Four Oaks Ln	N/S Connector (1)	New	0.54	3	SC	100%	\$1,977,300
2	39	Wiederstein Rd	E City Limits	FM 3009	New	0.64	4	DA	100%	\$3,079,800
2	40	Wiederstein Rd	Schertz Pkwy	W City Limits	New	0.41	2	UC	100%	\$1,294,700
2	41	Baptist Health Dr	Ripps-Kreusler	Wiederstein Rd	New	0.27	3	SC	100%	\$992,900
2	42	Ripps-Kreusler	Baptist Health Dr	End of Ripps Kreusler	New	0.22	3	SC	100%	\$803,900
2	43	Maske Rd	FM 1518	Oak St	New	0.54	3	SC	100%	\$1,827,600
2	44	Maske Rd Realignment	Oak St	Schertz Pkwy	New	0.88	2	UC	100%	\$3,645,200
2	45	FM 1518/Main St	Maske Rd	Oak St	New	1.30	3	SA	100%	\$4,494,500
2	46	FM 1518	N City Limits	SA 3 Limit	New	0.36	6	DA	100%	\$436,300
2/3	47	FM 1518	SA 3 Limit	Schertz Pkwy Ext.	New	0.39	6	DA	50%	\$222,650
2	48	FM 78/John Peterson Blvd	W City Limits	E City Limits	New	1.81	6	DA	100%	\$2,683,780
Sub-total SA 2						14.86				\$48,718,830

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Table 5 (continued): IFCIP Project Listing

Serv Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type Rdwy	Pct. in Serv. Area	Total Project Cost
3/2	47	FM 1518	SA 2 Limit	Schertz Pkwy Ext.	New	0.39	6	DA	50%	\$222,650
3	49	FM 1518	Schertz Pkwy Ext.	IH 10	New	4.09	6	DA	100%	\$5,165,000
3	50	Schaefer Rd	W City Limits	FM 1518	New	0.48	2	UC	100%	\$1,536,700
3/X	51	RAF - Burnette	Schaefer Rd	E City Limits	New	0.55	4	DA	100%	\$2,559,000
3/X	52	Lower Seguin Rd	W City Limits	E of Tates Dr	New	0.35	3	SA	50%	\$686,450
3	53	Lower Seguin Rd	E of Tates Dr	W of Canopy Bend	New	1.76	3	SA	100%	\$6,998,900
3	54A	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	1.08	4	DA	100%	\$4,917,900
3	54B	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	0.23	4	DA	100%	\$1,063,700
3	55	N/S Connector (3)	S. of Schaefer/Raf Burnette	Lower Seguin Rd	New	0.66	4	DA	100%	\$3,338,500
3	56	N/S Connector (3)	N City Limits	S City Limits	New	0.27	4	DA	100%	\$1,380,400
3	57A	N/S Connector (4)	N City Limits	S City Limits	New	0.26	2	UC	100%	\$894,600
3	57B	N/S Connector (4)	Lower Seguin Rd	S City Limit/Carmel Ranch	New	0.24	2	UC	100%	\$838,000
3	58	N/S Connector (4)	N City Limits	S City Limits	New	0.21	2	UC	100%	\$725,000
3/X	59	W Ware Seguin Rd	W City Limits	Boeing Dr	New	0.57	2	UC	50%	\$900,550
3	60	W Ware Seguin Rd	Boeing Dr	N/S Connector (5)	New	0.67	2	UC	100%	\$2,236,900
3	61	N/S Connector (5)	Lower Seguin Rd	W Ware Seguin Rd	New	1.10	2	UC	100%	\$3,760,500
3	62	N/S Connector (5)	W Ware Seguin Rd	E Ware Seguin Rd	New	0.93	2	UC	100%	\$3,227,400
3	63	Trainer Hale Rd (N/S)	Weir Rd	IH 10	New	1.66	4	DA	100%	\$8,020,500
3	64	Trainer Hale Rd (E/W)	FM 1518	Trainer Hale Rd (N/S)	New	1.51	4	DA	100%	\$7,710,300
3	65	Ware Seguin Rd	Graytown Rd	N/S Connector (5)	New	1.35	3	SA	100%	\$4,736,300
3	66	E Ware Seguin Rd	N/S Connector (5)	FM 1518	New	1.41	3	SA	100%	\$4,739,900
3/4	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	\$2,000,600
3	68	N/S Connector (6)	Ware Seguin Rd	IH 10	New	0.47	3	SC	100%	\$1,712,600
3	69	E/W Connector (8)	IH 10	E City Limits	New	2.33	3	SC	100%	\$8,482,300
Sub-total SA 3						23.67				\$77,874,650
4/3	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	\$2,000,600
4	70	Binz-Engleman Rd	W City Limits	Graytown Rd	New	1.30	3	SA	100%	\$4,667,000
4	71	Scenic Lake Dr	Binz-Engleman Rd	IH 10	New	0.77	3	SC	100%	\$2,777,400
Sub-total SA 4						3.19				\$9,445,000
Totals:						66.68				\$232,667,880

Notes:

- DA- Divided arterial
- SA- Special arterial (with two way left turn lane)
- SC- Special collector (with two way left turn lane)
- UC- Undivided collector

Projected Vehicle-Miles Capacity Available for New Growth

The vehicle-miles of new capacity supply were calculated consistent with the initial program for capacity supplied. The equation used was:

$$\text{Vehicle-Miles of New Capacity} = \text{Link capacity per peak hour per lane} \times \text{No. of Lanes} \times \text{Length of segment (miles)}$$

Vehicle-miles of new capacity provided by the CIP are listed in **Table 6**. Also depicted is the net capacity provided by the CIP (removal of existing traffic consuming capacity from improvements). The Appendix contains details of the capacity calculations provided by the CIP program for all service areas.

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Table 6: Updated Vehicle-Miles of IFCIP Capacity Provided

	A	B	C = A - B	D	E = C - D
SERVICE AREA	CAPACITY SUPPLIED BY CIP (VEH-MI)	EXISTING UTILIZATION ON CIP ROADS (VEH-MI)	EXCESS CAPACITY (VEH-MI)	EXISTING VEH-MILES OF DEFICIENCIES	VEH-MILES OF NET CAPACITY SUPPLIED
1	45,583	2,747	43,835	0	43,835
2	25,783	6,998	18,785	0	18,785
3	47,756	7,311	40,446	0	40,446
4	3,359	130	3,229	0	3,229
City Total	122,481	17,186	105,295	0	105,295

A comparison of net capacity provided by the updated CIP relative to 10-year demands (from land use assumptions) reveals sufficient capacity to address growth attributable to new development. **Table 7** summarizes the percentage of CIP attributable to new development.

Table 7: Projected Demand and Percent Attributable to 10-Year Growth

	A	B	B / A
SERVICE AREA	VEH-MILES OF NET CAPACITY SUPPLIED	PROJECTED 10-YEAR GROWTH (VEH-MI)	PERCENT OF CIP ATTRIBUTABLE TO 10-YEAR GROWTH
1	43,835	10,461	24.4
2	18,785	17,905	95.3
3	40,446	14,918	36.9
4	3,229	124	3.8
City Total	105,295	43,408	41.2

Cost of Roadway Improvements

The total cost, including study update costs, and cost of net capacity supplied to implement the roadway improvements plan projects by service area are shown in **Table 8**. If traffic exists on proposed CIP project roadways or there are any deficiencies present on the current network within each respective service area (existing utilization), the total system cost is adjusted to reflect the net capacity being made available by the impact fee program. In other words, only the excess or unused portion of the CIP and its associated costs are considered eligible. Per state law, a credit for the

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portion of ad-valorem tax revenues generated by improvements over the program period, or a credit equal to 50% of the total projected cost of implementing the capital improvements plan, must be given. A detailed listing by project segment in each service area can be found in the Appendix.

Table 8: Summary of IFCIP Cost and Cost of Net Capacity Provided

SERVICE AREA	TOTAL COST OF PROPOSED IFCIP PROJECTS	COST TO MEET EXISTING UTILIZATION ON CIP ROADWAYS	COST OF NET CAPACITY SUPPLIED BY CIP
1	\$96,666,616	\$5,826,582	\$90,840,034
2	\$48,739,881	\$13,228,990	\$35,510,891
3	\$77,913,641	\$11,927,108	\$65,986,533
4	\$9,447,742	\$365,721	\$9,082,022
Total	\$232,767,880	\$31,348,401	201,419,479

CALCULATION OF IMPACT FEES

Cost Attributable to New Development

The cost attributable to new development within this cost of net capacity is calculated by comparing the projected vehicle-miles of demand to the net capacity supplied by the IFCIP. If the demand is higher than the net IFCIP capacity provided, then the full cost of the net capacity is attributable to new development. If there is more net capacity than required to meet the project demand, then the cost attributable to new development is the proportional amount of the cost of net capacity based on the ratio of projected demand to net capacity supplied by the IFCIP.

For this update, all of Schertz's roadway service areas are projected to have a demand by new development that consumes only a portion of the full net capacity supplied by the IFCIP. This is shown in **Table 9**.

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Table 9: Roadway Improvements Plan Cost Attributable to New Development

SERVICE AREA	COST OF NET CAPACITY SUPPLIED	PCT. OF CIP ATTRIBUTABLE TO NEW DEV. (10-YR)	COST ATTRIBUTABLE TO NEW DEV.	DEBT SERVICE ATTRIBUTABLE TO NEW DEVELOPMENT	COST ATTRIBUTABLE TO NEW DEV.
1	\$90,840,034	24.4	\$22,184,410	\$2,679,760	\$24,864,170
2	\$35,510,891	95.3	\$33,846,739	\$3,978,291	\$37,825,030
3	\$65,986,533	36.9	\$24,339,036	\$2,865,171	\$27,204,207
4	\$9,082,022	3.8	\$349,633	\$41,588	\$391,221
Total	201,419,479	41.2	\$80,719,818	\$9,564,810	\$90,284,628

Credit Analysis

Per Chapter 395, the cost of the CIP must be credited for ad-valorem tax generated through new development either through a credit analysis or a flat 50% credit. The City of Schertz opted to perform the credit analysis in lieu of the 50% credit to determine the maximum allowable fee per service unit. No changes were made to the credit analysis as there were no changes in the 10-year Land Use Assumptions (and hence the resultant VMT growth). **Table 10** lists the CIP credit and resultant CIP cost attributable to growth (less credit).

Table 10: CIP Credit and Resultant Cost Attributable to New Development

SERVICE AREA	COST ATTRIBUTABLE TO NEW DEV.	CIP CREDIT	TOTAL COST ATTRIBUTABLE TO NEW DEV.
1	\$24,864,170	\$7,974,490	\$16,889,680
2	\$37,825,030	\$13,649,051	\$24,175,979
3	\$27,204,207	\$11,371,991	\$15,832,216
4	\$391,221	\$94,525	\$296,696
Total	\$90,284,628	\$33,090,057	\$57,194,571

Cost per Service Unit

The cost per service unit is calculated by dividing the cost of the CIP necessitated and attributable to new demand (net cost) by the projected service units of growth over the 10-year planning period.

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Table 11 lists the calculation and results of the cost per service unit calculation by service area. The actual cost per service unit reflects the true burden to the City for the implementation of the roadway capital improvements program. Based on the credit analysis, the maximum rate after credit reflects the maximum amount per service unit that can be charged to comply with state statute. The Appendix details the maximum fee per service unit calculation for each service area.

Table 11: Cost per Service Unit Summary

	A	B	C	D= B / A	E = C / A
SERVICE AREA	PROJECTED 10-YEAR GROWTH (VEH-MI)	TOTAL COST ATTRIBUTABLE TO NEW DEVELOPMENT	TOTAL COST ATTRIBUTABLE TO DEV. (LESS CREDIT)	BASE COST PER SERVICE UNIT	MAXIMUM ALLOWABLE COST PER SERVICE UNIT (AFTER CREDIT)
1	10,461	\$24,864,170	\$16,889,680	\$2,409.84	\$1,614.54
2	17,905	\$37,825,030	\$24,175,979	\$2,090.20	\$1,350.25
3	14,918	\$27,204,207	\$15,832,216	\$1,806.78	\$1,061.26
4	124	\$391,221	\$296,696	\$3,155.02	\$2,386.93
Total	43,408	\$90,284,628	\$57,194,571		

These updated cost per service unit rates (maximum allowable) are compared in **Table 12** to the rates calculated in the initial Impact Fee study as well as the current collection rates set at the conclusion of that study. There are slight variations to the cost per service unit in each service area. The updated cost per service unit do not have a negative effect to existing collection rates if the same collection rate is desired to be maintained.

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Table 12: Cost per Service Unit Comparison to Initial Impact Fee Study

Service Area	Maximum Credited Cost per Service Unit			COLLECTION RATE			
	2017 STUDY	2021 STUDY UPDATE	DIFF.	RESIDENTIAL		NON-RESIDENTIAL	
				Mar 2021 - 2022	Mar 2022 Forward	Mar 2018 - 2021	Mar 2021 Forward
1	\$1,647.53	\$1,614.54	(\$32.99)	\$900.00	\$1,000.00	\$100.00	\$175.00
2	\$1,327.89	\$1,350.25	\$22.36	\$900.00	\$1,000.00	\$100.00	\$175.00
3	\$1,044.48	\$1,061.26	\$16.78	\$900.00	\$1,000.00	\$100.00	\$175.00
4	\$2,392.72	\$2,386.93	(\$5.79)	\$900.00	\$1,000.00	\$100.00	\$175.00

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Appendices

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APPENDIX A: ROADWAY IMPROVEMENT PLAN PROJECTS

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Definitions

LANES	The total number of lanes in both directions available for travel.
TYPE	The type of roadway (used in determining capacity): UC = undivided collector DC = divided collector UA = undivided arterial DA = divided arterial SC = special collector (roadway with continuous left turn) SA = special arterial (roadway with continuous left turn) OW = one-way roadway
PK-HR VOLUME	The existing volumes of cars on the roadway segment traveling during the afternoon (P.M.) peak hour of travel.
% IN SERVICE AREA	If the roadway is located on the boundary of the service area (with the city limits running along the centerline of the roadway), then half of the roadway is inventoried in the service area and the other half is not. This value is either 50% or 100%.
VEH-MI SUPPLY TOTAL	The number of total service units (vehicle-miles) supplied within the service area, based on the length, and established capacity of the roadway type.
VEH-MI TOTAL DEMAND PK-HR	The total service unit (vehicle-mile) demand created by existing traffic on the roadway segment in the afternoon peak hour.
EXCESS CAPACITY PK-HR VEH-MI	The number of service units supplied but unused by existing traffic in the afternoon peak hour.

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Serv Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type	Pct. in Rwy/Serv. Area	Peak Hour Volume*			VMT Supply/VMT Demand			Excess VMT	CIP Capacity/Deficiency
										A	B	Total	PK-Hr	Total	VMT		
1	1	FM 2252	IH 35	FM 482	New	0.32	4	DA	100%	73	250	323	853	102	751	0	
1	2	FM 2252	FM 482	Railroad Tracks	New	0.64	4	DA	100%	73	250	323	1726	206	1519	0	
1/X	3	FM 2252	Railroad Tracks	N City Limits	New	0.22	4	DA	50%	0	250	250	289	55	244	0	
1/2	4	N/S Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	0	0	0	1691	0	1691	0	
1	5	E/W Connector (1)	N/S Connector (1)	FM 2252	New	0.99	4	DA	100%	0	0	0	2668	0	2668	0	
1	6	E/W Connector (2)	N/S Connector (1)	FM 2252	New	0.99	2	UC	100%	0	0	0	988	0	988	0	
1	7	FM 482	Hubertus Rd	Hubertus Rd	New	1.05	4	DA	100%	46	52	98	2841	103	2738	0	
1	8	FM 482	Hubertus Rd	Railroad Tracks	New	1.00	4	DA	100%	46	52	98	2705	98	2607	0	
1	9	FM 482	800' W of Friesenhahn	Friesenhahn Ln	New	0.15	4	DA	100%	46	52	98	405	15	390	0	
1/X	10	FM 482	Friesenhahn Ln	Schwab Rd	New	0.59	4	DA	50%	46	0	46	797	27	769	0	
1	11	FM 482	Schwab Rd	E City Limits	New	1.20	4	DA	100%	46	52	98	3240	118	3122	0	
1	12	Hubertus Rd	IH 35	FM 482	New	0.57	4	DA	100%	30	57	87	1529	49	1480	0	
1	13	Hubertus Rd	FM 482	N City Limits	New	0.30	4	DA	100%	0	0	0	821	0	821	0	
1	14	Friesenhahn Ln	IH 35	FM 482	New	0.72	3	SC	100%	50	50	100	789	72	717	0	
1	15	Schwab Rd	IH 35	FM 482	New	0.63	6	DA	100%	120	315	435	2548	274	2274	0	
1	16	E/W Connector (3)	Hubertus Rd	David Lack Blvd	New	1.59	3	SC	100%	0	0	0	1754	0	1754	0	
1	17A	Eckhardt Rd	Froboese Ln	Green Valley Rd	New	1.11	2	UC	100%	19	11	30	1110	33	1077	0	
1	18	Schwab Rd	IH 35	S City Limits	New	1.14	4	DA	100%	0	0	0	3078	0	3078	0	
1	19	Froboese Ln	Schwab Rd	Eckhardt Rd	New	0.57	2	UC	100%	0	0	0	573	0	573	0	
1	20	Froboese Ln	2200' E of Eckhardt	E City Limits	New	0.87	4	DA	100%	10	10	20	2352	17	2335	0	
1	21	Green Valley Rd	W City Limits	E City Limits	New	0.33	2	UC	100%	0	0	0	326	0	326	0	
1	22	Homestead Pkwy	End Ex Homestead Pkwy	S City Limits	New	0.35	2	UC	100%	0	0	0	350	0	350	0	
1	23	Country Club Blvd	Scenic Links	S City Limits	New	0.77	2	UC	100%	0	0	0	770	0	770	0	
1	24	E/W Connector (4)	Country Club Blvd	Homestead Pkwy	New	0.45	2	UC	100%	10	10	20	451	9	442	0	
1/X	25A	E/W Connector (4)	Schwab Rd	Eckhardt Rd	New	0.06	2	UC	50%	0	0	0	28	0	28	0	
1/X	25B	Big John Lane	Eckhardt Rd	City Limits	New	0.68	2	UC	50%	0	0	0	342	0	342	0	
1/X	25C	E/W Connector (4)	City Limits	E. City Limits	New	0.70	4	DA	100%	590	1020	1610	1894	1129	764	0	
1	26	FM 1103	IH 35	Old Wiederstein Rd	New	0.55	4	DA	100%	50	50	100	1485	55	1430	0	
1	27	N/S Conn. (1)/Cibola Valley	IH 35	Old Wiederstein Rd	New	0.73	4	DA	100%	0	0	0	1983	0	1983	0	
1	28	N/S Connector (2)	IH 35	Old Wiederstein Rd	New	2.00	2	UC	100%	0	0	0	1988	0	1988	0	
1	29	E/W Connector (5)	N/S Connector (1)	FM 1103	New	2.17	4	DA	50%	0	177	177	2930	384	2545	0	
1/X	30	Old Wiederstein Rd	N/S Connector (1)	Cherry Tree Dr	New	24.96	4	DA	50%	0	0	0	45583	2747	42835	0	
2	31	Doerr Ln	N City Limits	Lookout Rd	New	0.91	3	SC	100%	50	50	100	1004	91	913	0	
2/1	4	N/S Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	0	0	0	1691	0	1691	0	
2	32	E/W Connector (2)	FM 3009	N/S Connector (1)	New	0.81	2	UC	100%	0	0	0	810	0	810	0	
2	33	E/W Connector (6)	FM 3009	N/S Connector (1)	New	0.81	2	UC	100%	0	0	0	810	0	810	0	
2	34	Mid-Cities Pkwy	IH 35	FM 3009	New	0.98	3	SC	100%	0	0	0	1082	0	1082	0	
2	35	E/W Connector (1)	FM 3009	N/S Connector (1)	New	0.81	4	DA	100%	0	0	0	2200	0	2200	0	
2	36	E/W Conn. (7)/Tejas Way	W City Limits	Doerr Ln	Recoup	0.65	3	SC	100%	0	0	0	717	0	717	0	
2	36A	Tejas Way	Existing Tejas Way	UP RR/City Limit	New	0.52	3	SC	100%	0	0	0	574	0	574	0	
2	37	Lookout Rd	Tri-County Pkwy	Schertz Pkwy	New	0.74	3	SC	100%	133	219	352	815	261	554	0	
2	38	Four Oaks Ln	End of Ex. Four Oaks Ln	N/S Connector (1)	New	0.54	3	SC	100%	0	0	0	598	0	598	0	

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Serv Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type	Pct. in Rdwy Serv. Area	Peak Hour Volume*			VMT Supply/VMT Demand			Excess VMT Capacity/Deficiency
										A	B	Total	Pk Hr Total	Pk Hr Total	Total VMT	
2	39	Wiederstein Rd	E City Limits	FM 3009	New	0.64	4	DA	100%	0	0	0	1737	0	1737	0
2	40	Wiederstein Rd	Schertz Pkwy	W City Limits	New	0.41	2	UC	100%	100	100	200	406	81	325	0
2	41	Baptist Health Dr	Ripps-Kreusler	Wiederstein Rd	New	0.27	3	SC	100%	0	0	0	302	0	302	0
2	42	Ripps-Kreusler	Baptist Health Dr	End of Ripps Kreusler	New	0.22	3	SC	100%	0	0	0	245	0	245	0
2	43	Maske Rd	FM 1518	Oak St	New	0.54	3	SC	100%	97	105	202	595	109	486	0
2	44	Maske Rd Realignment	Oak St	Schertz Pkwy	New	0.88	2	UC	100%	0	0	0	875	0	875	0
2	45	FM 1518/Main St	Maske Rd	Oak St	New	1.30	3	SA	100%	397	351	748	1753	971	782	0
2	46	FM 1518	N City Limits	SA 3 Limit	New	0.38	6	DA	100%	755	508	1263	1465	457	1008	0
2/3	47	FM 1518	SA 3 Limit	Schertz Pkwy Ext.	New	0.39	6	DA	50%	755	0	755	793	296	497	0
2	48	FM 78/John Peterson Blvd	W City Limits	E City Limits	New	1.81	6	DA	100%	1525	1096	2621	7311	4732	2580	0
Sub-total SA 2						14.86							25783	6998	18785	0
3/2	47	FM 1518	SA 2 Limit	Schertz Pkwy Ext.	New	0.39	6	DA	50%	0	508	508	793	189	594	0
3	49	FM 1518	Schertz Pkwy Ext.	IH 10	New	4.09	6	DA	100%	755	508	1263	16565	5166	11398	0
3	50	Schaefer Rd	W City Limits	FM 1518	New	0.48	2	UC	100%	100	100	200	478	96	383	0
3/3	51	RAF - Burnette	Schaefer Rd	E City Limits	New	0.55	4	DA	100%	50	50	100	1472	55	1417	0
3/3	52	Lower Seguin Rd	W City Limits	E of Tates Dr	New	0.35	3	SA	50%	304	0	304	237	107	130	0
3	53	Lower Seguin Rd	E of Tates Dr	W of Canopy Bend	New	1.76	3	SA	100%	304	188	492	2376	866	1510	0
3	54A	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	1.08	4	DA	100%	37	16	53	2903	57	2846	0
3	54B	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	0.23	4	DA	100%	37	16	53	626	12	614	0
3	55	N/S Connector (3)	S. of Schaefer/Raf Burnette	Lower Seguin Rd	New	0.66	4	DA	100%	0	0	0	1778	0	1778	0
3	56	N/S Connector (3)	N City Limits	S City Limits	New	0.27	4	DA	100%	0	0	0	716	0	716	0
3	57A	N/S Connector (4)	N City Limits	S City Limits	New	0.26	2	UC	100%	0	0	0	256	0	256	0
3	57B	N/S Connector (4)	Lower Seguin Rd	S City Limit/Carmel Ranch	New	0.24	2	UC	100%	0	0	0	243	0	243	0
3	58	N/S Connector (4)	N City Limits	S City Limits	New	0.21	2	UC	100%	0	0	0	211	0	211	0
3/3	59	W Ware Seguin Rd	W City Limits	Boeing Dr	New	0.57	2	UC	50%	0	20	20	283	11	272	0
3	60	W Ware Seguin Rd	Boeing Dr	N/S Connector (5)	New	0.67	2	UC	100%	19	20	39	669	26	642	0
3	61	N/S Connector (5)	Lower Seguin Rd	W Ware Seguin Rd	New	1.10	2	UC	100%	20	19	39	1104	43	1081	0
3	62	N/S Connector (5)	W Ware Seguin Rd	E Ware Seguin Rd	New	0.93	2	UC	100%	20	19	39	932	36	895	0
3	63	Trainer Hale Rd (N/S)	Weir Rd	IH 10	New	1.66	4	DA	100%	50	50	100	4480	166	4314	0
3	64	Trainer Hale Rd (E/W)	FM 1518	Trainer Hale Rd (N/S)	New	1.51	4	DA	100%	50	50	100	4070	151	3920	0
3	65	Ware Seguin Rd	Graytown Rd	N/S Connector (5)	New	1.35	3	SA	100%	0	0	0	1828	0	1828	0
3	66	E Ware Seguin Rd	N/S Connector (5)	FM 1518	New	1.41	3	SA	100%	20	19	39	1910	55	1855	0
3/4	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	238	0	238	752	285	487	0
3	68	N/S Connector (6)	Ware Seguin Rd	IH 10	New	0.47	3	SC	100%	0	0	0	512	0	512	0
3	69	E/W Connector (6)	IH 10	E City Limits	New	2.33	3	SC	100%	0	0	0	2563	0	2563	0
Sub-total SA 3						23.67							47756	7311	40446	0
4/3	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	0	89	89	752	99	653	0
4	70	Binz-Engleman Rd	W City Limits	Graytown Rd	New	1.30	3	SA	100%	0	0	0	1760	0	1760	0
4	71	Scenic Lake Dr	Binz-Engleman Rd	IH 10	New	0.77	3	SC	100%	20	20	40	947	31	816	0
Sub-total SA 4						3.19							3359	130	3229	0
Totals:						66.68							122,481	17,186	105,295	0

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APPENDIX B: ROADWAY IMPROVEMENT PLAN COST ANALYSIS

TECHNICAL MEMORANDUM

Definitions

LANES	The total number of lanes in both directions available for travel.
TYPE	The type of roadway (used in determining capacity): UC = undivided collector DC = divided collector UA = undivided arterial DA = divided arterial SC = special collector (roadway with continuous left turn) SA = special arterial (roadway with continuous left turn) OW = one-way roadway
% IN SERVICE AREA	If the roadway is located on the boundary of the service area (with the city limits running along the centerline of the roadway), then half of the roadway is inventoried in the service area and the other half is not. This value is either 50% or 100%.
TOTAL SEGMENT COST	The estimated cost (in dollars) of the entire segment of the proposed improvement.
TOTAL COST IN SERVICE AREA	The estimated cost (in dollars) of the portion of the proposed roadway improvement within the service area.

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Srv Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type	Pct. In Rdwy/Serv. Area	Roadway Project Costs			Total Project Cost	Prorated Study Update Cost	Service Area Total Cost (100%)
										Engineering	ROW	Construction			
1	1	FM 2252	IH 35	FM 482	New	0.32	4	DA	100%	\$100,000	\$39,000	\$1,428,800	\$1,566,800	\$696	\$1,567,496
1	2	FM 2252	FM 482	Railroad Tracks	New	0.64	4	DA	100%	\$205,800	\$0	\$2,940,200	\$3,146,000	\$1,409	\$3,147,409
1/X	3	FM 2252	Railroad Tracks	N City Limits	New	0.22	4	DA	50%	\$33,350	\$0	\$476,500	\$509,850	\$244	\$510,094
1/2	4	NS Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	\$194,950	\$222,750	\$2,784,950	\$3,202,650	\$1,380	\$3,204,030
1	5	E/W Connector (1)	NS Connector (1)	NS Connector (1)	New	0.99	4	DA	100%	\$337,600	\$352,800	\$4,822,600	\$5,513,000	\$2,179	\$5,515,179
1	6	E/W Connector (2)	NS Connector (1)	NS Connector (1)	New	0.99	2	LC	100%	\$261,300	\$274,400	\$3,733,300	\$4,269,800	\$907	\$4,269,807
1	7	FM 482	Hubertus Rd	Hubertus Rd	New	1.05	4	DA	100%	\$343,300	\$207,900	\$4,904,900	\$5,456,100	\$2,319	\$5,458,419
1	8	FM 482	Hubertus Rd	Railroad Tracks	New	1.00	4	DA	100%	\$323,800	\$198,000	\$4,626,000	\$5,147,800	\$2,209	\$5,150,009
1	9	FM 482	800' W of Friesenhahn	Friesenhahn Ln	New	0.15	4	DA	100%	\$47,400	\$30,000	\$676,700	\$754,100	\$331	\$754,431
1/X	10	FM 482	Schwab Rd	Schwab Rd	New	0.59	4	DA	50%	\$96,250	\$58,400	\$1,375,950	\$1,530,650	\$650	\$1,530,650
1	11	FM 482	Schwab Rd	E City Limits	New	1.20	4	DA	100%	\$390,400	\$237,600	\$5,577,500	\$6,205,500	\$2,645	\$6,208,145
1	12	Hubertus Rd	IH 35	FM 482	New	0.57	4	DA	100%	\$178,000	\$135,400	\$2,542,300	\$2,865,700	\$1,248	\$2,866,948
1	13	Hubertus Rd	IH 35	Hubertus Rd	New	0.30	4	DA	100%	\$69,500	\$142,600	\$1,336,200	\$1,572,300	\$670	\$1,572,970
1	14	Friesenhahn Ln	IH 35	N City Limits	New	0.72	3	SC	100%	\$36,400	\$36,000	\$36,000	\$72,400	\$644	\$73,044
1	15	Schwab Rd	IH 35	FM 482	New	0.63	6	DA	100%	\$268,200	\$274,400	\$3,832,100	\$4,374,700	\$2,080	\$4,376,780
1	16	E/W Connector (3)	Hubertus Rd	David Lack Blvd	New	1.59	3	SC	100%	\$370,900	\$440,700	\$5,298,400	\$6,110,000	\$1,432	\$6,111,432
1	17A	Eckhardt Rd	Frobese Ln	Green Valley Rd	New	1.11	2	LC	100%	\$238,100	\$97,900	\$3,401,100	\$3,727,100	\$906	\$3,728,006
1	18	Schwab Rd	IH 35	S City Limits	New	1.14	4	DA	100%	\$345,100	\$408,300	\$4,928,300	\$5,680,700	\$2,513	\$5,683,213
1	19	Frobese Ln	Schwab Rd	Eckhardt Rd	New	0.57	2	LC	100%	\$122,500	\$168,000	\$1,748,900	\$2,039,400	\$468	\$2,040,868
1	20	Frobese Ln	Schwab Rd	E City Limits	New	0.26	2	LC	100%	\$56,200	\$31,100	\$602,700	\$690,000	\$212	\$690,212
1	21	Green Valley Rd	W City Limits	W City Limits	New	0.87	4	DA	100%	\$263,500	\$172,300	\$3,763,700	\$4,199,500	\$1,921	\$4,201,421
1	22	Homestead Pkwy	End Ex Homestead Pkwy	S City Limits	New	0.33	2	LC	100%	\$71,100	\$91,500	\$1,015,900	\$1,178,500	\$266	\$1,178,766
1	23	Country Club Blvd	Scenic Links	S City Limits	New	0.35	2	LC	100%	\$75,900	\$97,000	\$1,084,200	\$1,257,100	\$286	\$1,257,386
1	24	E/W Connector (4)	Country Club Blvd	Homestead Pkwy	New	0.77	2	LC	100%	\$160,800	\$213,800	\$2,295,600	\$2,671,200	\$929	\$2,671,829
1	25A	E/W Connector (4)	Schwab Rd	Eckhardt Rd	New	0.45	2	LC	100%	\$98,800	\$124,700	\$1,360,700	\$1,602,000	\$368	\$1,602,368
1/X	25B	Big John Lane	Eckhardt Rd	City Limits	New	0.06	2	LC	50%	\$3,050	\$3,850	\$43,775	\$50,675	\$23	\$50,698
1/X	25C	E/W Connector (4)	City Limits	E City Limits	New	0.68	2	LC	50%	\$36,700	\$47,900	\$524,675	\$608,625	\$279	\$608,904
1	26	FM 1103	IH 35	Old Wiederstein Rd	New	0.70	4	DA	100%	\$0	\$0	\$2,000,000	\$2,000,000	\$1,646	\$2,001,646
1	27	NS Conn. (1)/Chickale Valley	IH 35	Old Wiederstein Rd	New	0.55	4	DA	100%	\$0	\$0	\$1,300,000	\$1,300,000	\$1,212	\$1,301,212
1	28	NS Connector (2)	IH 35	Old Wiederstein Rd	New	0.73	4	DA	100%	\$220,800	\$260,200	\$3,154,700	\$3,635,700	\$1,619	\$3,637,319
1	29	E/W Connector (5)	NS Connector (1)	FM 1103	New	2.00	2	LC	100%	\$428,100	\$554,000	\$6,115,100	\$7,097,200	\$1,632	\$7,098,832
1/X	30	Old Wiederstein Rd	NS Connector (1)	Cherry Tree Dr	New	2.17	4	DA	50%	\$328,050	\$128,800	\$4,688,650	\$5,143,600	\$2,392	\$5,146,022
Sub-total SA 1															
2	31	Doerr Ln	N City Limits	Lookout Rd	New	0.91	3	SC	100%	\$212,600	\$0	\$3,037,300	\$3,249,900	\$920	\$3,250,720
2/1	4	NS Connector (1)	IH 35	Railroad Tracks	New	1.25	4	DA	50%	\$190,250	\$222,750	\$2,717,600	\$3,130,600	\$1,380	\$3,132,280
2	32	E/W Connector (2)	FM 3009	NS Connector (1)	New	0.81	2	LC	100%	\$206,800	\$224,500	\$2,584,900	\$3,386,200	\$661	\$3,386,861
2	33	E/W Connector (6)	FM 3009	NS Connector (1)	New	0.81	2	LC	100%	\$206,800	\$224,500	\$2,584,900	\$3,386,200	\$661	\$3,386,861
2	34	Mid-Cities Pkwy	IH 35	FM 3009	New	0.98	3	SC	100%	\$215,500	\$0	\$3,078,200	\$3,293,700	\$883	\$3,294,583
2	35	E/W Connector (1)	FM 3009	NS Connector (1)	New	0.81	4	DA	100%	\$355,300	\$288,700	\$3,646,900	\$4,190,900	\$1,797	\$4,192,697
2	36	E/W Conn. (7)/Tejas Way	W City Limits	Doerr Ln	Recoup	0.65	3	SC	100%	\$134,200	\$180,200	\$1,918,700	\$2,231,100	\$685	\$2,231,685
2	37	Lookout Rd	Existing Tejas Way	UP RRP/City Limit	New	0.52	3	SC	100%	\$99,100	\$0	\$1,415,700	\$1,647,800	\$488	\$1,648,288
2	38	Four Oaks Ln	Tri-County Pkwy	Schwartz Pkwy	New	0.74	3	SC	100%	\$178,500	\$0	\$2,564,100	\$2,743,600	\$666	\$2,744,266
2	39	Wiederstein Rd	End of Ex. Four Oaks Ln	NS Connector (1)	New	0.54	3	SC	100%	\$119,600	\$149,700	\$1,979,300	\$1,977,600	\$468	\$1,977,768
2	40	Wiederstein Rd	E City Limits	FM 3009	New	0.64	4	DA	100%	\$2,665,100	\$228,100	\$3,079,800	\$3,079,800	\$1,418	\$3,081,218
2	41	Baptist Health Dr	Schwartz Pkwy	W City Limits	New	0.41	2	LC	100%	\$64,700	\$0	\$1,210,000	\$1,294,700	\$331	\$1,295,031
2	42	Ripps-Kreusler	Ripps-Kreusler	Wiederstein Rd	New	0.27	3	SC	100%	\$60,100	\$74,900	\$694,300	\$803,900	\$247	\$804,147
2	43	Maske Rd	Baptist Health Dr	End of Ripps Kreusler	New	0.22	3	SC	100%	\$48,600	\$61,000	\$694,300	\$803,900	\$200	\$804,100
2	44	Maske Rd Realignment	FM 1518	Oak St	New	0.54	3	SC	100%	\$119,600	\$0	\$1,705,000	\$1,827,600	\$486	\$1,828,086
2	45	FM 1518/Main St	Oak St	Schwartz Pkwy	New	0.88	2	LC	100%	\$224,300	\$243,300	\$3,178,800	\$3,645,200	\$715	\$3,645,915
2			Maske Rd	Oak St	New	1.30	3	SA	100%	\$294,000	\$0	\$4,200,500	\$4,494,500	\$1,431	\$4,495,931

TECHNICAL MEMORANDUM

Serv Area	Project No.	Roadway	From	To	Project Status	Length (mi)	No. of Lanes	Type	Pct. in Rwy Serv. Area	Roadway Project Costs			Total Project Cost	Privatized Study Update Cost	Service Area Total Cost (100%)
										Engineering	ROW	Construction			
2	46	FM 1518	N City Limits	SA 3 Limit	New	0.36	6	DA	100%	\$27,400	\$17,100	\$391,900	\$436,300	\$1,196	\$437,496
2/3	47	FM 1518	SA 3 Limit	Schertz Pkwy Ext	New	0.39	6	DA	50%	\$13,950	\$9,250	\$199,450	\$222,650	\$648	\$223,298
2	48	FM 78/John Paterson Blvd	W City Limits	E City Limits	New	1.81	6	DA	100%	\$175,600	\$0	\$2,508,100	\$2,683,700	\$5,069	\$2,688,769
Sub-total SA 2															
3/2	47	FM 1518	SA 2 Limit	Schertz Pkwy Ext	New	0.39	6	DA	50%	\$13,950	\$9,250	\$199,450	\$222,650	\$648	\$223,298
3	49	FM 1518	Schertz Pkwy Ext	IH 10	New	4.08	6	DA	100%	\$327,300	\$162,000	\$4,675,700	\$5,165,000	\$13,524	\$5,178,524
3	50	Schaefer Rd	W City Limits	FM 1518	New	0.48	2	UC	100%	\$69,300	\$19,000	\$1,476,400	\$1,564,700	\$391	\$1,568,091
3/X	51	RAF - Burnette	Schaefer Rd	E City Limits	New	0.55	4	DA	100%	\$160,300	\$108,900	\$2,289,900	\$2,559,000	\$1,202	\$2,560,202
3/X	52	Lower Seguin Rd	W City Limits	E of Tates Dr	New	0.35	3	SA	50%	\$44,450	\$6,950	\$635,050	\$686,450	\$193	\$688,383
3	53	Lower Seguin Rd	E of Tates Dr	W of Canopy Bend	New	1.76	3	SA	100%	\$453,300	\$69,700	\$6,475,900	\$6,998,900	\$1,940	\$7,000,840
3	54	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	1.08	4	DA	100%	\$313,400	\$127,700	\$4,479,800	\$4,917,900	\$2,370	\$4,920,270
3	54B	Lower Seguin Rd	W of Canopy Bend	E City Limits	New	0.23	4	DA	100%	\$67,800	\$27,600	\$959,300	\$1,053,700	\$511	\$1,054,211
3	55	NS Connector (3)	S. of Schaefer/Burnette	Lower Seguin Rd	New	0.66	4	DA	100%	\$168,000	\$12,600	\$2,827,900	\$3,338,500	\$1,450	\$3,339,950
3	56	NS Connector (3)	N City Limits	S City Limits	New	0.27	4	DA	100%	\$81,900	\$128,300	\$1,170,200	\$1,380,400	\$585	\$1,380,985
3	57A	NS Connector (4)	N City Limits	S City Limits	New	0.26	2	UC	100%	\$53,800	\$72,100	\$769,700	\$894,600	\$208	\$894,808
3	57B	NS Connector (4)	Lower Seguin Rd	S City Limit/Carmel Ranch	New	0.24	2	UC	100%	\$50,400	\$67,900	\$720,100	\$838,000	\$198	\$838,198
3	58	NS Connector (4)	N City Limits	S City Limits	New	0.21	2	UC	100%	\$43,600	\$58,200	\$623,200	\$725,000	\$172	\$725,172
3/X	59	W Ware Seguin Rd	W City Limits	Boeing Dr	New	0.57	2	UC	50%	\$58,900	\$0	\$841,650	\$900,550	\$231	\$900,781
3	60	W Ware Seguin Rd	Boeing Dr	NS Connector (5)	New	0.67	2	UC	100%	\$146,300	\$0	\$2,090,600	\$2,236,900	\$546	\$2,237,446
3	61	NS Connector (5)	Lower Seguin Rd	W Ware Seguin Rd	New	1.10	2	UC	100%	\$227,400	\$304,900	\$3,248,200	\$3,780,500	\$901	\$3,781,401
3	62	NS Connector (5)	W Ware Seguin Rd	E Ware Seguin Rd	New	0.93	2	UC	100%	\$208,700	\$36,800	\$2,961,900	\$3,227,400	\$761	\$3,228,161
3	63	Trainer Hale Rd (NS)	Weir Rd	IH 10	New	1.66	4	DA	100%	\$468,900	\$394,400	\$7,127,200	\$8,024,157	\$3,657	\$8,027,814
3	64	Trainer Hale Rd (E/W)	FM 1518	Trainer Hale Rd (NS)	New	1.51	4	DA	100%	\$500,600	\$59,800	\$7,150,000	\$7,710,300	\$3,323	\$7,713,623
3	65	Ware Seguin Rd	Graytown Rd	NS Connector (5)	New	1.35	3	SA	100%	\$278,400	\$481,100	\$3,976,800	\$4,736,300	\$1,493	\$4,737,793
3	66	E Ware Seguin Rd	NS Connector (5)	FM 1518	New	1.41	3	SA	100%	\$298,100	\$167,500	\$4,273,300	\$4,739,900	\$1,559	\$4,741,459
3/4	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	\$126,550	\$65,950	\$1,608,100	\$2,000,600	\$614	\$2,001,214
3	68	NS Connector (6)	Ware Seguin Rd	IH 10	New	0.47	3	SC	100%	\$103,300	\$130,300	\$1,478,800	\$1,712,400	\$418	\$1,712,818
3	69	E/W Connector (6)	IH 10	E City Limits	New	2.33	3	SC	100%	\$512,700	\$545,900	\$7,323,700	\$8,482,300	\$2,093	\$8,484,393
Sub-total SA 3															
4/3	67	Graytown Rd	Boeing Dr	IH 10	New	1.11	3	SA	50%	\$126,550	\$65,950	\$1,608,100	\$2,000,600	\$614	\$2,001,214
4	70	Binz-Engleman Rd	W City Limits	Graytown Rd	New	1.30	3	SA	100%	\$275,000	\$463,300	\$3,923,700	\$4,662,000	\$1,437	\$4,663,437
4	71	Scenic Lake Dr	Binz-Engleman Rd	IH 10	New	0.77	3	SC	100%	\$177,700	\$81,000	\$2,538,700	\$2,797,400	\$691	\$2,798,091
Sub-total SA 4															
Totals:										\$14,277,050	\$11,132,050	\$207,258,750	\$232,667,850	\$100,000	\$232,767,850

TECHNICAL MEMORANDUM

APPENDIX C: ROADWAY SERVICE AREA ANALYSIS SUMMARY

TECHNICAL MEMORANDUM

2021 Schertz Roadway Impact Fee Update*

Service Area Analysis Summary

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Service Area	Capacity Supplied by CIP (veh-mi)	Existing Utilization (veh-mi)	Existing Deficiencies (veh-mi)	Net Capacity Supplied by CIP (veh-mi)	Total Project Cost of CIP	Cost of Net Capacity Supplied	Cost to Meet Existing Utilization	Projected 10-yr Growth (veh-miles)	Pct. of CIP Attributable to New Dev. (10-yr)	Debt Service Attributable to New Dev.	Cost Attributable to New Dev.	Maximum Credited Cost per Service Unit	Full Cost per Service Unit (veh-mi)
1	48,583	2,747	0	42,835	\$96,666,616	\$90,840,034	\$5,826,582	10,461	24.4	\$2,679,760	\$24,864,170	\$1,614.54	\$2,408.84
2	25,733	6,998	0	18,735	\$48,739,881	\$37,610,891	\$13,226,930	17,605	35.3	\$3,978,291	\$7,625,030	\$1,350.25	\$2,089.51
3	47,756	7,311	0	40,446	\$77,913,644	\$65,986,533	\$11,927,108	14,918	36.9	\$2,885,171	\$27,204,207	\$1,061.26	\$1,895.78
4	3,359	130	0	3,229	\$9,147,742	\$9,062,022	\$65,721	124	3.6	\$41,586	\$31,221	\$2,386.93	\$2,155.02
Totals	122,481	17,186	0	105,295	232,767,880	201,419,479	31,348,401	43,408	41.2	\$9,544,810	\$90,284,628	\$1,317.59	\$2,072.87

- TOTAL VEH-MI OF CAPACITY SUPPLIED BY CIP (TYMCAP)
- TOTAL VEH-MI OF EXISTING DEMAND (VMEXT)
- TOTAL VEH-MI OF EXISTING DEFICIENCIES (VMDEF)
- NET AMOUNT OF ROADWAY CAPACITY SUPPLIED (NVMCAP) =
NVMCAP = TYMCAP - VMEXT - VMDEF
- TOTAL COST OF CIP WITHIN STUDY AREA (TYMCOST)
- COST OF NET CAPACITY SUPPLIED (NCVMCAP) =
NCVMCAP = (NVMCAP / TYMCAP) * TYMCOST
- COST TO MEET EXISTING NEEDS AND USAGE (EXCOST) =
EXCOST = TYMCOST - NVMCAP
- TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (TNVDEM)

- PERCENT OF CIP ATTRIBUTABLE TO NEW DEVELOPMENT (NPICNT) =
IF TNVDEM > NVMCAP, NPICNT = 100%
IF TNVDEM < NVMCAP, NPICNT = (TNVDEM / NVMCAP) * 100
- DEBT SERVICE ATTRIBUTABLE TO NEW DEVELOPMENT (DSDEM)
- COST OF CIP ATTRIBUTABLE TO NEW DEVELOPMENT (DSDEM) =
NCVMDEM = (TNVDEM / NVMCAP) * NVMCAP + DSDEM
- CIP CREDIT PER CREDIT ANALYSIS (CCRED)
- COST PER SERVICE UNIT = (MAX FEE)
- MAX FEE = (NCVMDEM - CCRED) / TNVDEM
- BASE COST PER SERVICE UNIT (BASE FEE)
- BASE FEE = NCVMDEM / TNVDEM

* Amendments to Service Area 1, 2 and 3 include:

- SA3: Project 51 - Schaefer/Raf Bennett; Secondary Arterial (90'); extension of city limits
- SA3: Project 54A/54B - Lower Seguin Road, Secondary Arterial (90' ROW); extension of city limits
- SA3: Project 55 - NIS Connector (120' ROW) from Schaefer/Raf Burnette; extension of city limits
- SA3: Project 57B - Addition of Res Collector (70' ROW) from Lower Seguin Rd; extension of city limits
- SA1: Project 25B/25C - Big John Lane (Res. Collector, 70' ROW); extension of city limits
- SA1: Project 27 - Wiederstein Road (Prin. Art., 120' ROW); Amended Cost per Dev. Agreement
- SA1: Project 36A - Tejas Way Extension (Comm. Collector, 70' ROW)

Roadway Capital Recovery Fee Ordinance 18-M-13

Service Area	Maximum Credited Cost per Service Unit		COLLECTION DATE	
	2017 Study Update	2021 Study Update	RESIDENTIAL Mar 2021 - 2022	NON-RESIDENTIAL Mar 2018 - 2021
1	\$1,647.53	\$1,031.54	\$900.00	\$100.00
2	\$1,327.89	\$1,350.25	\$900.00	\$100.00
3	\$1,044.48	\$1,061.26	\$900.00	\$100.00
4	\$2,392.72	\$2,386.93	\$900.00	\$100.00