

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF DENTON, TEXAS, AMENDING ORDINANCE NO. 2016-189 AND UPDATING THE LAND USE ASSUMPTIONS, ROADWAY CAPITAL IMPROVEMENT PLAN, AND THE IMPOSITION OF UPDATED ROADWAY IMPACT FEES FOR DESIGNATED SERVICE AREAS; ADOPTING ROADWAY IMPACT FEES PER SERVICE UNIT; ESTABLISHING PROCEDURES FOR THE ASSESSMENT, COLLECTION, COMPUTATION, EXPENDITURE, REFUND AND GENERAL ADMINISTRATION OF ROADWAY IMPACT FEES; PROVIDING FOR THE ESTABLISHMENT OF ACCOUNTS FOR ROADWAY IMPACT FEES; PROVIDING CONSTRUCTION, SEVERABILITY, AND CONFLICT CLAUSES; PROVIDING FOR THE AMENDMENT THE CHAPTER 25 OF THE CODE OF ORDINANCES BY CREATING AND CODIFYING ARTICLE VI, ENTITLED "ROADWAY IMPACT FEES"; PROVIDING FOR CODIFICATION OF SECTIONS 25-252 THROUGH 25-275 IN THE CODE OF ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City has adopted a roadway impact fee by Ordinance No. 2016-189, and in accordance with Chapter 395 of the Local Government Code ("Statute"), the impact fee and the associated Land Use Assumptions and Capital Improvements Plan shall be updated at least every five years.

WHEREAS, the City retained Kimley-Horn and Associates ("Kimley-Horn") to prepare 1) a "Roadway Impact Fee Study" that contains updated Land Use Assumptions ("LUA") reflecting a description of five Service areas and projections of 10-year growth in residential and nonresidential land uses in each service area, 2) an updated Roadway Impact Fee Capital Improvement Plan ("CIP") to identify capital improvements or roadway facility expansions for which roadway impact fees may be assessed, and 3) an updated calculation of the roadway impact fee ("Roadway Impact Fees"). The Roadway Impact Fee Study is attached as Exhibit A hereto and incorporated by reference herein; and

WHEREAS, the City has made of copy of the proposed LUA, the time of the projections, and a description of the capital improvement facilities available to the public by keeping a copy of the LUA and CIP in the City Secretary's office and posting a copy on the City Website on May 16, 2024 in compliance with Section 395.043, Texas Local Government Code; and

WHEREAS, the Capital Improvement Advisory Committee of the City of Denton ("CIAC"), created pursuant to Section 395.058, Texas Local Government Code, filed its written comments on the proposed Roadway Impact Fees on or about May 20, 2024; and

WHEREAS, on June 6, 2024, City Council approved Resolution 24-173 establishing and providing notice of a public hearing as required by Chapter 395 of the Texas Local Government Code; and

WHEREAS, on July 16, 2024, City Council held a public hearing on the LUA and CIP relating to the adoption of updated Roadway Impact Fees where the public had the right to appear

at the hearing and present evidence for or against the LUA and CIP for the proposed Roadway Impact Fees; and

WHEREAS, the City Council desires to adopt, update and amend the LUA and CIP for Roadway Impact Fees; and after public hearing on this matter, the City Council finds that adoption of the updated LUA and CIP are in the best interest of the citizens of the City of Denton; and

WHEREAS, the City Council desires to adopt the Roadway Impact Fees and related administrative process as herein described and finds that it is in the best interest of the citizens of the City of Denton; **NOW THEREFORE**,

THE COUNCIL OF THE CITY OF DENTON HEREBY ORDAINS:

SECTION 1. The recitals and findings set forth above are true and correct and are incorporated into the body of this Ordinance as if fully set forth herein.

SECTION 2. The City hereby adopts and approves the Kimley-Horn Roadway Impact Fee Study inclusive of Land Use Assumptions and Roadway Capital Improvements Plan attached hereto as Exhibits A.

SECTION 3. Chapter 395, Texas Local Government Code, supplements this Ordinance to the extent that its provision may be applicable there to and, to such extent, its provisions are incorporated herein. The terms and provisions of this Ordinance shall not be construed in a manner to conflict with Chapter 395, as amended, and if any term or provisions of this Ordinance shall appear to conflict with any term, provision or condition of Chapter 395 such Ordinance term or provisions shall be read, interpreted, and construed in a manner consistent with and not in conflict with Chapter 395.

SECTION 4. The City hereby adopts the updated Maximum Assessable Roadway Impact Fee and the updated Roadway Impact Fee Collection Rate attached and incorporated hereto as **Exhibit B, Schedule 1**, and **Exhibit B, Schedule 2** respectively.

SECTION 5. The City hereby adopts the updated Land Use Equivalency Table attached and incorporated as **Exhibit C**.

SECTION 6. If any provision of this Ordinance or the application of any provision to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared to be severable.

SECTION 7. This Ordinance shall be cumulative of all provisions of ordinances and of the Code of Ordinances for the City of Denton, Texas, as amended except where provisions of this Ordinance are in direct conflict with the provisions of such ordinances of such Code, in which event the conflicting provisions of such ordinances and Code are hereby repealed.

SECTION 8. Chapter 25 of the Denton Code of Ordinance of City of Denton, Texas, entitled “Streets, Sidewalks, and Public Places” is hereby amended to add Article VI entitled “Roadway Impact Fees” which contents shall read as follows:

CHAPTER 25: STREETS, SIDEWALKS, AND PUBLIC PLACES

ARTICLE VI. ROADWAY IMPACT FEES

Section 25-252. Short Title.

This article shall be known and cited as the "Denton Roadway Impact Fee Regulations".

Sec. 25-253. Findings Incorporated.

The findings set forth above are incorporated into the body of this article as if fully set forth herein and are hereby found to be true and correct factual and legislative determinations of the City of Denton, Texas.

Sec. 25-254. Purpose.

This article is intended to assure the provision of adequate roadway facilities to serve New Development in the City by requiring each development to pay a share of the costs of such Capital Improvements or Roadway Facility expansions necessitated by and attributable to such New Development.

25-255. Authority.

This article is adopted pursuant to Texas Local Government Code (TLGC) Chapter 395 and the Denton City Charter. Chapter 395 supplements this Article to the extent that its provisions may be applicable hereto and, to such extent, its provisions are incorporated herein by reference. The provisions of this article shall not be construed to limit the power of the City to utilize 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.

Sec. 25-256. Applicability.

The provisions of this article apply to all new, non-exempt development within the corporate boundaries of the City located within a Roadway Service Area.

Sec. 25-257. Incorporation of Land Use Assumptions and Roadway Impact Fee Capital Improvements Plan.

The Roadway Impact Fee Capital Improvements Plan and Land Use Assumptions identifying Capital Improvements or Facility Expansions pursuant to which Roadway Impact Fees may be assessed, as considered and adopted by the City Council Ordinance No. 2016- 085 and as amended by City Council Ordinance 2024-1125.

Sec. 25-258. Definitions.

In this article:

- (a) *Assessment* means the determination of the amount of the Maximum Assessable Roadway Impact Fee per Service Unit which can be imposed on New Development pursuant to this Article.
- (b) *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.
- (c) *City* means the City of Denton, Texas.
- (d) *Credit* means a reduction in the amount of a Roadway Impact Fee(s), payments, or charges for approved construction or provision of the same type of Capital Improvement for which a fee has been assessed for a New Development. This is done by either by a proven decrease in the number of Service Units attributable to such development or a decrease in the amount of Roadway Impact Fees otherwise due, that results from contributions of land, improvements or funds to construct system improvements in accordance with the City's subdivision and development regulations, policies or requirements, as determined by the City.
- (e) *Final plat approval* means authorization by the City Planning and Zoning Commission that the final map of a proposed subdivision meets all City standards and conditions in accordance with the City's subdivision regulations and the Executive Chairman of the City Planning and Zoning Commission executes the applicant's plat and that the plat may be recorded in the office of the county clerk of Denton. The term applies both to original plats and replats.
- (f) *Impact Fee, or "Roadway Impact Fee"*, means a fee, charge, or Assessment for Roadway Facilities imposed on New Development by the City pursuant to this Article in order to generate revenue to fund or recoup all or part of the costs of Capital Improvements or facility expansion necessitated by and attributable to such New Development. The term includes amortized charges, lump-sum charges, capital recovery fees, contributions in aid of construction and any other fee that functions as described by this article or the TLGC Chapter 395 . The term is inclusive of both the Maximum Assessable Roadway Impact Fee and the Roadway Impact Fee Collection Rate as herein described.
- (g) *Land Use Assumptions* means the description of 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, upon which the Roadway Impact Fee Capital Improvements Plan is based.
- (h) *Land Use Equivalency Table* means a table converting the demands for Capital Improvements generated by various land uses to numbers of Service Units, as may be amended from time to time. (See Land Use Equivalency Table below.)

Exhibit C - Land Use Equivalency Table											
Land Use Category	ITE Land Use Code	Development Units	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											
Intermodal Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.02	50%	5.01	5.01	9.37
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.65			0.65	10.02	50%	5.01	5.01	3.26
Industrial Park	130	1,000 SF GFA	0.34			0.34	10.02	50%	5.01	5.01	1.70
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Residential Condominium/Townhome	230	Dwelling Unit	0.36			0.36	9.79	50%	4.90	4.90	1.76
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	Beds	0.24			0.24	9.79	50%	4.90	4.90	1.18
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.21	3.21	1.89
Motel	320	Room	0.36			0.36	6.43	50%	3.21	3.21	1.16
RECREATIONAL											
Golf Driving Range	432	Tees / Driving Positions	1.25			1.25	7.86	50%	3.93	3.93	4.91
Golf Course	430	Acre	0.28			0.28	7.86	50%	3.93	3.93	1.10
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.93	9.83
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	7.86	50%	3.93	3.93	5.23
Miniature Golf Course	431	Holes	0.33			0.33	7.86	50%	3.93	3.93	1.30
Multiplex Movie Theater	445	Movie Screens	13.96			13.96	15.77	50%	7.88	6.00	83.76
Racquet / Tennis Club	491	Tennis Court	3.82			3.82	7.86	50%	3.93	3.93	15.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.15	4.15	2.03
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.74	1.74	10.84
Elementary School	520	Students	0.16			0.16	3.49	50%	1.74	1.74	0.28
Middle School / Junior High School	522	Students	0.15			0.15	3.49	50%	1.74	1.74	0.26
High School	530	Students	0.14			0.14	3.49	50%	1.74	1.74	0.24
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	5.22	0.57
University / College	550	Students	0.15			0.15	10.44	50%	5.22	5.22	0.78
MEDICAL											
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.92	4.92	18.15
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.92	4.92	4.23
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.92	4.92	0.69
Animal Hospital / Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	9.85	50%	4.92	4.92	12.15
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80
General Office Building	710	1,000 SF GFA	1.44			1.44	14.65	50%	7.32	6.00	8.64
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.92	4.92	19.34
Single Tenant Office Building	715	1,000 SF GFA	1.76			1.76	14.65	50%	7.32	6.00	10.56
Office Park	750	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.22	2.22	4.15
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.22	2.22	6.19
Gasoline / Service Station	944	Vehicle Fueling Position	13.91	42%	A	8.07	1.20	50%	0.60	0.60	4.84
Gasoline / Service Station w/ Conv Market	945	Vehicle Fueling Position	18.42	56%	B	8.10	1.20	50%	0.60	0.60	4.86
New Car Sales	841	1,000 SF GFA	2.42	20%	B	1.94	5.60	50%	2.80	2.80	5.43
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.22	2.22	6.46
Self-Service Car Wash	947	Wash Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.75	28%	A	2.70	4.45	50%	2.22	2.22	5.99
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.03	50%	A	16.52	5.64	50%	2.82	2.82	46.59
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	33.21	50%	B	16.61	5.64	50%	2.82	2.82	46.84
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.05	43%	A	5.16	5.64	50%	2.82	2.82	14.55
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	5.64	50%	2.82	2.82	12.32
Coffee / Donut Shop with Drive-Thru Window	937	1,000 SF GFA	38.99	70%	A	11.7	5.64	50%	2.82	2.82	32.99
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.83	30%	C	3.38	5.60	50%	2.80	2.80	9.46
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.61
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	5.60	50%	2.80	2.80	3.39
Pharmacy / Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy / Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.29	49%	A	5.25	5.60	50%	2.80	2.80	14.70
Shopping Center (>150k)	820	1,000 SF GFA	3.40	34%	A	2.24	5.60	50%	2.80	2.80	6.27
Shopping Plaza (40-150k)	821	1,000 SF GFA	5.19	34%	A	3.43	5.60	50%	2.80	2.80	9.60
Strip Retail Plaza (<40k)	822	1,000 SF GFA	6.59	34%	A	4.35	5.60	50%	2.80	2.80	12.18
Supermarket	850	1,000 SF GFA	9.24	36%	A	5.91	5.60	50%	2.80	2.80	16.55
Toy / Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.84
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.22	2.22	16.16
Drive-In Bank	912	Drive-In Lanes	27.07	47%	A	14.35	4.45	50%	2.22	2.22	31.86
Hair Salon	918	1,000 SF GFA	1.45	30%	B	1.02	6.41	50%	3.20	3.20	3.26

Key to Sources of Pass-by Rates:

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

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

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

- (i) *Maximum Assessable Roadway Impact Fee* means the Impact Fee that is established for each Service Area computed by calculating the total projected costs of Capital Improvements necessitated by and attributable to New Development and subtracting a portion of ad valorem tax revenues to be generated by new Service Units, including the payment of debt, associated with the roadway CIP, and then dividing that amount by the total number of Service Units anticipated within the Service Area based upon the land use assumptions. The Maximum Assessable Roadway Impact Fee shall be established and reflected in Schedule 1 below. The City may adopt a Roadway Impact Fee Collection Rate that is less than this amount, but in no instance shall the Roadway Impact Fee exceed the Maximum Assessable Roadway Impact Fee except by amendment of this article. *See Section 25-260.*
- (j) *New Development* means a project involving the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure, or any use or extension of land, which has the effect of increasing the requirements for Capital Improvements or facility expansions, measured by the number of Service Units to be generated by such activity.
- (k) *Recoupment* means the imposition of an Impact Fee to reimburse the City for Capital Improvements which the City has previously oversized to serve New Development.
- (l) *Roadway Impact Fee Collection Rate* means the current amount of Roadway Impact Fee adopted by Denton City Council to be paid by the property owner, as may from time to time be amended, which is the result of a percentage reduction of the adopted Maximum Assessable Roadway Impact Fee. The adopted Roadway Impact Fee Collection Rate shall be established and reflected in Schedule 2. The adopted Roadway Impact Fee Collection Rate may be further reduced with Credits, designed to fairly reflect the value of Roadway Facilities provided by a developer in accordance with the City's development regulations or requirements. *See Section 25-260..*
- (m) *Roadway* means any primary and secondary arterial or collector designated in the City's adopted Mobility Plan, as may be amended from time to time. Roadway also includes any thoroughfare designated as a numbered highway on the official federal or Texas highway system; to the extent that the City incurs Capital Improvement costs for such facility.
- (n) *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 Facility; street lighting or curbs, and water and wastewater improvements affected by the Roadway Facility. Roadway Facility also includes any improvement or appurtenance to an intersection with a Roadway officially enumerated in the federal or Texas highway system, and to any improvements or appurtenances to such federal or Texas highway, to the extent that the City has incurred capital costs for such facilities, including without limitation local matching funds and costs related to utility line relocation and the establishment of curbs, gutters, sidewalks, drainage appurtenances and rights-of-way. Roadway Facility excludes those improvements or appurtenances to any Roadway which is a Site- related Facility.

- (o) *Roadway Facility Expansion* means the expansion of the capacity of an existing roadway in the City, but does not include the repair, maintenance, modernization, or expansion of an existing roadway to better serve existing development.
- (p) *Roadway Impact Fee Capital Improvements Plan, or "Capital Improvements Plan" (CIP)* means the adopted plan included in this article, as may be amended from time to time, which identifies the roadway facilities or Roadway Facility expansions and their costs for each roadway Service Area, which are necessitated by and which are attributable to New Development, for a period not to exceed 10 years, which are to be financed in whole or in part through the imposition of Roadway Impact Fees pursuant to this article.
- (q) *Service Area* means a Roadway Service Area within the City's corporate boundary, within which Impact Fees for Roadway Capital Improvements or Roadway Facility expansions may be collected for New Development occurring within such area and within which fees so collected will be expended for those types of improvements or expansions identified in the Roadway Impact Fee Capital Improvements Plan applicable to the Service Area.
- (r) *Service Unit* means a vehicle mile. A vehicle-mile shall be defined as one (1) vehicle traveling a distance of one (1) mile during the afternoon peak hour as calculated herein.
- (s) *Site Related Facility* means an improvement or facility which is for the primary use or benefit of one or more New Developments and/or which is for the primary purpose of safe and adequate provision of Roadway Facilities to serve the New Development, including access to the development, which is not included in the Roadway Capital Improvements Plan, and for which the developer (s) or property owner(s) is solely responsible under subdivision or other applicable development regulations. Site-related Facility may include a Roadway improvement which is located offsite, or within or on the perimeter of the development site.
- (t) *System Facility* means a roadway improvement or facility expansion which is designated in the Roadway Impact Fee Capital Improvements Plan and which is not a Site-related Facility. System Facility may include a roadway improvement which is located offsite, or within or on the perimeter of the development site.

Sec. 25-259. Roadway Service Areas.

The City hereby establishes five (5) Roadway Service Areas, constituting land within the City's corporate boundaries, as depicted in Tables 2 (A-E). The boundaries of the Roadway Service Areas may be amended from time to time, or new Roadway Service Areas may be delineated, pursuant to the procedures of this Article.

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
A-1	SA	CORBIN	IH-35W TO CORBIN	0.58	100%
A-2	SA	CORBIN	500' S OF SPRINGSIDE TO CORBIN	0.27	100%
A-3	PA	FM 1515	IH 35W TO CORBIN	1.13	100%
A-4	PA	FM 1515	CORBIN TO WESTERN	0.22	100%
A-5	PA	FM 1515	WESTERN TO WESTCOURT	0.29	100%
A-6	PA	FM 1515	WESTCOURT TO MASCH BRANCH	0.12	100%
A-7	PA	FM 1515	TOM COLE TO 3435' W OF TOM COLE	0.65	100%
A-8	PA	FM 1515	3435' W OF TOM COLE TO 530' E OF C WOLFE	0.71	100%
A-9	PA	H LIVELY	C WOLFE TO 2145' W OF H LIVELY	0.41	50%
A-10	PA	H LIVELY	2145' W OF H LIVELY TO 2150' W OF ED ROBSON	0.74	100%
A-11	C	IH-35-CORBIN	IH-35 TO CORBIN	0.84	100%
A-12	SA	JIM CHRISTAL	IH 35 TO OLD SH 24	0.59	100%
A-13,C-10	SA	JIM CHRISTAL	OLD SH 24 TO WESTERN	0.55	50%
A-14,C-11	SA	JIM CHRISTAL	WESTERN TO MASCH BRANCH	0.66	50%
A-15,C-12	SA	JIM CHRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%
A-16,C-13	SA	JIM CHRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%
A-17	C	PRECISION-WESTERN	PRECISION TO WESTERN	0.65	100%
A-18	PA	ROBSON RANCH	IH 35W TO ED ROBSON	1.65	50%
A-19	PA	ROBSON RANCH	ED ROBSON TO YARBROUGH	1.35	50%
A-20	SA	SPRINGSIDE	CORBIN TO UNDERWOOD	0.35	100%
A-21	SA	SPRINGSIDE	UNDERWOOD TO WESTCOURT	0.16	100%
A-22	C	TJ EGAN-LOOP 288	LOOP 288 TO 2440' W OF LOOP 288	0.46	100%
A-23	PA	C WOLFE	1140' S OF TOM COLE TO FM 2449	1.38	50%
A-24	PA	C WOLFE	FM 2449 TO H LIVELY	0.63	50%
A-25	C	CORBIN	IH-35-CORBIN TO SPRINGSIDE	0.39	100%
A-26	C	J CHRISTAL-H LIVELY	FM 2449 TO H LIVELY	0.63	100%
A-27	C	PRECISION	JIM CHRISTAL TO 1635' N OF FM 1515	0.45	100%
A-28	SA	THOMAS J EGAN	JIM CHRISTAL TO 2915' S OF JIM CRISTAL	0.55	100%
A-29	SA	THOMAS J EGAN	1830' N OF FM 1515 TO FM 1515	0.35	50%
A-30	PA	UNDERWOOD	SPRINGSIDE TO UNDERWOOD CONNECTOR	0.76	100%
A-31	SA (1/2)	WESTCOURT	FM 1515 TO SPRINGSIDE	0.79	100%
A-32	PA (1/3)	WESTERN	JIM CHRISTAL TO AIRPORT	1.23	100%
A-33	PA	WESTERN	FM 1515 TO SPRINGSIDE	0.79	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
B-1	C	ALLRED	BONNIE BRAE TO BRUSH CREEK	0.81	50%
B-2	PA	ALLRED	BRUSH CREEK TO JOHN PAINE	0.30	50%
B-3	PA	BRUSH CREEK	815' E OF COUNTRY CLUB TO COUNTRY CLUB	0.15	100%
B-4	PA	BRUSH CREEK	COUNTRY CLUB TO 1935' W OF COUNTRY CLUB	0.37	100%
B-5	PA	BRUSH CREEK	2180' E OF FORT WORTH TO FORT WORTH	0.41	100%
B-6	PA	BRUSH CREEK	FORT WORTH TO 590' E OF ALLRED	0.68	100%
B-7	SA	CORBIN	BONNIE BRAE TO IH-35W	0.66	100%
B-8	C	CREEKDALE	PIMLICO TO RIVERCHASE	0.61	100%
B-9	C	CREEKDALE	THISTLE WAY TO OAKBLUFF	0.39	100%
B-10	C	EL PASEO	BELMONT TO COUNTRY CLUB	0.36	100%
B-11	PA	FM 1515	BONNIE BRAE TO IH 35W	0.15	100%
B-12	PA (1/3)	HICKORY CREEK	FM 2499 TO NAUTICA	0.22	100%
B-13	PA (1/3)	HICKORY CREEK	NAUTICA TO TEASLEY	0.25	100%
B-14	PA (1/3)	HICKORY CREEK	TEASLEY TO MONTECITO	0.85	100%
B-15	PA (1/3)	HICKORY CREEK	MONTECITO TO 1435' W OF BIDDY BYE	0.42	50%

B-16	PA	HICKORY CREEK	1435' W OF BIDDY BYE TO 815' E OF COUNTRY CLUB	0.38	100%
B-17	SA	HOBSON LANE	TEASLEY TO MONTECITO	0.13	100%
B-18	SA	HOBSON LANE	MONTECITO TO FORRESTRIDGE	0.28	100%
B-19	SA	HOBSON LANE	FORRESTRIDGE TO COUNTRY CLUB	0.72	100%
B-20	C	PARVIN	MCCORMICK TO HIGHLAND PARK	0.50	100%
B-21	SA	ROBINSON	230' E OF WHEELER RIDGE TO TEASLEY	0.52	100%
B-22	SA	RYAN	TEASLEY TO MONTECITO	0.76	100%
B-23	SA	RYAN	MONTECITO TO FORRESTRIDGE	0.63	100%
B-24	SA	RYAN	FORRESTRIDGE TO COUNTRY CLUB	0.66	100%
B-25	PA (1/3)	VINTAGE	FORT WORTH TO BONNIE BRAE	0.87	100%
B-26	PA (1/3)	VINTAGE	BONNIE BRAE TO NAPA VALLEY	0.14	100%
B-27	PA (1/3)	VINTAGE	NAPA VALLEY TO IH 35W	0.65	100%
B-28	C	WILLOWWOOD	1250' W OF HIGHLAND PARK TO BONNIE BRAE	0.24	100%
B-29	SA	BONNIE BRAE	IH 35E TO FM 1515	0.14	100%
B-30	SA	BONNIE BRAE	FM 1515 TO WILLOWWOOD	1.09	100%
B-31	SA	BONNIE BRAE	HIGHLAND PARK TO ROSELAWN	0.48	50%
B-32	SA	COUNTRY CLUB	FORT WORTH TO HOBSON	0.08	100%
B-33	SA	COUNTRY CLUB	HOBSON TO RYAN	1.00	100%
B-34	SA	COUNTRY CLUB	RYAN TO HICKORY CREEK	0.66	50%
B-35	PA	FORT WORTH	COUNTRY CLUB TO VINTAGE	1.32	100%
B-36	PA	FORT WORTH	VINTAGE TO BONNIE BRAE	1.07	100%
B-37	PA	FORT WORTH	BONNIE BRAE TO BRUSH CREEK	0.24	100%
B-38	PA	FORT WORTH	BRUSH CREEK TO CRAWFORD	1.11	100%
B-39	Completed	JOHN PAINE	JOHNSON TO ATHENS	0.42	100%
B-40	SA	JOHN PAINE	VINTAGE TO 1045' S OF VINTAGE	0.20	100%
B-41	C	PARVIN-ROSELAWN	PARVIN TO ROSELAWN	0.52	100%
B-42	PA (1/3)	TEASLEY	IH 35E TO LONDONDERRY	0.25	100%
B-43	PA (1/3)	TEASLEY	LONDONDERRY TO HOBSON	0.97	100%
B-44	PA (1/3)	TEASLEY	LILLIAN B MILLER TO PENNSYLVANIA	0.36	100%
B-45	PA (1/3)	TEASLEY	PENNSYLVANIA TO HOBSON	0.21	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
C-1	PA	BARTHOLD	MASCH BRANCH TO 5200' W OF IH 35	0.98	50%
C-2	SA	BOBCAT	FM 2164 TO IH-35	2.75	100%
C-3	SA	FM 1173	IH 35 TO 4605' W OF IH 35	0.87	100%
C-4	SA	FM 1173	4605' W OF IH 35 TO LOVERS	0.41	50%
C-5	SA	FM 2164-IH 35	FM 2164 TO IH 35	2.73	100%
C-6	PA	GANZER	FM 2164 TO GANZER	2.40	100%
C-7	PA	GANZER	2900' E OF IH 35 TO IH 35	0.55	100%
C-8	PA	GANZER	1620' E OF BARTHOLD TO BARTHOLD	0.31	50%
C-9	PA	GANZER	BARTHOLD TO RECTOR	0.49	50%
A-13,C-10	SA	JIM CHRISTAL	OLD SH 24 TO WESTERN	0.55	50%
A-14,C-11	SA	JIM CHRISTAL	WESTERN TO MASCH BRANCH	0.66	50%
A-15,C-12	SA	JIM CHRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%
A-16,C-13	SA	JIM CHRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%
C-14	SA	JIM CHRISTAL	945' W OF C WOLFE TO NAIL	0.59	50%
C-15	SA	JIM CHRISTAL	NAIL TO 2045' W of Nail	0.39	50%
C-16	C	MARSHALL	2845' N OF HAMPTON TO HAMPTON	0.54	100%
C-17	C	MARSHALL	HAMPTON TO US 380	0.59	100%
C-18	SA	MASCH BRANCH	MASCH BRANCH TO DARBY SMITH	0.65	100%
C-19	C	WESTWARD	NORTHWAY TO BONNIE BRAE	0.22	100%
C-20	SA (1/2)	RINEY	US 77 TO 2460' W OF US 77	0.47	100%
C-21	SA (1/2)	RINEY	2460' W OF US 77 TO BONNIE BRAE	0.19	100%
C-22	PA (1/3)	US 77	WINDSOR TO FM 2164	0.22	100%
C-23	PA (1/3)	US 77	RINEY TO WINDSOR	0.46	100%
C-24	PA (1/3)	US 77	RINEY TO RINEY	0.40	100%
C-25	PA (1/3)	US 77	BONNIE BRAE TO RINEY	0.75	100%
C-26	PA (1/3)	US 77	LOOP 288 TO BONNIE BRAE	0.33	100%
C-27	PA (1/3)	US 77	IH 35 TO LOOP 288	0.87	100%
C-28	C	MASCH BRANCH-NAIL	MASCH BRANCH TO 1295' W OF MASCH BRANCH	0.25	100%
C-29	C	MASCH BRANCH-NAIL	1050' E OF LOOP 288 TO 1550' W OF LOOP 288	0.49	100%

C-30	C	MASCH BRANCH-NAIL	1335' W OF THOMAS J EGAN TO 775' E OF C WOLFE	0.48	100%
C-31	C	MASCH BRANCH-NAIL	775' E OF C WOLFE TO 690' W OF C WOLFE	0.28	50%
C-32	C	MASCH BRANCH-NAIL	690' W OF C WOLFE TO NAIL	0.58	100%
C-33	SA	WESTGATE	WESTGATE TO 1460' E OF IH-35	0.18	100%
C-34	SA	WINDSOR	US 77 TO HINKLE	0.46	100%
C-35	SA (1/2)	WINDSOR	HINKLE TO BONNIE BRAE	0.99	100%
C-36	SA (1/2)	WINDSOR	WESTGATE TO 145' W OF CLARENDON	0.10	100%
C-37	SA (1/2)	WINDSOR	220' W OF WINDSOR FARMS TO IH 35	0.17	100%
C-38	SA	WINDSOR	IH 35 TO MASCH BRANCH	1.24	100%
C-39	SA	BARTHOLD	GANZER TO 2600' S OF GANZER	0.49	100%
C-40	PA	BONNIE BRAE	MILAM TO LOOP 288	3.13	100%
C-41	SA	BONNIE BRAE	LOOP 288 TO US 77	0.24	100%
C-42	SA	BONNIE BRAE	US 77 TO RINEY	0.38	100%
C-43	SA	BONNIE BRAE	RINEY TO WINDSOR	0.66	100%
C-44	SA	BONNIE BRAE	WINDSOR TO US 380	0.68	100%
C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%
C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%
C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%
C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%
C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%
C-50,E-34	SA	BONNIE BRAE	PRAIRIE TO IH 35E	0.16	50%
C-51	PA	C WOLFE	US 380 TO WESTERN-NAIL	0.51	100%
C-52	C	FALLMEADOW	MEADOWLEDGE TO GARDENVIEW	0.17	100%
C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%
C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%
C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%
C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%
C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%
C-58	SA	LOVERS	FM 1173 TO MASCH BRANCH	0.78	100%
C-59	SA	LOVERS	1085' N OF MASCH BRANCH TO MASCH BRANCH	0.21	100%
C-60	SA	LOVERS LN CONNECTOR	LOVERS TO LOOP 288	0.06	100%
C-61	SA	LOVERS LN CONNECTOR	LOOP 288 TO 1085' N OF MASCH BRANCH	0.08	100%
C-62	SA	MASCH BRANCH	1295' S OF FM 1173 TO JACKSON	0.79	50%
C-63	SA	MASCH BRANCH	LOVERS TO US 380	0.72	100%
C-64	SA	MASCH BRANCH	US 380 TO JIM CHRISTAL	0.78	100%
C-65	SA	MILAM-LOOP 288	MILAM TO LOOP 288	2.71	100%
C-66	SA	MILAM-US 77	MILAM TO GANZER	1.51	100%
C-67	SA	MILAM-US 77	GANZER TO LONG	0.73	100%
C-68	SA	MILAM-US 77	LONG TO US 77	0.53	100%
C-69	C	NICOSIA	LOOP 288 TO BEALL	0.12	100%
C-70	SA	THOMAS J EGAN	US 380 TO JIM CHRISTAL	0.76	100%
C-71	PA	WESTERN	US 380 TO JIM CHRISTAL	0.80	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
D-1	SA	BOBCAT	560' W OF FM 2164 TO FM 2164	0.11	50%
D-2	C	FISHTRAP	MINGO TO GEESLING	0.36	50%
D-3	PA	GANZER	15,500' E OF SHERMAN TO 4600' W OF SHERMAN	3.41	100%
D-4	SA	GRIBBLE SPRINGS	INDIAN WELLS TO 3015' W OF INDIAN WELLS	0.57	50%
D-5	SA	HARTLEE FIELD	4220' E OF COOPER CREEK TO COOPER CREEK	0.80	50%
D-6	SA	HARTLEE FIELD	COOPER CREEK TO 5170' W OF COOPER CREEK	0.98	50%
D-7	C	HARTLEE FIELD	600' E OF SHERMAN TO SHERMAN	0.11	50%
D-8	SA	HARTLEE FLD-FM 2164	HARTLEE FIELD TO SHERMAN	0.43	100%
D-9	SA	HARTLEE FLD-FM 2164	SHERMAN TO 3500' W OF SHERMAN	0.66	100%
D-10	SA	HARTLEE FLD-FM 2164	STUART TO 1485' W OF STUART	0.28	50%
D-11	SA	HARTLEE FLD-FM 2164	475' W OF FM 2164 TO FM 2164	0.09	100%
D-12	C	LONG	510' W OF FM 2164 TO FM 2164	0.10	100%
D-13	SA	MINGO	E CITY LIMITS TO COOPER CREEK	0.09	100%
D-14	SA	MINGO	COOPER CREEK TO LOOP 288	0.44	100%
D-15	SA	MINGO	LOOP 288 TO US 380	0.43	100%
D-16	C	KINGS ROW	SILVER DOME TO LOOP 288	0.50	100%
D-17	C	SILVER DOME	COOPER CREEK TO FARRIS RD	0.41	50%
D-18	C	COLLINS	HARTLEE FIELD TO 2730' S OF HARTLEE FIELD	0.84	50%
D-19	SA	COOPER CREEK	SHERMAN TO HARTLEE FIELD	1.91	100%

D-20	SA	COOPER CREEK	SILVER DOME TO MINGO	0.83	50%
D-21	PA	COOPER CREEK	MINGO TO US 380	0.32	100%
C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%
D-23	PA	GREEN VALLEY	2395' S OF FM 2153 TO 2935' N OF SHEPARD	1.47	100%
D-24	SA	GREEN VALLEY	WARSCHUN TO SHERMAN	0.40	100%
D-25	SA	INDIAN WELLS	1615' S OF FM 2153 TO 4930' N OF GRIBBLE SPRINGS	0.73	100%
D-26	SA	INDIAN WELLS	4930' N OF GRIBBLE SPRINGS TO 2905' N OF GRIBBLE	0.38	50%
D-27	SA	INDIAN WELLS	2905' N OF GRIBBLE SPRINGS TO GRIBBLE SPRINGS	0.55	50%
C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%
C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%
C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%
C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%
D-32	SA	SHERMAN	LOOP 288 TO HERCULES	0.31	100%
D-33	SA	SHERMAN	HERCULES TO KINGS	0.36	100%
D-34	SA	SHERMAN	KINGS TO WINDSOR	0.38	100%
D-35	SA	SHERMAN	WINDSOR TO WILSONWOOD	0.19	100%
D-36	SA	SHERMAN	WILSONWOOD TO CORONADO	0.22	100%
D-37	SA	SHERMAN	CORONADO TO GREENWOOD	0.31	100%
D-38	SA	SHERMAN	GREENWOOD TO BELL	0.16	100%
D-39	SA	SHERMAN	BELL TO LOCUST	0.32	100%
D-40	C	WINDSOR	LOOP 288 TO DOMINION	0.16	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
E-1	C	AUDRA	LOOP 288 TO 1185' W OF LOOP 288	0.22	100%
E-2	SA	BLAGG	LAKEVIEW TO GEESLING	0.71	100%
E-3	SA	BLAGG	GEESLING TO 2175' W OF GEESLING	0.41	100%
E-4	SA	BLAGG	235' E OF MAYHILL TO MAYHILL	0.04	50%
E-5	PA (1/3)	DALLAS	TEASLEY TO IH 35E	0.87	100%
E-6	C	DÜCHESS	TRAILHEAD TO WOODROW	0.76	100%
E-7	SA	FM 426	LANEY TO GRISSOM	0.57	100%
E-8	Completed	MCKINNEY	GRISSOM TO LOOP 288	1.65	100%
E-9	SA	MCKINNEY	LOOP 288 TO CARDINAL	0.13	100%
E-10	SA	MCKINNEY	CARDINAL TO MOCKINGBIRD	0.22	100%
E-11	SA	MCKINNEY	MOCKINGBIRD TO MACK	0.61	100%
E-12	SA	MCKINNEY	MACK TO AUDRA	0.29	100%
E-13	SA	MILLS	TRINITY TO MAYHILL	1.40	100%
E-14	SA	MILLS	LAKEVIEW TO MAYHILL	0.41	100%
E-15	SA	MINGO	US 380 TO OLD NORTH	0.14	100%
E-16	SA	MINGO	OLD NORTH TO NOTTINGHAM	0.48	100%
E-17	SA	MINGO	NOTTINGHAM TO PERTAIN	0.56	100%
E-18	SA	MINGO	PERTAIN TO RUDELL	0.18	100%
E-19	SA	MINGO	RUDELL TO WILLIS	0.11	100%
E-20	SA	MINGO	WILLIS TO WITHERS	0.44	100%
E-21	SA	MINGO	WITHERS TO PAISLEY	0.04	100%
E-22	SA	MINGO	PAISLEY TO BELL	0.19	100%
E-23	SA (1/2)	MORSE	MAYHILL TO KIMBERLY	0.22	100%
E-24	SA	SHADY OAKS	WOODROW TO TEASLEY	0.58	100%
E-25	SA	SPENCER	MAYHILL TO LOOP 288	0.44	100%
E-26	C	TREATMENT PLANT	MCKINNEY TO POST OAK	0.63	100%
E-27	SA	TREATMENT PLANT	POST OAK TO 1325' W OF POST OAK	0.25	100%
E-28	SA	TREATMENT PLANT	1325' W OF POST OAK TO MAYHILL	0.75	100%
C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%
C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%
C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%
C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%
C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%
C-50,E-34	SA	BONNIE BRAE	PRAIRIE TO IH 35E	0.16	50%
E-35	C	CARDINAL	ORIOLE TO MCKINNEY	0.42	100%
E-36	PA	GEESLING	US 380 TO BLAGG	0.46	100%

E-37	PA	GEESLING	US 380 TO BLAGG	1.02	100%
E-38	PA (1/3)	LAKEVIEW	POST OAK TO SHADY SHORES	0.26	100%
E-39	PA (1/3)	MAYHILL	US 380 TO PROMINENCE	0.44	100%
E-40	PA (1/3)	MAYHILL	PROMINENCE TO 770' N OF RUSSELL NEWMAN	0.39	100%
E-41	PA (1/3)	MAYHILL	770' N OF RUSSELL NEWMAN TO RUSSELL NEWMAN	0.15	50%
E-42	PA (1/3)	MAYHILL	RUSSELL NEWMAN TO 460' S OF RUSSELL NEWMAN	0.09	50%
E-43	PA (1/3)	MAYHILL	460' S OF RUSSELL NEWMAN TO MILLS	0.20	100%
E-44	PA (1/3)	MAYHILL	MILLS TO MCKINNEY	0.37	100%
E-45	PA (1/3)	MAYHILL	MCKINNEY TO MORSE	0.39	100%
E-46	PA (1/3)	MAYHILL	MORSE TO SPENCER	0.67	100%
E-47	PA (1/3)	MAYHILL	SPENCER TO EDWARDS	0.60	100%
E-48	PA (1/3)	MAYHILL	2725' N OF COLORADO TO COLORADO	0.52	100%
E-49	PA (1/3)	MAYHILL	COLORADO TO IH 35E	0.44	100%
E-50	PA	MAYHILL CONNECTOR	MAYHILL TO QUAILCREEK	0.13	100%
E-51	C	MOCKINGBIRD	MCKINNEY TO 625' N OF DUCHESS	0.16	100%
E-52	SA	MOCKINGBIRD	DUCHESSE TO SHADY OAKS	0.41	100%
E-53	SA	MOCKINGBIRD	SHADY OAKS TO SPENCER	0.53	100%
E-54	PA	POST OAK	MILLS TO SPENCER	1.30	100%
E-55	PA	POST OAK	TREATMENT PLANT TO EDWARDS	1.27	100%
E-56	PA	POST OAK	EDWARDS TO POCKRUS PAGE	0.51	100%
E-57	C	SWISHER	EDWARDS TO POCKRUS PAGE	0.50	100%
E-58	PA (1/3)	TEASLEY	DALLAS TO IH 35E	0.35	100%
E-59	C	N STAR	SPENCER TO ROY	0.32	100%
E-60	C	ROY	MAYHILL TO N STAR	0.21	100%

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

Sec. 25-260. Roadway Impact Fees Adopted.

The City hereby adopts the Maximum Assessable Roadway Impact Fee as shown in Schedule 1 below, and the Roadway Impact Fee Collection Rate as shown in Schedule 2 below. Each non-exempt New Development shall be assessed the Maximum Assessable Roadway Impact Fee and shall pay the Roadway Impact Fee Collection Rate, minus any applicable Credits, as described herein. Except as herein otherwise provided, the Assessment and collection of a Roadway Impact Fee shall be additional and supplemental to, and not in substitution of, any other tax, fee, charge or assessment which is lawfully imposed on and due against the property.

SCHEDULE 1

MAXIMUM ASSESSABLE ROADWAY IMPACT FEE PER SERVICE UNIT

Exhibit B - Schedule 1

Service Area	Maximum Assessable Roadway Impact Fee Per Service Unit
Service Area A	\$ 2,496
Service Area B	\$ 3,742
Service Area C	\$ 4,695
Service Area D	\$ 5,265
Service Area E	\$ 3,722

SCHEDULE 2
ROADWAY IMPACT FEE COLLECTION RATE PER SERVICE UNIT
Exhibit B - Schedule 2 Roadway Impact Fee Collection Rate Per Service Unit

Assessment Date	Properties platted on or before 12/31/2024		Properties platted on or after 1/1/2025	
Service Areas	Land Use Type		Land Use Type	
	Residential	Non-Residential	Residential	Non-Residential
A	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
B	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
C	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
D	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
E	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40

Sec. 25-261. Roadway Impact Fee Required.

No Final Plat for New Development shall be released for filing with Denton County without Assessment of an Impact Fee pursuant to this article; or, if no plat is required, then no building permit shall be issued until such Assessment is made and paid in accordance with the Assessment and collection procedures indicated herein.

Sec. 25-262. Assessment of Impact Fees.

Assessment of the Impact Fee for any New Development shall be made as follows:

- (a) For a New Development which has received final plat approval before the effective date of this article, Assessment of Impact Fees shall occur on the effective date of this article, and shall be the amount of the Maximum Assessable Roadway Impact Fee per Service Unit as set forth in Schedule 1 of Section 25-260. However, the Roadway Impact Fee Collection Rate shall not be collected on any Service Unit which has received final plat approval before the effective date of this article and for which a valid building permit is issued within one year after the date of adoption of this article.
- (b) For land which is not required to be platted at the time of application for a building permit pursuant to the City's subdivision regulations prior to development, Assessment of Roadway Impact Fees shall occur at the time application is made for the building permit, and shall be the amount of the Maximum Assessable Roadway Impact Fee per Service Unit as set forth in Schedule 1 of Section 25-260 then in effect.
- (c) For New Development which is submitted for approval pursuant to the City's subdivision regulations or which is proposed for replatting on or after the effective date of this Article, Assessment of Impact Fees shall be at the time of final plat or replat approval, and shall be the amount of the Maximum Assessable Roadway Impact Fee per Service Unit as set forth in Schedule 1 of Section 25-260 then in effect.
- (d) Following Assessment of the Impact Fee pursuant to this Section, the amount of the Impact Fee Assessment per Service Unit for that 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 other development application that results in approval of additional Service Units, in which case a new Assessment shall occur at the Schedule 1 of Section 25-260 rate then in effect for such additional Service Units.

- (e) The Director of Engineering or his or her designee shall compute the Roadway Impact Fees for New Development by first determining whether the New Development is eligible for Credits calculated in accordance with this article, which would further reduce Impact Fees otherwise due in whole or in part. The total amount of Impact Fees for the New Development shall be attached to the development application as a condition of approval.
- (f) Approval of an amending plat pursuant to Tex. Loc. Gov't Code, Section 212.016 and the City's subdivision regulations is not subject to reassessment for an Impact Fee.
- (g) For the following uses in table provided in Section 258(h) of this article, Land Use Equivalency Table Land of the Roadway Impact Fee Study, the maximum Service Unit charge will be capped at 1.92 vehicle miles per development unit: General Light Industrial, General Heavy Industrial, and Industrial Park.

Sec. 25-263. Exemptions to Impact Fees.

The following are exempt from the applicability of this article:

- (a) Pursuant to Tex. Loc. Gov't Code Section 395.022, as amended, a public school district is not required to pay Roadway Impact Fees imposed under this article unless the board of trustees of the district consents to the payment of the fees by entering a contract with the City imposing the fees.
- (b) A change in use that generates less than 10 times the number of Service Units attributable to the immediately preceding use is exempt from the payment of Impact Fees.

Sec. 25-264. Collection of Impact Fees.

Roadway Impact Fees shall be collected in the following manner; however, the City has the ability to require construction greater than the Roadway Impact Fee Collection Rate for amounts up to the Maximum Assessable Roadway Impact Fee:

- (a) The Roadway Impact Fee Collection Rate shall be paid at the time the City issues a building permit for a New Development.
- (b) For properties requiring a plat, the Roadway Impact Fee Collection Rate to be paid and collected per Service Unit for New Development shall be the amount listed in Schedule 2 of Section 25-260 in effect at the time of final plat approval for up to a one-year period following such final plat approval. After the one-year period has expired, the Roadway Impact Fee Collection Rate shall be paid according to the current amount listed in Schedule 2 of Section 25-260 then in effect.
- (c) For properties that do not require the filing of a plat, the Roadway Impact Fee Collection Rate shall be paid and collected per Service Unit for New Development in the amount listed in Schedule 2 of Section 25-260 in effect at the time that the building permit is filed.
- (d) If the building permit for which an Impact Fee has been paid has expired, and a new application is thereafter filed, the Roadway Impact Fee Collection Rate shall be computed

using Schedule 2 of Section 25-260 in effect at the time of the new application, with Credits for previous payment of Impact Fees being applied against the new Impact Fees due.

- (e) Whenever the property owner proposes to increase the number of Service Units for a development, the additional Impact Fees collected for such new Service Units shall be determined by using Schedule 2 of Section 25-260 in effect at the time of the request, and such additional fee shall be collected at the times prescribed by this section.
- (f) The City may vary the rates of collection or amount of Roadway Impact Fees per Service Unit among or within Service Areas in order to reasonably further goals and policies affecting the adequacy of roadway facilities serving New Development, or other regulatory purposes affecting the type, quality, intensity, economic development potential or development timing of land uses within such Service Areas.
- (g) The Maximum Assessable Roadway Impact Fee per Service Unit for Roadway Facilities, as may be amended from time to time, hereby is declared to be an approximate and appropriate measure of the impacts generated by a new unit of development on the City's Roadway System. To the extent that the Roadway Impact Fee Collection Rate charged against a New Development, as may be amended from time to time, is less than the Maximum Assessable Roadway Impact Fee per Service Unit assessed, such difference hereby is declared to be founded on policies unrelated to measurement of the impacts of the New Development on the City's roadway system. The Maximum Assessable Roadway Impact Fee may be used in evaluating any claim by a property owner that the dedication or construction of a Capital Improvement within a Service Area imposed as a condition of development approval pursuant to the City's subdivision or development regulations is disproportionate to the impacts created by the development on the City's Roadway System.

Sec. 25-265. Credits against Impact Fees.

The City may credit the contribution of land, improvements or funding for construction of any System Facility that is required or agreed to by the City, pursuant to rules established in this section or pursuant to administrative guidelines promulgated by the City with the following limitations:

- (a) The Credit shall be associated with the plat or other detailed plan of development for the property that is to be served by the Roadway Facility.
- (b) Master Planned Community projects, including subdivisions containing multiple phases, and whether approved before or after the effective date of these Impact Fee regulations, may apply for Credits against Roadway Impact Fees for the entire project based upon contributions of land, improvements or funds toward construction of system facilities, or other Roadway Capital Improvements supplying excess capacity. Credits shall be determined by comparing costs of Roadway Capital Improvements supplied by the project with the costs of Roadway Capital Improvements to be utilized by development within the project, utilizing a methodology approved by the City. The Credit determination shall be incorporated within an agreement for Credits, in accordance with this Article. The Roadway requirements of an agreement for Credits shall not be less than what is required by the Denton Development Code.

- (c) The City's current policies and regulations shall apply to determine a New Development's obligations to construct adjacent System Facilities. The obligation to construct, however, shall not exceed the Maximum Assessable Roadway Impact Fee assessed against the New Development under Schedule 1 of Section 25-260 of this article. Construction required under such policies and regulations shall be a Credit against the amount of Impact Fees otherwise due. If the costs of constructing a System Facility in accordance with the current City policies and regulations are greater than the amount of the Roadway Impact Fee Collection Rate due, the amount of the Credit due shall be deemed to be 100% of the assessed Impact Fees and no Impact Fee shall be collected thereafter for the development, unless the number of Service Units is subsequently increased.
- (d) All Credits against Roadway Impact Fees shall be based upon standards promulgated by the City, which may be adopted as administrative guidelines, including the following standards:
 - (1) No Credit shall be given for the dedication or construction of Site-related Facilities.
 - (2) No Credit shall be given for a Roadway Facility which is not identified within the Roadway Impact Fee Capital Improvements Plan.
 - (3) In no event will the City grant a Credit when no Roadway Impact Fees can be collected pursuant to this Article or for any amount exceeding the Roadway Impact Fee Collection Rate due for the development, unless expressly agreed to by the City in writing.
 - (4) The City may participate in the costs of a System Facility to be dedicated to the City, including costs that exceed the amount of the Impact Fees due for the development, in accordance with policies and rules established by the City. The amount of any Credit for construction of a System Facility shall be reduced by the amount of any participation funds received from the City.
 - (5) Where funds for Roadway Facilities have been escrowed under an agreement that was executed with the City prior to the effective date of this article, the following rules apply:
 - i. Funds expended under the agreement for Roadway Facilities shall first be credited against the amount of Roadway Impact Fees that would have been due under Schedule 2 of Section 25-260 of this article for those units of development for which building permits already have been issued;
 - ii. Any remaining funds shall be credited against Impact Fees due for the development under Schedule 2 of Section 25-260 of this article at the time building permits are issued.
- (e) Credits for construction of Capital Improvements shall be deemed created when the Capital Improvements are completed and the City has accepted the facility, or in the case of Capital Improvements constructed and accepted prior to the Effective Date of this Article, on such effective date. Credits created after the Effective Date of this Article shall expire ten (10) years from the date the Credit was created. Credits arising prior to such Effective Date shall expire ten (10) years from such effective date. Upon application by the property owner, the City may agree to extend the expiration date for the Credit on mutually agreeable terms.

- (f) Unless an agreement for Credits, as described herein, is executed providing for a different manner of applying Credits against Roadway Impact Fees due, a Credit associated with a plat shall be applied at the time of application for the first building permit and, at each building permit application thereafter, to reduce Impact Fees due until the Credit is exhausted.
- (g) An owner of a New Development who has constructed or financed a Roadway Capital Improvement or Roadway Facility expansion designated in the Roadway Impact Fee Capital Improvements Plans, or other Roadway Capital Improvement that supplies excess capacity, as required or authorized by the City, shall enter into an agreement with the City to provide for Credits against Roadway Impact Fees due for the development in accordance with this paragraph. The agreement shall identify the basis for and the method for computing and the amount of the Credit due and any reduction in Credits attributable to consumption of road capacity by developed lots or tracts served by the Roadway Capital Improvements. For multi-phased projects, the City may require that total Credits be proportionally allocated among the phases. If authorized by the City, the agreement also may provide for allocation of Credits among New Developments within the project, and provisions for the timing and collection of Impact Fees.

Section 25-266. Use of Proceeds of Impact Fee Accounts.

The Roadway Impact Fees collected for each Service Area pursuant to these regulations may be used to finance or to recoup the costs of any roadway improvements or facility expansions identified in the Roadway Impact Fee Capital Improvements Plan for the Service Area, including but not limited to the construction contract price, surveying and engineering fees, and land acquisition costs (including land purchases, court awards and costs, attorney's fees, and expert witness fees). Roadway Impact Fees may also 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 roadway improvements or facility expansions. Roadway Impact Fees also may be used to pay fees actually contracted to be paid to an independent qualified engineer or financial consultant for preparation of or updating the Roadway Impact Fee Capital Improvements Plan. Impact Fees collected may not be used to pay for the expenses prohibited by TLGC Chapter 395 .

Section 25-267. Establishment of Accounts.

The City's Finance Department shall establish an account to which interest is allocated for each Service Area for which a Roadway Impact Fee is imposed pursuant to this article. Each Impact Fee collected within the Service Area shall be deposited in such account with the following regulations:

- (a) Interest earned on the account into which the Impact Fees are deposited shall be considered funds of the account and shall be used solely for the purposes authorized in this article and TLGC Chapter 395 .

- (b) The City's Finance Department shall establish adequate financial and accounting controls to ensure that Roadway Impact Fees disbursed from the account are utilized solely for the purposes authorized in this Article and TLGC Chapter 395. Disbursement of funds shall be authorized by the City at such times as are reasonably necessary to carry out the purposes and intent of this Article; provided, however, that any Roadway Impact Fee paid shall be expended within a reasonable period of time, but not to exceed ten (10) years from the date the fee is deposited into the account.
- (c) The City's Finance Department shall maintain and keep financial records for Roadway Impact Fees, which shall show the source and disbursement of all fees collected in or expended from each Service Area. The records of the account into which Impact Fees are deposited shall be open for public inspection and copying during ordinary business hours. The City may establish a fee for copying services.

Sec. 25-268. Impact Fee as Additional and Supplemental Regulation.

Roadway Impact Fees established by these regulations are additional and supplemental to, and not in substitution of, any other requirements imposed by the City on the development of land or the issuance of building permits or certificates of occupancy. Such Impact Fees are intended to be consistent with and to further the policies of the Denton Plan, the Capital Improvements Plan, the zoning ordinances, subdivision regulations and other City policies, ordinances and resolutions by which the City seeks to ensure the provision of adequate public facilities in conjunction with the development of land. This article shall not affect, in any manner, the permissible use of property, density of development, design, and improvement standards and requirements, or any other aspect of the development of land or provision of public improvements subject to the zoning and subdivision regulations or other regulations and policies of the City, which shall be operative and remain in full force and effect without limitation with respect to all such development.

Sec. 25-269. Updates to Plans and Revision of Fees.

The City shall update its Land Use Assumptions and Capital Improvements Plan and make any revision of fees as indicated below:

- (a) The City shall update its Land Use Assumptions and Roadway Impact Fee Capital Improvements Plans and shall recalculate the Roadway Impact Fees based thereon in accordance with the procedures set forth in Texas Local Gov't Code, Ch. 395, or in any successor statute. However, this does not preclude the City from reviewing its Land Use Assumptions, Roadway Impact Fee Capital Improvements Plans, Roadway Impact Fees, and other factors such as market conditions more frequently than provided for herein to determine whether the Land Use Assumptions and Roadway Capital Improvements Plans should be updated and the Roadway Impact Fees recalculated accordingly, utilizing statutory update procedures.
- (b) Schedule 2 of 25-260 of this article may be amended without revising the Land Use Assumptions and Roadway Capital Improvements Plans at any time prior to the update

provided for in this Section, provided that the Roadway Impact Fee Collection Rate to be collected under Schedule 2 of 25-260 do not exceed the Maximum Assessable Roadway Impact Fees assessed under Schedule 1 of 25-260 of this article.

- (c) If, at the time an update is required as indicated herein and the City Council determines that no change to the Land Use Assumptions, Roadway Impact Fee Capital Improvements Plan or Roadway Impact Fees are needed, it may dispense with such update by following the procedures in Texas Local Gov't Code, Section 395.0575 or its successor statute.
- (d) The City may amend any other provisions of this Article in accordance with procedures for ordinance amendments contained in the City's Charter or State law.

Sec. 25-270. Refunds

- (a) Upon application, any Roadway Impact Fee or portion thereof collected pursuant to this article, which has not been expended within the Service Area within ten (10) years from the date of payment, shall be refunded to the record owner of the property for which the Impact Fee was paid or, if the Impact 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 Sec. 302.002, Tex. Fin. Code, or its successor statute. The application for refund pursuant to this section shall be submitted within sixty (60) days after the expiration of the ten-year period for expenditure of the Impact Fee. An Impact Fee shall be considered expended on a first-in, first out basis.
- (b) An Impact Fee collected pursuant to this article shall also be considered expended if the total expenditures for Capital Improvements or Roadway Facility expansions authorized within the Service Area within ten (10) years following the date of payment exceeds the total fees collected within the Service Area for such improvements or expansions during such period.
- (c) If a refund is due pursuant to Subsections (a) or (b), the City shall divide the difference between the amount of expenditures and the amount of the Impact Fees collected by the total number of Service Units assumed within the 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 development for which the fee was paid, and interest due shall be calculated upon that amount.

Sec. 25-271. Rebates.

If the building permit for a New Development for which a Roadway Impact Fee has been paid has expired, and a modified or new application has not been filed within six (6) months of such expiration, the City shall, upon written application, rebate the amount of the Impact Fee to the record owner of the property for which the Impact Fee was paid. If no application for rebate pursuant to this subsection has been filed within this period, no rebate shall become due.

Sec. 25-272. Appeals.

The property owner or applicant for New Development may appeal the applicability or amount of the Roadway Impact Fee or the availability or amount of Credits or Refunds to the City Council using the following procedure:

- (a) The burden of proof shall be on the applicant to demonstrate that relief should be granted by the City.
- (b) The applicant must file a written notice of appeal with the City Manager or designee within thirty (30) days following the decision being appealed. Along with the notice of appeal, an applicant may request an alternative Service Unit computation for land uses not contained with the latest edition of the ITE Trip Generation Manual by submitting a trip generation study demonstrating the appropriateness of the trip generation rates for the proposed development. An applicant may also include an alternative Service Unit calculation.
- (c) The City Manager or designee ("Manager") may (1) resolve the appeal, if the applicant agrees with the Manager's decision, or (2) if the applicant does not agree, refer the matter to the City Council for decision, along with the Manager's recommendation and any trip generation study provided, if any.
- (d) If City Council review is requested by the applicant after receiving the Manager's decision, the City Secretary shall schedule a public hearing at which the applicant may present testimony and evidence before the City Council. The City Council shall act on the appeal within 60 days of receipt of the notice of appeal by the City, unless otherwise agreed by the Applicant.
- (e) If the notice of appeal is accompanied by a payment or other security satisfactory to the City Attorney in an amount equal to the original determination of the Roadway Impact Fee due, the City shall process and may issue a building permit if other requirements are met while the appeal is pending.
- (f) If the City Council allows for a different amount of the Roadway Impact Fee due for a New Development under this section to be paid, it may cause to be appropriated from other City funds the amount of the reduction in the Impact Fee to the account for the Service Area in which the property is located.

Sec 25-273. Severability.

If any provision of this Article or the application of any provision to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the Article which can be given effect without the invalid provision or application, and to this end the provisions of this Article are declared to be severable.

Sec 25-274. Conflicts.

This Article shall be cumulative of all provisions of ordinances and of the Code of Ordinances for the City of Denton, Texas, as amended, except where provisions of this article are in direct conflict with the provisions of such ordinances or such Code, in which event the conflicting provisions of such ordinances and Code are hereby repealed.

25-275. Effective Date.

This Article shall take effect on January 1, 2025 or immediately from and after its passage and publication in accordance with the provisions of the Texas Local Government Code, whichever is later, and it is accordingly so ordained.

SECTION 9. This Ordinance shall take effect on January 1, 2025, and it is accordingly so ordained.

The motion to approve this ordinance was made by Jill Jester and seconded by Joe Holland, the ordinance was passed and approved by the following vote [6 - 6]:

	Aye	Nay	Abstain	Absent
Mayor Gerard Hudspeth:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
Vicki Byrd, District 1:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
Brian Beck, District 2:	<u> </u>	<u> </u>	<u> </u>	<u>✓</u>
Paul Meltzer, District 3:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
Joe Holland, District 4:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
Brandon Chase McGee, At Large Place 5:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>
Jill Jester, At Large Place 6:	<u>✓</u>	<u> </u>	<u> </u>	<u> </u>

PASSED AND APPROVED this the 16th day of July, 2024.

Gerard Hudspeth
GERARD HUDSPETH, MAYOR

ATTEST:
LAUREN THODEN, CITY SECRETARY

BY: Lauren Thoden

APPROVED AS TO LEGAL FORM:
MACK REINWAND, CITY ATTORNEY

BY: Mack Reinwand



EXHIBIT A

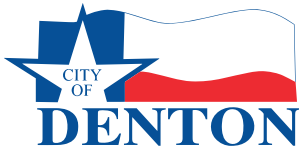
(ROADWAY IMPACT FEE STUDY)

CITY OF DENTON, TEXAS

ROADWAY IMPACT FEE STUDY

May 2024

Prepared for

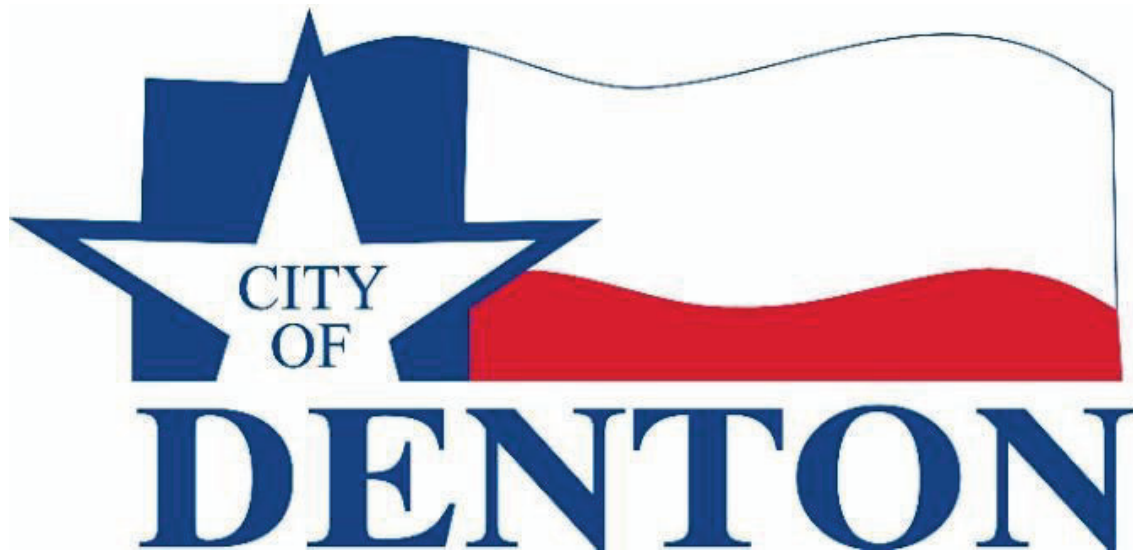


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TBPE Firm Registration
Number: F-928
Project Number: 067390001

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CITY OF DENTON, TEXAS ROADWAY IMPACT FEE STUDY



May
2024

Prepared for the City of Denton

Prepared by:

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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. They have been used to fund public water and wastewater improvements since 1998 and transportation improvements since 2016 in the City of Denton.

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 2022 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 Fee Basics

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

Impact Fee Study

The primary purpose of the 2022 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 collected is at the discretion of the Denton City Council, so long as it does not exceed the maximum assessable 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 six miles. In Denton, this restriction necessitated the creation of five separate Service Areas. A map of the Service Areas can be found on Page 6.

In defining the Service Area boundaries, the project team considered the corporate boundary, required size limit, adjacent land uses, 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 contained areas of uniform land use within the same Service Area boundary where possible.

Land Use Assumptions

The maximum Roadway 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 2022-2032.

In order to arrive at a reasonable projection of growth, all vacant parcels were inventoried. It was assumed that vacant parcels would develop according to the Future Land Use Plan specified in the Comprehensive Plan (Pg. 8). To project future development in the ten-year window, the known developing areas within the city were assumed to be fully developed by the year 2032. Research of historical building permits was performed to compare the projected growth of these known development areas against historical data.

Roadway Impact Fee Capital Improvement Plan (CIP)

The Roadway Impact Fee CIP is distinct and separate from the City's traditional Capital Improvements Plan. The Roadway Impact Fee CIP is simply the list of projects eligible for funding through impact fees. Only those capacity improvements included in the City's adopted Mobility Plan are included in the Roadway Impact Fee 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.

Only the projects listed in the Roadway Impact Fee CIP are eligible to utilize impact fee funds. In order to optimize future flexibility, all capacity improvement projects included in the Mobility Plan are included in the Roadway Impact Fee CIP and will be eligible to utilize impact fee funds. Only the costs associated with providing the additional capacity necessitated by 10-years of growth can be used to calculate the maximum impact fee.

In order to calculate the maximum impact fee, the total cost of the Roadway Impact Fee CIP at build-out was reduced to account for:

- The portion of new capacity that will address existing needs, and
- The portion of new capacity that will not be necessitated until beyond the 10-year growth window.

A ratio that compares 10 years' demand for capacity to the net supply of capacity (total new capacity in the Roadway Impact Fee CIP minus existing needs) can be calculated. This 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 cost of the Roadway Impact Fee CIP Attributable to Growth (i.e. recoverable portion of the Roadway Impact Fee CIP):

SERVICE AREA:	A	B	C	D	E
Recoverable Cost of Roadway Impact Fee CIP and Financing	\$99,742,506	\$61,268,086	\$147,114,364	\$61,257,141	\$89,881,134

Service Units

The impact fee law defines a service unit as follows: "Service Unit means a standardized measure of consumption attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years."

The 2022 Roadway Impact Fee Study defines a *service unit* as the number of vehicle-miles. Based on the City's 10-year growth projections the associated demand (consumption) values for each service area are as follows in terms of vehicle-miles:

SERVICE AREA:	A	B	C	D	E
Total Veh-Mi Demand Over Ten Years	39,968	16,374	31,332	11,634	24,148

Impact Fee Calculation

The maximum impact fee allowable in each of the five service areas is then calculated by dividing the Roadway Impact Fee CIP Attributable to Growth by the number of vehicle-miles in the corresponding Service Area in the above table. This calculation is performed for each service area individually; each service area has a stand-alone Roadway Impact Fee CIP and 10-year growth projection.

Below is the listing of the 2022 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

SERVICE AREA:	A	B	C	D	E
2022 Roadway Impact Fee Study Maximum Assessable Fee Per Vehicle-Mile	\$2,496	\$3,742	\$4,695	\$5,265	\$3,722

Chapter 395 Required Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvement 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 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 first public hearing on the Land Use Assumptions and Roadway Impact Fee CIP and a second public hearing on the Roadway Impact Fee Ordinance.

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

Collection and Use of Transportation 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.

I. INTRODUCTION

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

The City retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2022 Roadway Impact Fee Study. This report includes details of the Roadway Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the Roadway Impact Fee Capital Improvements Plan, and the Land Use Equivalency Table.

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

- 1) **Land Use Assumptions** (Pg. 3)
- 2) **Roadway Impact Fee Capital Improvements Plan (CIP)** (Pg. 9)

Information from these Land Use Assumptions and Roadway Impact Fee 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. 20)
- 2) **Roadway Impact Fee Calculation** (Pg. 36)
- 3) **Plan for Financing and the Ad Valorem Tax Credit** (Pg. 38)

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

- Service Areas (Pg. 20)
- Service Units (Pg. 20)
- Cost Per Service Unit (Pg. 22)
- Roadway Impact Fee CIP Costing Methodology (Pg. 22)
- Summary of Roadway Impact Fee CIP Costs (Pg. 25)
- Service Unit Calculation (Pg. 31)

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit (Pg. 36)
- Service Unit Demand Per Unit of Development (Pg. 43)

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 Roadway Impact Fee CIP. This plan, prepared by NewGen Strategies, and upon which we relied, details the maximum assessable impact fee per service unit the City of Denton 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 political subdivision. 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.

Information from the following sources was compiled to complete the land use assumptions:

- Denton Plan 2040 (City of Denton Comprehensive Plan)
- Denton County Appraisal District (DCAD)
- North Central Texas Council of Governments (NCTCOG)
- City of Denton staff
- Denton 2022 Mobility Plan

The Land Use Assumptions include 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 Denton into service areas for transportation facilities.
- **Residential and Employment**– Data on residential and employment growth within the service area over the next ten years (2022 – 2032).
- **Land Use Assumptions Summary** – A synopsis of the land use assumptions.

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

Residential: Number of residential 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 Denton. 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. 45).

B. Land Use Assumptions Methodology

The residential and employment 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;
- Current zoning plans;
- Future Land Use Plan (based on Denton 2040 Comprehensive Plan);
- Growth trends;
- Location of vacant land;

- Physical restrictions (i.e. flood plains, railroads); and
- Physical development capacity of Denton.

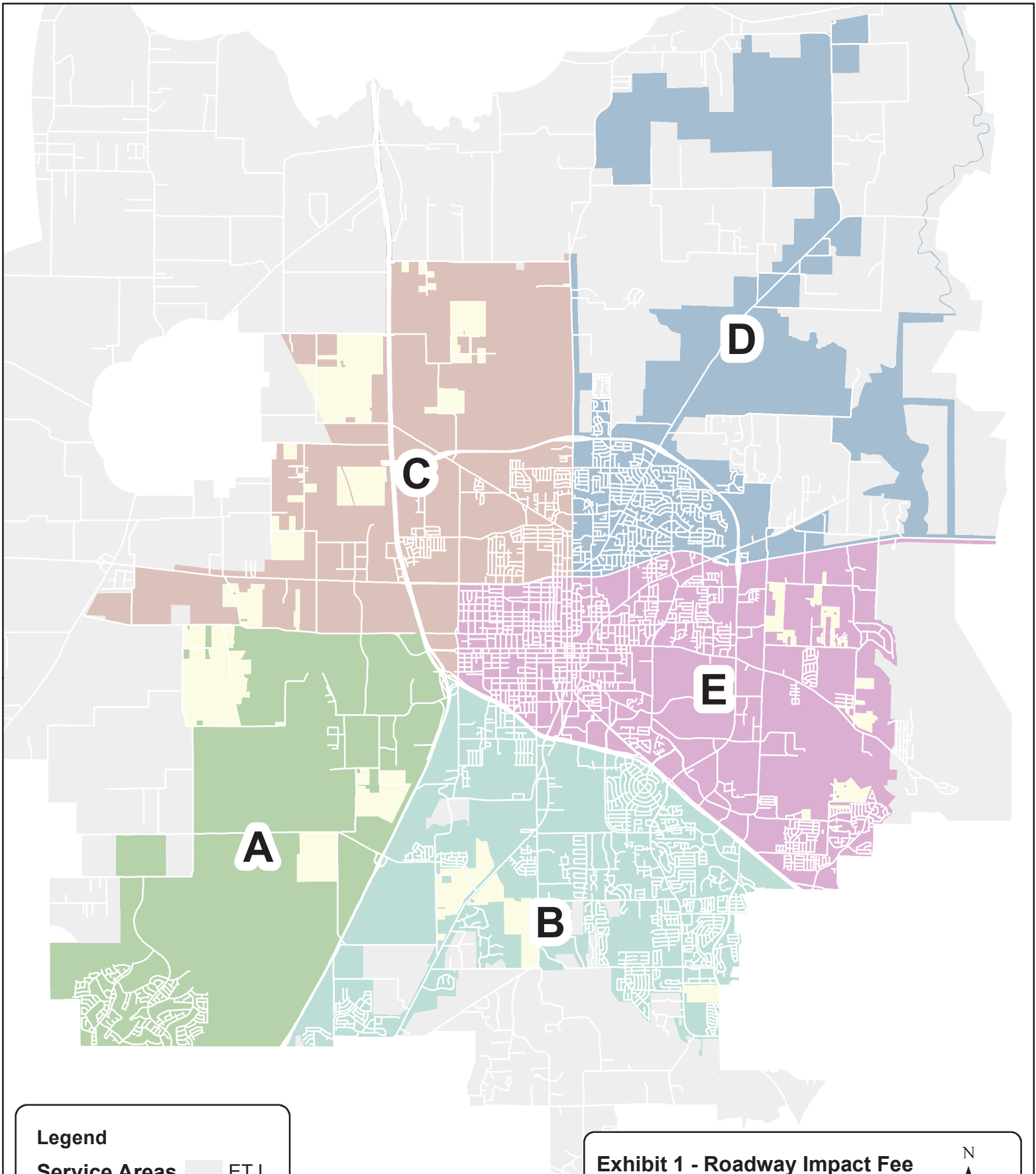
Existing residential and employment estimates were obtained using Denton Central Appraisal District (DCAD) parcel data and an aerial survey of existing development.

For the remaining undeveloped areas, assumptions based upon the City's Future Land Use Plan were used to estimate the ultimate buildout of residential and employment development. To project future development in the ten-year window, the known developing areas within the city were assumed to be fully developed by the year 2032.

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 Denton is currently divided into five (5) service areas, each based upon the six (6) mile limit, as required in Chapter 395 (explained on Pg. 20). For roadway facilities, the service areas as required by state law are limited to areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) and non-annexation areas (NAAs) are excluded from this study.

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



Legend

Service Areas

- | | | | |
|--|---|---|-----|
|  | A |  | ETJ |
|  | B |  | NAA |
|  | C | | |
|  | D | | |
|  | E | | |

Exhibit 1 - Roadway Impact Fee Service Areas 2022 Roadway Impact Fee Study

0 0.5 1
Miles

Kimley»Horn



D. Residential and Employment

Residential and Employment estimates for the base year (2022) were performed based upon a survey of the existing land uses on DCAD parcel data, and aerial verification. Build-out projections were prepared by combining the existing land uses within the service area with reasonable density assumptions for undeveloped land based upon the Denton 2040 Comprehensive Plan - Future Land Use Plan. Ten-year growth projections were prepared based upon historic growth trends, location of recent and known development within the City, and consultation with City staff. **Exhibit 2** presents the existing City limits and the proposed service areas, combined with the Future Land Use Plan.

E. Land Use Assumptions Summary

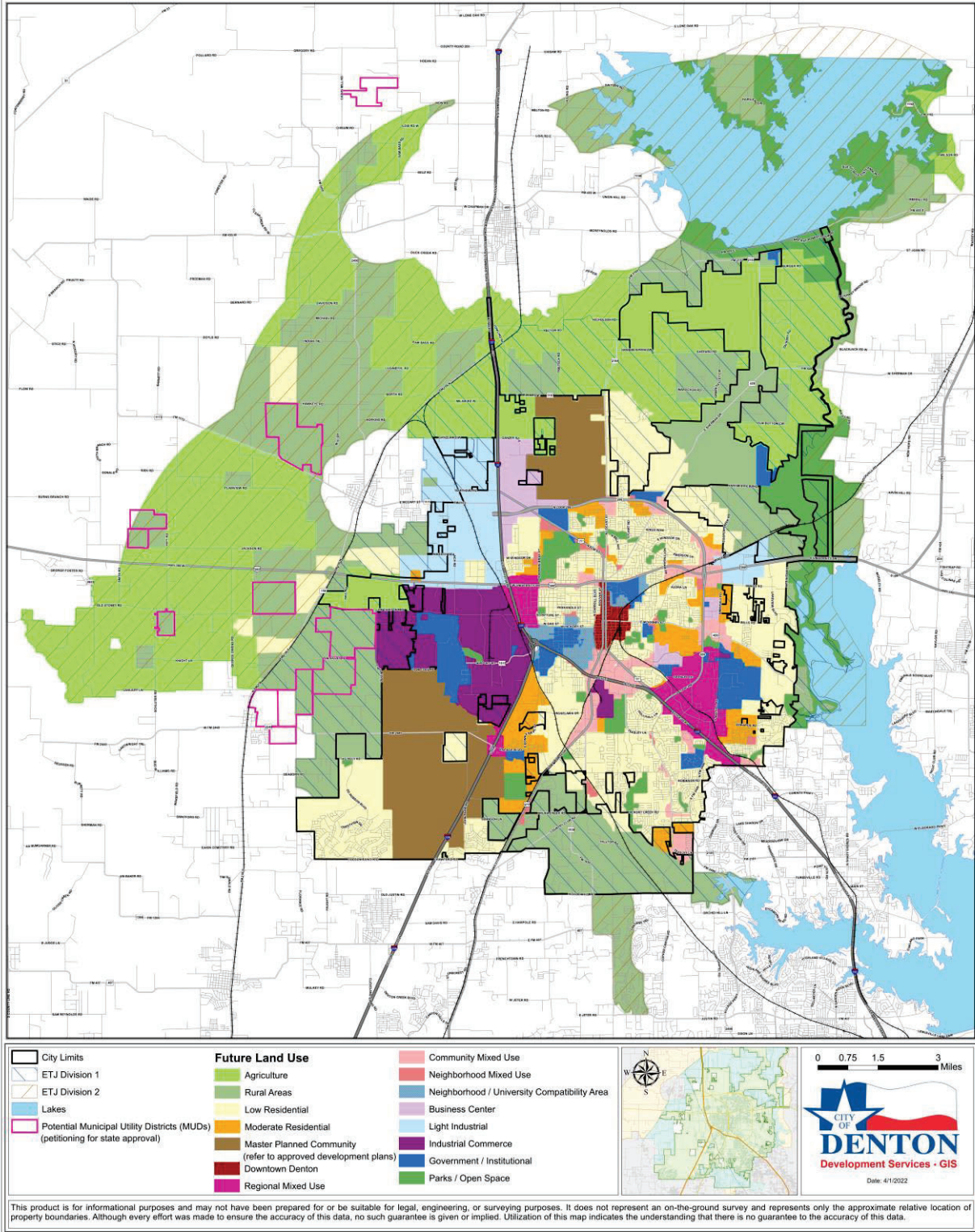
Table 1 summarizes the residential and employment 10-year growth projections. The projected growth over the next ten years is reasonable compared to the historical growth over the previous ten years, as described in the Land Use Assumptions Methodology (page 4).

Table 1. Residential and Employment 10-Year Projections

Service Area	Residential		Employment		
	Single Family	Multi-Family	Basic	Service	Retail
	Dwelling Units		Sq. Ft.	Sq. Ft.	Sq. Ft.
A	3,212	970	2,843,000	591,000	871,000
B	2,009	387	415,000	238,000	285,000
C	1,538	1,015	3,518,000	689,000	446,000
D	847	215	815,000	206,000	287,000
E	1,219	1,291	1,831,000	519,000	505,000
Sub-Total	8,825	3,878	9,422,000	2,243,000	2,394,000
Total	12,703		14,059,000		

Exhibit 2– Citywide Future Land Use Map

**Denton 2040 Comprehensive Plan
Future Land Use Map**



III. ROADWAY IMPACT FEE CAPITAL IMPROVEMENTS PLAN

Development of a 10-year Roadway Impact Fee Capital Improvement Plan is required per Chapter 395 of the Texas local Government Code. To accomplish this, the current Denton Mobility Plan has been updated using a Denton-specific Travel Demand Model. The Travel Demand Model was developed using the existing roadway network and residential and employment data to develop a baseline scenario. This scenario was calibrated using existing vehicle counts. Several build-out scenarios were run using the build-out residential and employment data to assist in completing the updated mobility plan map. This updated mobility plan map serves as the basis for this Roadway Impact Fee CIP. The Roadway Impact Fee CIP includes arterial and collector class roadway facilities that serve the overall transportation system, as well as major intersection improvements. All the facilities identified are included in the proposed mobility plan map.

The proposed Roadway Impact Fee CIP is listed in **Tables 2.A – 2.E** and mapped in **Exhibits 3.A – 3.E**. The tables show the length of each project as well as the facility’s Mobility Plan classification. The Roadway Impact Fee CIP was developed in conjunction with input from City of Denton staff and represents those 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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
A-1	SA	CORBIN	IH-35W TO CORBIN	0.58	100%
A-2	SA	CORBIN	500' S OF SPRINGSIDE TO CORBIN	0.27	100%
A-3	PA	FM 1515	IH 35W TO CORBIN	1.13	100%
A-4	PA	FM 1515	CORBIN TO WESTERN	0.22	100%
A-5	PA	FM 1515	WESTERN TO WESTCOURT	0.29	100%
A-6	PA	FM 1515	WESTCOURT TO MASCH BRANCH	0.12	100%
A-7	PA	FM 1515	TOM COLE TO 3435' W OF TOM COLE	0.65	100%
A-8	PA	FM 1515	3435' W OF TOM COLE TO 530' E OF C WOLFE	0.71	100%
A-9	PA	H LIVELY	C WOLFE TO 2145' W OF H LIVELY	0.41	50%
A-10	PA	H LIVELY	2145' W OF H LIVELY TO 2150' W OF ED ROBSON	0.74	100%
A-11	C	IH-35-CORBIN	IH-35 TO CORBIN	0.84	100%
A-12	SA	JIM CHRISTAL	IH 35 TO OLD SH 24	0.59	100%
A-13,C-10	SA	JIM CHRISTAL	OLD SH 24 TO WESTERN	0.55	50%
A-14,C-11	SA	JIM CHRISTAL	WESTERN TO MASCH BRANCH	0.66	50%
A-15,C-12	SA	JIM CHRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%
A-16,C-13	SA	JIM CHRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%
A-17	C	PRECISION-WESTERN	PRECISION TO WESTERN	0.65	100%
A-18	PA	ROBSON RANCH	IH 35W TO ED ROBSON	1.65	50%
A-19	PA	ROBSON RANCH	ED ROBSON TO YARBROUGH	1.35	50%
A-20	SA	SPRINGSIDE	CORBIN TO UNDERWOOD	0.35	100%
A-21	SA	SPRINGSIDE	UNDERWOOD TO WESTCOURT	0.16	100%
A-22	C	TJ EGAN-LOOP 288	LOOP 288 TO 2440' W OF LOOP 288	0.46	100%
A-23	PA	C WOLFE	1140' S OF TOM COLE TO FM 2449	1.38	50%
A-24	PA	C WOLFE	FM 2449 TO H LIVELY	0.63	50%
A-25	C	CORBIN	IH-35-CORBIN TO SPRINGSIDE	0.39	100%
A-26	C	J CHRISTAL-H LIVELY	FM 2449 TO H LIVELY	0.63	100%
A-27	C	PRECISION	JIM CHRISTAL TO 1635' N OF FM 1515	0.45	100%
A-28	SA	THOMAS J EGAN	JIM CHRISTAL TO 2915' S OF JIM CRISTAL	0.55	100%
A-29	SA	THOMAS J EGAN	1830' N OF FM 1515 TO FM 1515	0.35	50%
A-30	PA	UNDERWOOD	SPRINGSIDE TO UNDERWOOD CONNECTOR	0.76	100%
A-31	SA (1/2)	WESTCOURT	FM 1515 TO SPRINGSIDE	0.79	100%
A-32	PA (1/3)	WESTERN	JIM CHRISTAL TO AIRPORT	1.23	100%
A-33	PA	WESTERN	FM 1515 TO SPRINGSIDE	0.79	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
B-1	C	ALLRED	BONNIE BRAE TO BRUSH CREEK	0.81	50%
B-2	PA	ALLRED	BRUSH CREEK TO JOHN PAINE	0.30	50%
B-3	PA	BRUSH CREEK	815' E OF COUNTRY CLUB TO COUNTRY CLUB	0.15	100%
B-4	PA	BRUSH CREEK	COUNTRY CLUB TO 1935' W OF COUNTRY CLUB	0.37	100%
B-5	PA	BRUSH CREEK	2180' E OF FORT WORTH TO FORT WORTH	0.41	100%
B-6	PA	BRUSH CREEK	FORT WORTH TO 590' E OF ALLRED	0.68	100%
B-7	SA	CORBIN	BONNIE BRAE TO IH-35W	0.66	100%
B-8	C	CREEKDALE	PIMLICO TO RIVERCHASE	0.61	100%
B-9	C	CREEKDALE	THISTLE WAY TO OAKBLUFF	0.39	100%
B-10	C	EL PASEO	BELMONT TO COUNTRY CLUB	0.36	100%
B-11	PA	FM 1515	BONNIE BRAE TO IH 35W	0.15	100%
B-12	PA (1/3)	HICKORY CREEK	FM 2499 TO NAUTICA	0.22	100%
B-13	PA (1/3)	HICKORY CREEK	NAUTICA TO TEASLEY	0.25	100%
B-14	PA (1/3)	HICKORY CREEK	TEASLEY TO MONTECITO	0.85	100%
B-15	PA (1/3)	HICKORY CREEK	MONTECITO TO 1435' W OF BIDDY BYE	0.42	50%
B-16	PA	HICKORY CREEK	1435' W OF BIDDY BYE TO 815' E OF COUNTRY CLUB	0.38	100%
B-17	SA	HOBSON LANE	TEASLEY TO MONTECITO	0.13	100%
B-18	SA	HOBSON LANE	MONTECITO TO FORRESTRIDGE	0.28	100%
B-19	SA	HOBSON LANE	FORRESTRIDGE TO COUNTRY CLUB	0.72	100%
B-20	C	PARVIN	MCCORMICK TO HIGHLAND PARK	0.50	100%
B-21	SA	ROBINSON	230' E OF WHEELER RIDGE TO TEASLEY	0.52	100%
B-22	SA	RYAN	TEASLEY TO MONTECITO	0.76	100%
B-23	SA	RYAN	MONTECITO TO FORRESTRIDGE	0.63	100%
B-24	SA	RYAN	FORRESTRIDGE TO COUNTRY CLUB	0.66	100%
B-25	PA (1/3)	VINTAGE	FORT WORTH TO BONNIE BRAE	0.87	100%
B-26	PA (1/3)	VINTAGE	BONNIE BRAE TO NAPA VALLEY	0.14	100%
B-27	PA (1/3)	VINTAGE	NAPA VALLEY TO IH 35W	0.65	100%
B-28	C	WILLOWWOOD	1250' W OF HIGHLAND PARK TO BONNIE BRAE	0.24	100%
B-29	SA	BONNIE BRAE	IH 35E TO FM 1515	0.14	100%
B-30	SA	BONNIE BRAE	FM 1515 TO WILLOWWOOD	1.09	100%
B-31	SA	BONNIE BRAE	HIGHLAND PARK TO ROSELAWN	0.48	50%
B-32	SA	COUNTRY CLUB	FORT WORTH TO HOBSON	0.08	100%
B-33	SA	COUNTRY CLUB	HOBSON TO RYAN	1.00	100%
B-34	SA	COUNTRY CLUB	RYAN TO HICKORY CREEK	0.66	50%
B-35	PA	FORT WORTH	COUNTRY CLUB TO VINTAGE	1.32	100%
B-36	PA	FORT WORTH	VINTAGE TO BONNIE BRAE	1.07	100%
B-37	PA	FORT WORTH	BONNIE BRAE TO BRUSH CREEK	0.24	100%
B-38	PA	FORT WORTH	BRUSH CREEK TO CRAWFORD	1.11	100%
B-39	Completed	JOHN PAINE	JOHNSON TO ATHENS	0.42	100%
B-40	SA	JOHN PAINE	VINTAGE TO 1045' S OF VINTAGE	0.20	100%
B-41	C	PARVIN-ROSELAWN	PARVIN TO ROSELAWN	0.52	100%
B-42	PA (1/3)	TEASLEY	IH 35E TO LONDONDERRY	0.25	100%
B-43	PA (1/3)	TEASLEY	LONDONDERRY TO HOBSON	0.97	100%
B-44	PA (1/3)	TEASLEY	LILLIAN B MILLER TO PENNSYLVANIA	0.36	100%
B-45	PA (1/3)	TEASLEY	PENNSYLVANIA TO HOBSON	0.21	100%

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

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

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
C-1	PA	BARTHOLD	MASCH BRANCH TO 5200' W OF ITH 35	0.98	50%
C-2	SA	BOBCAT	FM 2164 TO IH-35	2.75	100%
C-3	SA	FM 1173	IH 35 TO 4605' W OF IH 35	0.87	100%
C-4	SA	FM 1173	4605' W OF IH 35 TO LOVERS	0.41	50%
C-5	SA	FM 2164-IH 35	FM 2164 TO IH 35	2.73	100%
C-6	PA	GANZER	FM 2164 TO GANZER	2.40	100%
C-7	PA	GANZER	2900' E OF IH 35 TO IH 35	0.55	100%
C-8	PA	GANZER	1620' E OF BARTHOLD TO BARTHOLD	0.31	50%
C-9	PA	GANZER	BARTHOLD TO RECTOR	0.49	50%
A-13,C-10	SA	JIM CHRISTAL	OLD SH 24 TO WESTERN	0.55	50%
A-14,C-11	SA	JIM CHRISTAL	WESTERN TO MASCH BRANCH	0.66	50%
A-15,C-12	SA	JIM CHRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%
A-16,C-13	SA	JIM CHRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%
C-14	SA	JIM CHRISTAL	945' W OF C WOLFE TO NAIL	0.59	50%
C-15	SA	JIM CHRISTAL	NAIL TO 2045' W of Nail	0.39	50%
C-16	C	MARSHALL	2845' N OF HAMPTON TO HAMPTON	0.54	100%
C-17	C	MARSHALL	HAMPTON TO US 380	0.59	100%
C-18	SA	MASCH BRANCH	MASCH BRANCH TO DARBY SMITH	0.65	100%
C-19	C	WESTWARD	NORTHWAY TO BONNIE BRAE	0.22	100%
C-20	SA (1/2)	RINEY	US 77 TO 2460' W OF US 77	0.47	100%
C-21	SA (1/2)	RINEY	2460' W OF US 77 TO BONNIE BRAE	0.19	100%
C-22	PA (1/3)	US 77	WINDSOR TO FM 2164	0.22	100%
C-23	PA (1/3)	US 77	RINEY TO WINDSOR	0.46	100%
C-24	PA (1/3)	US 77	RINEY TO RINEY	0.40	100%
C-25	PA (1/3)	US 77	BONNIE BRAE TO RINEY	0.75	100%
C-26	PA (1/3)	US 77	LOOP 288 TO BONNIE BRAE	0.33	100%
C-27	PA (1/3)	US 77	IH 35 TO LOOP 288	0.87	100%
C-28	C	MASCH BRANCH-NAIL	MASCH BRANCH TO 1295' W OF MASCH BRANCH	0.25	100%
C-29	C	MASCH BRANCH-NAIL	1050' E OF LOOP 288 TO 1550' W OF LOOP 288	0.49	100%
C-30	C	MASCH BRANCH-NAIL	1335' W OF THOMAS J EGAN TO 775' E OF C WOLFE	0.48	100%
C-31	C	MASCH BRANCH-NAIL	775' E OF C WOLFE TO 690' W OF C WOLFE	0.28	50%
C-32	C	MASCH BRANCH-NAIL	690' W OF C WOLFE TO NAIL	0.58	100%
C-33	SA	WESTGATE	WESTGATE TO 1460' E OF IH-35	0.18	100%
C-34	SA	WINDSOR	US 77 TO HINKLE	0.46	100%
C-35	SA (1/2)	WINDSOR	HINKLE TO BONNIE BRAE	0.99	100%
C-36	SA (1/2)	WINDSOR	WESTGATE TO 145' W OF CLARENDON	0.10	100%
C-37	SA (1/2)	WINDSOR	220' W OF WINDSOR FARMS TO IH 35	0.17	100%
C-38	SA	WINDSOR	IH 35 TO MASCH BRANCH	1.24	100%
C-39	SA	BARTHOLD	GANZER TO 2600' S OF GANZER	0.49	100%
C-40	PA	BONNIE BRAE	MILAM TO LOOP 288	3.13	100%
C-41	SA	BONNIE BRAE	LOOP 288 TO US 77	0.24	100%
C-42	SA	BONNIE BRAE	US 77 TO RINEY	0.38	100%
C-43	SA	BONNIE BRAE	RINEY TO WINDSOR	0.66	100%
C-44	SA	BONNIE BRAE	WINDSOR TO US 380	0.68	100%
C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%
C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%
C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%
C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%
C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%
C-50,E-34	SA	BONNIE BRAE	PRAIRIE TO IH 35E	0.16	50%
C-51	PA	C WOLFE	US 380 TO WESTERN-NAIL	0.51	100%
C-52	C	FALLMEADOW	MEADOWLEDGE TO GARDENVIEW	0.17	100%
C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%
C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%
C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%
C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%
C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%
C-58	SA	LOVERS	FM 1173 TO MASCH BRANCH	0.78	100%
C-59	SA	LOVERS	1085' N OF MASCH BRANCH TO MASCH BRANCH	0.21	100%
C-60	SA	LOVERS LN CONNECTOR	LOVERS TO LOOP 288	0.06	100%
C-61	SA	LOVERS LN CONNECTOR	LOOP 288 TO 1085' N OF MASCH BRANCH	0.08	100%
C-62	SA	MASCH BRANCH	1295' S OF FM 1173 TO JACKSON	0.79	50%
C-63	SA	MASCH BRANCH	LOVERS TO US 380	0.72	100%
C-64	SA	MASCH BRANCH	US 380 TO JIM CHRISTAL	0.78	100%
C-65	SA	MILAM-LOOP 288	MILAM TO LOOP 288	2.71	100%
C-66	SA	MILAM-US 77	MILAM TO GANZER	1.51	100%
C-67	SA	MILAM-US 77	GANZER TO LONG	0.73	100%
C-68	SA	MILAM-US 77	LONG TO US 77	0.53	100%
C-69	C	NICOSIA	LOOP 288 TO BEALL	0.12	100%
C-70	SA	THOMAS J EGAN	US 380 TO JIM CHRISTAL	0.76	100%
C-71	PA	WESTERN	US 380 TO JIM CHRISTAL	0.80	100%

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

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

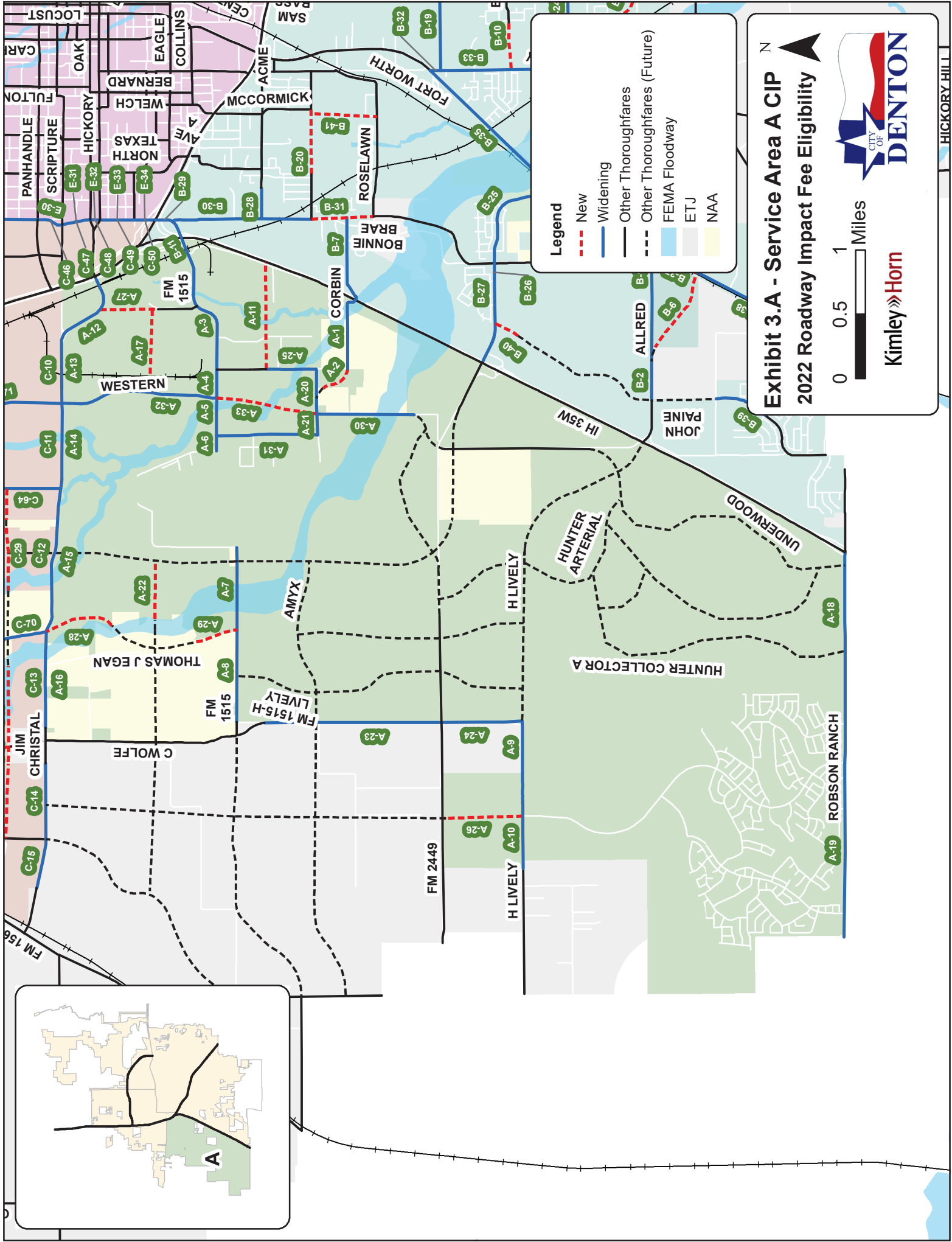
Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
D-1	SA	BOBCAT	560' W OF FM 2164 TO FM 2164	0.11	50%
D-2	C	FISHTRAP	MINGO TO GEESLING	0.36	50%
D-3	PA	GANZER	15,500' E OF SHERMAN TO 4600' W OF SHERMAN	3.41	100%
D-4	SA	GRIBBLE SPRINGS	INDIAN WELLS TO 3015' W OF INDIAN WELLS	0.57	50%
D-5	SA	HARTLEE FIELD	4220' E OF COOPER CREEK TO COOPER CREEK	0.80	50%
D-6	SA	HARTLEE FIELD	COOPER CREEK TO 5170' W OF COOPER CREEK	0.98	50%
D-7	C	HARTLEE FIELD	600' E OF SHERMAN TO SHERMAN	0.11	50%
D-8	SA	HARTLEE FLD-FM 2164	HARTLEE FIELD TO SHERMAN	0.43	100%
D-9	SA	HARTLEE FLD-FM 2164	SHERMAN TO 3500' W OF SHERMAN	0.66	100%
D-10	SA	HARTLEE FLD-FM 2164	STUART TO 1485' W OF STUART	0.28	50%
D-11	SA	HARTLEE FLD-FM 2164	475' W OF FM 2164 TO FM 2164	0.09	100%
D-12	C	LONG	510' W OF FM 2164 TO FM 2164	0.10	100%
D-13	SA	MINGO	E CITY LIMITS TO COOPER CREEK	0.09	100%
D-14	SA	MINGO	COOPER CREEK TO LOOP 288	0.44	100%
D-15	SA	MINGO	LOOP 288 TO US 380	0.43	100%
D-16	C	KINGS ROW	SILVER DOME TO LOOP 288	0.50	100%
D-17	C	SILVER DOME	COOPER CREEK TO FARRIS RD	0.41	50%
D-18	C	COLLINS	HARTLEE FIELD TO 2730' S OF HARTLEE FIELD	0.84	50%
D-19	SA	COOPER CREEK	SHERMAN TO HARTLEE FIELD	1.91	100%
D-20	SA	COOPER CREEK	SILVER DOME TO MINGO	0.83	50%
D-21	PA	COOPER CREEK	MINGO TO US 380	0.32	100%
C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%
D-23	PA	GREEN VALLEY	2395' S OF FM 2153 TO 2935' N OF SHEPARD	1.47	100%
D-24	SA	GREEN VALLEY	WARSCHUN TO SHERMAN	0.40	100%
D-25	SA	INDIAN WELLS	1615' S OF FM 2153 TO 4930' N OF GRIBBLE SPRINGS	0.73	100%
D-26	SA	INDIAN WELLS	4930' N OF GRIBBLE SPRINGS TO 2905' N OF GRIBBLE	0.38	50%
D-27	SA	INDIAN WELLS	2905' N OF GRIBBLE SPRINGS TO GRIBBLE SPRINGS	0.55	50%
C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%
C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%
C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%
C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%
D-32	SA	SHERMAN	LOOP 288 TO HERCULES	0.31	100%
D-33	SA	SHERMAN	HERCULES TO KINGS	0.36	100%
D-34	SA	SHERMAN	KINGS TO WINDSOR	0.38	100%
D-35	SA	SHERMAN	WINDSOR TO WILSONWOOD	0.19	100%
D-36	SA	SHERMAN	WILSONWOOD TO CORONADO	0.22	100%
D-37	SA	SHERMAN	CORONADO TO GREENWOOD	0.31	100%
D-38	SA	SHERMAN	GREENWOOD TO BELL	0.16	100%
D-39	SA	SHERMAN	BELL TO LOCUST	0.32	100%
D-40	C	WINDSOR	LOOP 288 TO DOMINION	0.16	100%

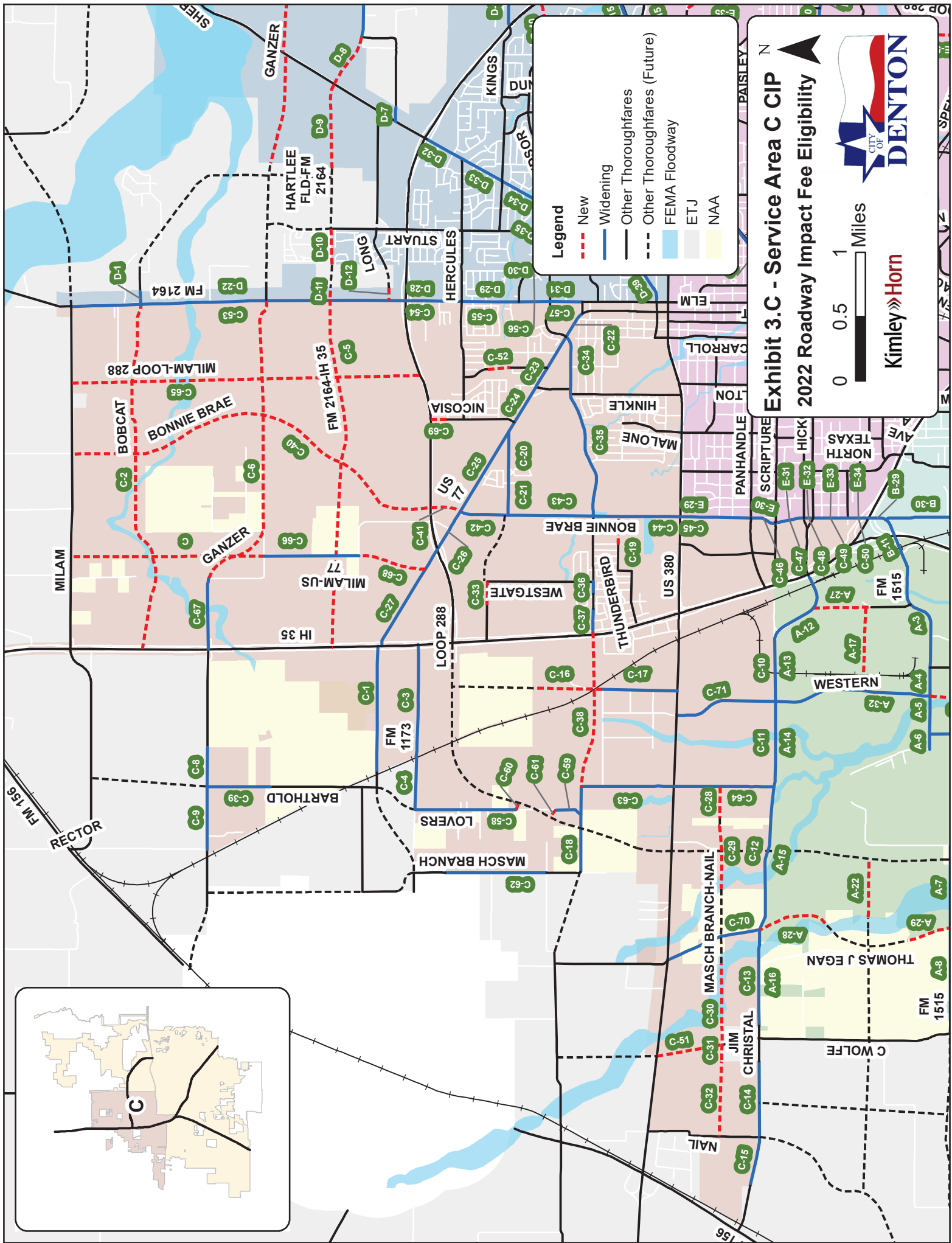
Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.

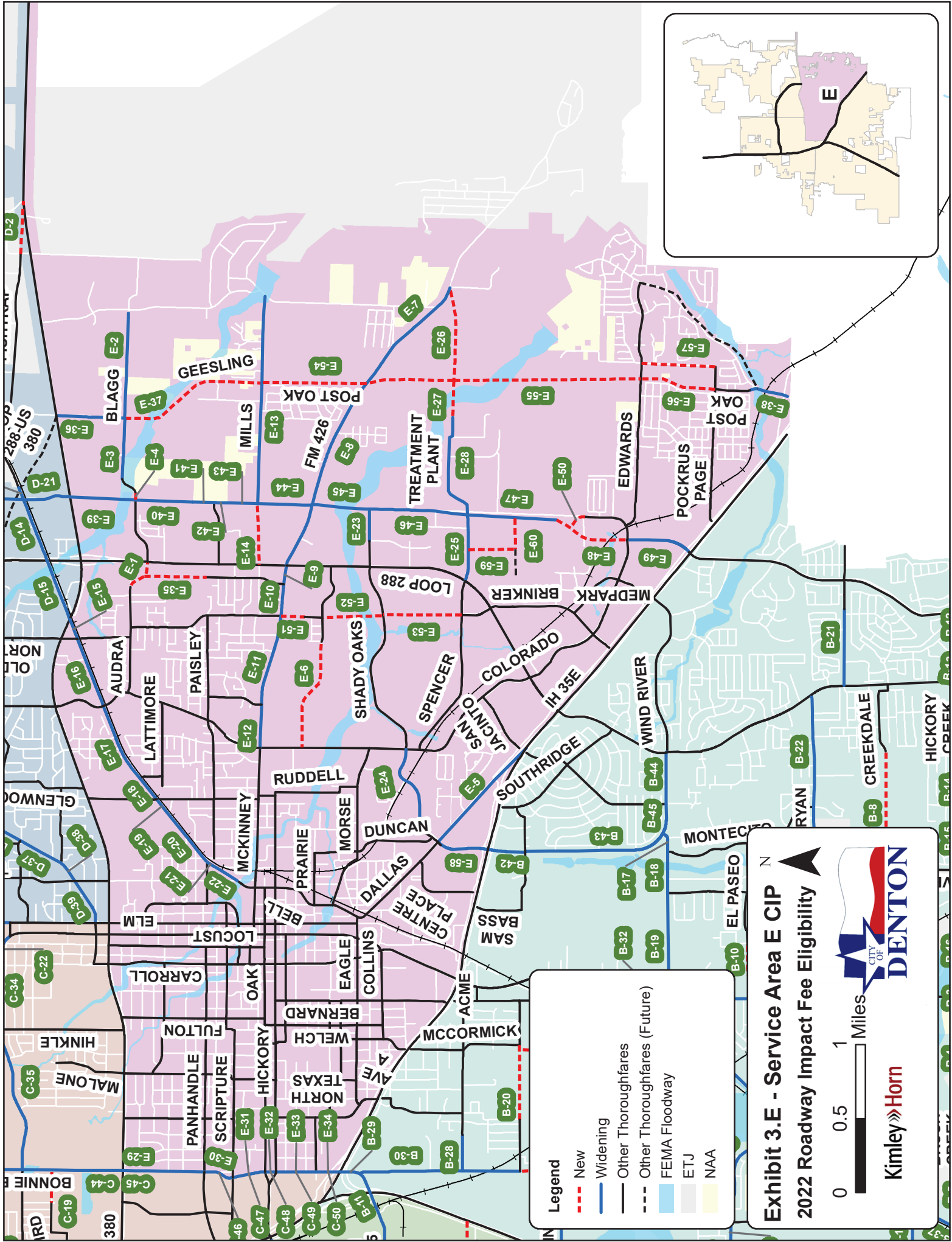
Table 2.E. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area E

Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
E-1	C	AUDRA	LOOP 288 TO 1185' W OF LOOP 288	0.22	100%
E-2	SA	BLAGG	LAKEVIEW TO GEESLING	0.71	100%
E-3	SA	BLAGG	GEESLING TO 2175' W OF GEESLING	0.41	100%
E-4	SA	BLAGG	235' E OF MAYHILL TO MAYHILL	0.04	50%
E-5	PA (1/3)	DALLAS	TEASLEY TO IH 35E	0.87	100%
E-6	C	DUCHESS	TRAILHEAD TO WOODROW	0.76	100%
E-7	SA	FM 426	LANEY TO GRISSOM	0.57	100%
E-8	Completed	MCKINNEY	GRISSOM TO LOOP 288	1.65	100%
E-9	SA	MCKINNEY	LOOP 288 TO CARDINAL	0.13	100%
E-10	SA	MCKINNEY	CARDINAL TO MOCKINGBIRD	0.22	100%
E-11	SA	MCKINNEY	MOCKINGBIRD TO MACK	0.61	100%
E-12	SA	MCKINNEY	MACK TO AUDRA	0.29	100%
E-13	SA	MILLS	TRINITY TO MAYHILL	1.40	100%
E-14	SA	MILLS	LAKEVIEW TO MAYHILL	0.41	100%
E-15	SA	MINGO	US 380 TO OLD NORTH	0.14	100%
E-16	SA	MINGO	OLD NORTH TO NOTTINGHAM	0.48	100%
E-17	SA	MINGO	NOTTINGHAM TO PERTAIN	0.56	100%
E-18	SA	MINGO	PERTAIN TO RUDELL	0.18	100%
E-19	SA	MINGO	RUDELL TO WILLIS	0.11	100%
E-20	SA	MINGO	WILLIS TO WITHERS	0.44	100%
E-21	SA	MINGO	WITHERS TO PAISLEY	0.04	100%
E-22	SA	MINGO	PAISLEY TO BELL	0.19	100%
E-23	SA (1/2)	MORSE	MAYHILL TO KIMBERLY	0.22	100%
E-24	SA	SHADY OAKS	WOODROW TO TEASLEY	0.58	100%
E-25	SA	SPENCER	MAYHILL TO LOOP 288	0.44	100%
E-26	C	TREATMENT PLANT	MCKINNEY TO POST OAK	0.63	100%
E-27	SA	TREATMENT PLANT	POST OAK TO 1325' W OF POST OAK	0.25	100%
E-28	SA	TREATMENT PLANT	1325' W OF POST OAK TO MAYHILL	0.75	100%
C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%
C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%
C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%
C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%
C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%
C-50,E-34	SA	BONNIE BRAE	PRAIRIE TO IH 35E	0.16	50%
E-35	C	CARDINAL	ORIOLE TO MCKINNEY	0.42	100%
E-36	PA	GEESLING	US 380 TO BLAGG	0.46	100%
E-37	PA	GEESLING	US 380 TO BLAGG	1.02	100%
E-38	PA (1/3)	LAKEVIEW	POST OAK TO SHADY SHORES	0.26	100%
E-39	PA (1/3)	MAYHILL	US 380 TO PROMINENCE	0.44	100%
E-40	PA (1/3)	MAYHILL	PROMINENCE TO 770' N OF RUSSELL NEWMAN	0.39	100%
E-41	PA (1/3)	MAYHILL	770' N OF RUSSELL NEWMAN TO RUSSELL NEWMAN	0.15	50%
E-42	PA (1/3)	MAYHILL	RUSSELL NEWMAN TO 460' S OF RUSSELL NEWMAN	0.09	50%
E-43	PA (1/3)	MAYHILL	460' S OF RUSSELL NEWMAN TO MILLS	0.20	100%
E-44	PA (1/3)	MAYHILL	MILLS TO MCKINNEY	0.37	100%
E-45	PA (1/3)	MAYHILL	MCKINNEY TO MORSE	0.39	100%
E-46	PA (1/3)	MAYHILL	MORSE TO SPENCER	0.67	100%
E-47	PA (1/3)	MAYHILL	SPENCER TO EDWARDS	0.60	100%
E-48	PA (1/3)	MAYHILL	2725' N OF COLORADO TO COLORADO	0.52	100%
E-49	PA (1/3)	MAYHILL	COLORADO TO IH 35E	0.44	100%
E-50	PA	MAYHILL CONNECTOR	MAYHILL TO QUAILCREEK	0.13	100%
E-51	C	MOCKINGBIRD	MCKINNEY TO 625' N OF DUCHESS	0.16	100%
E-52	SA	MOCKINGBIRD	DUCHESS TO SHADY OAKS	0.41	100%
E-53	SA	MOCKINGBIRD	SHADY OAKS TO SPENCER	0.53	100%
E-54	PA	POST OAK	MILLS TO SPENCER	1.30	100%
E-55	PA	POST OAK	TREATMENT PLANT TO EDWARDS	1.27	100%
E-56	PA	POST OAK	EDWARDS TO POCKRUS PAGE	0.51	100%
E-57	C	SWISHER	EDWARDS TO POCKRUS PAGE	0.50	100%
E-58	PA (1/3)	TEASLEY	DALLAS TO IH 35E	0.35	100%
E-59	C	N STAR	SPENCER TO ROY	0.32	100%
E-60	C	ROY	MAYHILL TO N STAR	0.21	100%

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







IV.COMPUTATION METHOD FOR ROADWAY IMPACT FEES

A. Service Areas

The five (5) service areas used in the 2022 Roadway Impact Fee Study are shown in **Exhibit 1**. These service areas cover the entire corporate area of the City of Denton. 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.”

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 2022 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 Denton Mobility Plan (see **Appendix B**).

Total Vehicle-Miles of Demand: Based on the 10-year growth projections (Pg. 35). The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2022 Roadway Impact Fee Study are based upon Thoroughfare Capacity Criteria published by the North Central Texas Council of Governments (NCTCOG) and applied to City of Denton thoroughfare standards. **Tables 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	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
Primary Arterial (PA)	Divided	850
Secondary Arterial (SA)	Divided	750
Collector (C)	Undivided	550

Table 3B. Service Volumes for Existing Facilities
(used in Appendix C – Existing Roadway Facilities Inventory)

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e., gravel, dirt, etc.)	150
2U-H	Two lane undivided – Arterial Type	725
2-1W	Two lane – one way couplet	650
2U	Two lane undivided	425
3-1W	Three lane - one way couplet	700
3U	Three lane undivided (two-way, left-turn lane)	550
4U	Four lane undivided	550
4D	Four lane divided	750
6D	Six lane divided	850

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. Roadway Impact Fee CIP Costing Methodology

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. 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 Roadway Impact Fee 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 detailed costing components are provided in the costing sheets in **Appendix A**. The following is a detailed description of the costing methodology for the Roadway Impact Fee CIP.

1. 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-10 is in Service Area A and is the 10th project on the list.
- Roadway Name – A unique identifier for each project. In some cases abbreviations are used for the project name. In cases where roadway names are unknown the connecting limits may be used such as FM 1515 – H Lively represents a roadway link that connects FM 1515 to H Lively.
- Limits – Represents the beginning and ending location for each project.
- Length (ft) – The distance measured in feet that is used to cost out the project.
- Roadway Classification – 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 proposed Mobility Plan classification of the roadway. For example, PA stands for Primary Arterial. A PA Impact Fee Class means the entire roadway is to be constructed. Additional classifications are utilized in cases where a portion of the facility currently exists and the road is only to be widened. The following notations are used for these projects:
 - “(1/2)” for facilities where half the facility still needs to be constructed;
 - “(1/3)” for future six-lane principal arterials facilities where two additional median lanes are needed
 - “(2/3)” for future six-lane principal arterials facilities where four additional lanes are needed

2. Construction Cost

A typical roadway project consists of a number of costs, including the following: planning, survey, design engineering, permitting, right-of way acquisition, and construction and inspection. While the construction cost component of a project may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. The pay items used to estimate construction costs are shown in **Table 4.**

Table 4. Construction Cost Pay Items

Pay Items
• Unclassified Street Earthwork • Lime Stabilization • Concrete pavement and curb • Sidewalk (and Trail when applicable) • Topsoil • Block Sodding • Turn lanes

3. Allowances

A percentage of the paving construction cost is allotted for various major construction component allowances, as appropriate. These allowances include mobilization, traffic control, pavement markings and signage, roadway drainage, illumination, minor water and sewer adjustments, landscaping, irrigation and SWPPP. These allowance percentages are also based on historical data and are shown in the example project costing sheets in the **Appendix.**

In addition, allowances are provided for streams and channel crossings, railroad crossings, and intersection improvements where needs are anticipated. The construction cost subtotal is given a fifteen percent (15%) allowance for contingency and ROW costs, sixteen percent (16%) for engineering, surveying, and SUE, and three and a half percent (3.5%) of the construction cost total is added for inspection and materials testing. In addition, if City funds

were previously spent or are currently allocated to a project, those amounts are also included in the total cost.

The Impact Fee Project Cost Total is then the Construction Cost Total plus engineering, surveying, testing, and inspection; plus ROW/contingency.

E. Summary of Roadway Impact Fee CIP Costs

Tables 5.A – 5.E are the 10-Year Roadway Impact Fee CIP project lists for each service area with planning level project costs. Overall project costs can be seen in the summary tables in **Appendix A**, Conceptual Level Project Cost Projections. These costs are based on the example project costing sheets, also provided in **Appendix A**. 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 Roadway Impact Fee CIP establishes the list of projects for which Impact Fees may be utilized. Projects not included in the Roadway Impact Fee 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 5.A – 10-Year Roadway Impact Fee 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	SA	CORBIN	IH-35W TO CORBIN	0.58	100%	\$ 10,164,000	\$ 10,164,000
	A-2	SA	CORBIN	500' S OF SPRINGSIDE TO CORBIN	0.27	100%	\$ 3,378,000	\$ 3,378,000
	A-3	PA	FM 1515	IH 35W TO CORBIN	1.13	100%	\$ 23,533,000	\$ 23,533,000
	A-4	PA	FM 1515	CORBIN TO WESTERN	0.22	100%	\$ 3,959,000	\$ 3,959,000
	A-5	PA	FM 1515	WESTERN TO WESTCOURT	0.29	100%	\$ 7,495,000	\$ 7,495,000
	A-6	PA	FM 1515	WESTCOURT TO MASCH BRANCH	0.12	100%	\$ 2,089,000	\$ 2,089,000
	A-7	PA	FM 1515	TOM COLE TO 3435' W OF TOM COLE	0.65	100%	\$ 13,827,000	\$ 13,827,000
	A-8	PA	FM 1515	3435' W OF TOM COLE TO 530' E OF C WOLFE	0.71	100%	\$ 13,132,000	\$ 13,132,000
	A-9	PA	H LIVELY	C WOLFE TO 2145' W OF H LIVELY	0.41	50%	\$ 7,226,000	\$ 3,613,000
	A-10	PA	H LIVELY	2145' W OF H LIVELY TO 2150' W OF ED ROBSON	0.74	100%	\$ 13,188,000	\$ 13,188,000
	A-11	C	IH-35-CORBIN	IH-35 TO CORBIN	0.84	100%	\$ 7,040,000	\$ 7,040,000
	A-12	SA	JIM CRISTAL	IH 35 TO OLD SH 24	0.59	100%	\$ 10,332,000	\$ 10,332,000
	A-13,C-10	SA	JIM CRISTAL	OLD SH 24 TO WESTERN	0.55	50%	\$ 9,746,000	\$ 4,873,000
	A-14,C-11	SA	JIM CRISTAL	WESTERN TO MASCH BRANCH	0.66	50%	\$ 11,964,000	\$ 5,982,000
	A-15,C-12	SA	JIM CRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%	\$ 18,502,000	\$ 9,251,000
	A-16,C-13	SA	JIM CRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%	\$ 12,707,000	\$ 6,353,500
	A-17	C	PRECISION-WESTERN	PRECISION TO WESTERN	0.65	100%	\$ 6,566,000	\$ 6,566,000
	A-18	PA	ROBSON RANCH	IH 35W TO ED ROBSON	1.65	50%	\$ 30,974,000	\$ 15,487,000
	A-19	PA	ROBSON RANCH	ED ROBSON TO YARBROUGH	1.35	50%	\$ 25,335,000	\$ 12,667,500
	A-20	SA	SPRINGSIDE	CORBIN TO UNDERWOOD	0.35	100%	\$ 6,141,000	\$ 6,141,000
	A-21	SA	SPRINGSIDE	UNDERWOOD TO WESTCOURT	0.16	100%	\$ 2,971,000	\$ 2,971,000
	A-22	C	TJ EGAN-LOOP 288	LOOP 288 TO 2440' W OF LOOP 288	0.46	100%	\$ 3,722,000	\$ 3,722,000
	A-23	PA	C WOLFE	1140' S OF TOM COLE TO FM 2449	1.38	50%	\$ 26,240,000	\$ 13,120,000
	A-24	PA	C WOLFE	FM 2449 TO H LIVELY	0.63	50%	\$ 12,018,000	\$ 6,009,000
	A-25	C	CORBIN	IH-35-CORBIN TO SPRINGSIDE	0.39	100%	\$ 3,667,000	\$ 3,667,000
	A-26	C	J CRISTAL-H LIVELY	FM 2449 TO H LIVELY	0.63	100%	\$ 5,353,000	\$ 5,353,000
	A-27	C	PRECISION	JIM CRISTAL TO 1635' N OF FM 1515	0.45	100%	\$ 3,694,000	\$ 3,694,000
	A-28	SA	THOMAS J EGAN	JIM CRISTAL TO 2915' S OF JIM CRISTAL	0.55	100%	\$ 6,984,000	\$ 6,984,000
	A-29	SA	THOMAS J EGAN	1830' N OF FM 1515 TO FM 1515	0.35	50%	\$ 4,635,000	\$ 2,317,500
	A-30	PA	UNDERWOOD	SPRINGSIDE TO UNDERWOOD CONNECTOR	0.76	100%	\$ 15,229,000	\$ 15,229,000
	A-31	SA (1/2)	WESTCOURT	FM 1515 TO SPRINGSIDE	0.79	100%	\$ 5,343,000	\$ 5,343,000
	A-32	PA (1/3)	WESTERN	JIM CRISTAL TO AIRPORT	1.23	100%	\$ 6,619,000	\$ 6,619,000
	A-33	PA	WESTERN	FM 1515 TO SPRINGSIDE	0.79	100%	\$ 14,102,000	\$ 14,102,000
Service Area Project Cost Subtotal							\$ 268,201,500	
2022 Roadway Impact Fee Study Cost Per Service Area							\$ 37,660	
Total Cost in SERVICE AREA A							\$ 268,239,160	

- These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of Denton.
- 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 5.B – 10-Year Roadway Impact Fee 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	B-1	C	ALLRED	BONNIE BRAE TO BRUSH CREEK	0.81	50%	\$ 6,097,000	\$ 3,048,500
	B-2	PA	ALLRED	BRUSH CREEK TO JOHN PAINE	0.30	50%	\$ 5,424,000	\$ 2,712,000
	B-3	PA	BRUSH CREEK	815' E OF COUNTRY CLUB TO COUNTRY CLUB	0.15	100%	\$ 2,747,000	\$ 2,747,000
	B-4	PA	BRUSH CREEK	COUNTRY CLUB TO 1935' W OF COUNTRY CLUB	0.37	100%	\$ 6,769,000	\$ 6,769,000
	B-5	PA	BRUSH CREEK	2180' E OF FORT WORTH TO FORT WORTH	0.41	100%	\$ 7,344,000	\$ 7,344,000
	B-6	PA	BRUSH CREEK	FORT WORTH TO 590' E OF ALLRED	0.68	100%	\$ 10,698,000	\$ 10,698,000
	B-7	SA	CORBIN	BONNIE BRAE TO IH-35W	0.66	100%	\$ 10,760,000	\$ 10,760,000
	B-8	C	CREEKDALE	PIMLICO TO RIVERCHASE	0.61	100%	\$ 5,346,000	\$ 5,346,000
	B-9	C	CREEKDALE	THISTLE WAY TO OAKBLUFF	0.39	100%	\$ 3,461,000	\$ 3,461,000
	B-10	C	EL PASEO	BELMONT TO COUNTRY CLUB	0.36	100%	\$ 3,369,000	\$ 3,369,000
	B-11	PA	FM 1515	BONNIE BRAE TO IH 35W	0.15	100%	\$ 2,595,000	\$ 2,595,000
	B-12	PA (1/3)	HICKORY CREEK	FM 2499 TO NAUTICA	0.22	100%	\$ 1,605,000	\$ 1,605,000
	B-13	PA (1/3)	HICKORY CREEK	NAUTICA TO TEASLEY	0.25	100%	\$ 1,789,000	\$ 1,789,000
	B-14	PA (1/3)	HICKORY CREEK	TEASLEY TO MONTECITO	0.85	100%	\$ 8,638,000	\$ 8,638,000
	B-15	PA (1/3)	HICKORY CREEK	MONTECITO TO 1435' W OF BIDDY BYE	0.42	50%	\$ 4,006,000	\$ 2,003,000
	B-16	PA	HICKORY CREEK	1435' W OF BIDDY BYE TO 815' E OF COUNTRY CLUB	0.38	100%	\$ 7,612,000	\$ 7,612,000
	B-17	SA	HOBSON LANE	TEASLEY TO MONTECITO	0.13	100%	\$ 1,914,000	\$ 1,914,000
	B-18	SA	HOBSON LANE	MONTECITO TO FORRESTRIDGE	0.28	100%	\$ 5,710,000	\$ 5,710,000
	B-19	SA	HOBSON LANE	FORRESTRIDGE TO COUNTRY CLUB	0.72	100%	\$ 11,559,000	\$ 11,559,000
	B-20	C	PARVIN	MCCORMICK TO HIGHLAND PARK	0.50	100%	\$ 2,150,000	\$ 2,150,000
	B-21	SA	ROBINSON	230' E OF WHEELER RIDGE TO TEASLEY	0.52	100%	\$ 8,061,000	\$ 8,061,000
	B-22	SA	RYAN	TEASLEY TO MONTECITO	0.76	100%	\$ 11,980,000	\$ 11,980,000
	B-23	SA	RYAN	MONTECITO TO FORRESTRIDGE	0.63	100%	\$ 10,878,000	\$ 10,878,000
	B-24	SA	RYAN	FORRESTRIDGE TO COUNTRY CLUB	0.66	100%	\$ 10,824,000	\$ 10,824,000
	B-25	PA (1/3)	VINTAGE	FORT WORTH TO BONNIE BRAE	0.87	100%	\$ 11,721,000	\$ 11,721,000
	B-26	PA (1/3)	VINTAGE	BONNIE BRAE TO NAPA VALLEY	0.14	100%	\$ 1,665,000	\$ 1,665,000
	B-27	PA (1/3)	VINTAGE	NAPA VALLEY TO IH 35W	0.65	100%	\$ 7,975,000	\$ 7,975,000
	B-28	C	WILLOWWOOD	1250' W OF HIGHLAND PARK TO BONNIE BRAE	0.24	100%	\$ 2,079,000	\$ 2,079,000
	B-29	SA	BONNIE BRAE	IH 35E TO FM 1515	0.14	100%	\$ 1,285,000	\$ 1,285,000
	B-30	SA	BONNIE BRAE	FM 1515 TO WILLOWWOOD	1.09	100%	\$ 11,351,000	\$ 11,351,000
	B-31	SA	BONNIE BRAE	HIGHLAND PARK TO ROSELAWN	0.48	50%	\$ 4,521,000	\$ 2,260,500
	B-32	SA	COUNTRY CLUB	FORT WORTH TO HOBSON	0.08	100%	\$ 1,229,000	\$ 1,229,000
	B-33	SA	COUNTRY CLUB	HOBSON TO RYAN	1.00	100%	\$ 15,093,000	\$ 15,093,000
	B-34	SA	COUNTRY CLUB	RYAN TO HICKORY CREEK	0.66	50%	\$ 11,902,000	\$ 5,951,000
	B-35	PA	FORT WORTH	COUNTRY CLUB TO VINTAGE	1.32	100%	\$ 26,417,000	\$ 26,417,000
	B-36	PA	FORT WORTH	VINTAGE TO BONNIE BRAE	1.07	100%	\$ 19,299,000	\$ 19,299,000
	B-37	PA	FORT WORTH	BONNIE BRAE TO BRUSH CREEK	0.24	100%	\$ 4,811,000	\$ 4,811,000
	B-38	PA	FORT WORTH	BRUSH CREEK TO CRAWFORD	1.11	100%	\$ 20,190,000	\$ 20,190,000
	B-39	Completed	JOHN PAINE	JOHNSON TO ATHENS	0.42	100%	\$ 238,000	\$ 238,000
	B-40	SA	JOHN PAINE	VINTAGE TO 1045' S OF VINTAGE	0.20	100%	\$ 3,254,000	\$ 3,254,000
	B-41	C	PARVIN-ROSELAWN	PARVIN TO ROSELAWN	0.52	100%	\$ 3,878,000	\$ 3,878,000
	B-42	PA (1/3)	TEASLEY	IH 35E TO LONDONDERRY	0.25	100%	\$ 1,039,000	\$ 1,039,000
	B-43	PA (1/3)	TEASLEY	LONDONDERRY TO HOBSON	0.97	100%	\$ 4,558,000	\$ 4,558,000
	B-44	PA (1/3)	TEASLEY	LILLIAN B MILLER TO PENNSYLVANIA	0.36	100%	\$ 1,493,000	\$ 1,493,000
	B-45	PA (1/3)	TEASLEY	PENNSYLVANIA TO HOBSON	0.21	100%	\$ 857,000	\$ 857,000
Service Area Project Cost Subtotal							\$ 290,216,000	
2022 Roadway Impact Fee Study Cost Per Service Area							\$ 37,660	
Total Cost in SERVICE AREA B							\$ 290,253,660	

- These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of Denton.
- 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 5.C – 10-Year Roadway Impact Fee 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	C-1	PA	BARTHOLD	MASCH BRANCH TO 5200' W OF IH 35	0.98	50%	\$ 17,750,000	\$ 8,875,000
	C-2	SA	BOBCAT	FM 2164 TO IH-35	2.75	100%	\$ 37,762,000	\$ 37,762,000
	C-3	SA	FM 1173	IH 35 TO 4605' W OF IH 35	0.87	100%	\$ 13,401,000	\$ 13,401,000
	C-4	SA	FM 1173	4605' W OF IH 35 TO LOVERS	0.41	50%	\$ 7,704,000	\$ 3,852,000
	C-5	SA	FM 2164-IH 35	FM 2164 TO IH 35	2.73	100%	\$ 37,057,000	\$ 37,057,000
	C-6	PA	GANZER	FM 2164 TO GANZER	2.40	100%	\$ 39,748,000	\$ 39,748,000
	C-7	PA	GANZER	2900' E OF IH 35 TO IH 35	0.55	100%	\$ 11,525,000	\$ 11,525,000
	C-8	PA	GANZER	1620' E OF BARTHOLD TO BARTHOLD	0.31	50%	\$ 5,708,000	\$ 2,854,000
	C-9	PA	GANZER	BARTHOLD TO RECTOR	0.49	50%	\$ 9,208,000	\$ 4,604,000
	A-13,C-10	SA	JIM CHRISTAL	OLD SH 24 TO WESTERN	0.55	50%	\$ 9,746,000	\$ 4,873,000
	A-14,C-11	SA	JIM CHRISTAL	WESTERN TO MASCH BRANCH	0.66	50%	\$ 11,964,000	\$ 5,982,000
	A-15,C-12	SA	JIM CHRISTAL	MASCH BRANCH TO THOMAS J EGAN	1.13	50%	\$ 18,502,000	\$ 9,251,000
	A-16,C-13	SA	JIM CHRISTAL	THOMAS J EGAN TO 515' E OF C WOLFE	0.75	50%	\$ 12,707,000	\$ 6,353,500
	C-14	SA	JIM CHRISTAL	945' W OF C WOLFE TO NAIL	0.59	50%	\$ 9,547,000	\$ 4,773,500
	C-15	SA	JIM CHRISTAL	NAIL TO 2045' W of Nail	0.39	50%	\$ 5,841,000	\$ 2,920,500
	C-16	C	MARSHALL	2845' N OF HAMPTON TO HAMPTON	0.54	100%	\$ 5,249,000	\$ 5,249,000
	C-17	C	MARSHALL	HAMPTON TO US 380	0.59	100%	\$ 4,397,000	\$ 4,397,000
	C-18	SA	MASCH BRANCH	MASCH BRANCH TO DARBY SMITH	0.65	100%	\$ 10,602,000	\$ 10,602,000
	C-19	C	WESTWARD	NORTHWAY TO BONNIE BRAE	0.22	100%	\$ 1,672,000	\$ 1,672,000
	C-20	SA (1/2)	RINEY	US 77 TO 2460' W OF US 77	0.47	100%	\$ 3,156,000	\$ 3,156,000
	C-21	SA (1/2)	RINEY	2460' W OF US 77 TO BONNIE BRAE	0.19	100%	\$ 1,258,000	\$ 1,258,000
	C-22	PA (1/3)	US 77	WINDSOR TO FM 2164	0.22	100%	\$ 1,432,000	\$ 1,432,000
	C-23	PA (1/3)	US 77	RINEY TO WINDSOR	0.46	100%	\$ 2,819,000	\$ 2,819,000
	C-24	PA (1/3)	US 77	RINEY TO RINEY	0.40	100%	\$ 2,075,000	\$ 2,075,000
	C-25	PA (1/3)	US 77	BONNIE BRAE TO RINEY	0.75	100%	\$ 3,126,000	\$ 3,126,000
	C-26	PA (1/3)	US 77	LOOP 288 TO BONNIE BRAE	0.33	100%	\$ 1,859,000	\$ 1,859,000
	C-27	PA (1/3)	US 77	IH 35 TO LOOP 288	0.87	100%	\$ 4,739,000	\$ 4,739,000
	C-28	C	MASCH BRANCH-NAIL	MASCH BRANCH TO 1295' W OF MASCH BRANCH	0.25	100%	\$ 2,094,000	\$ 2,094,000
	C-29	C	MASCH BRANCH-NAIL	1050' E OF LOOP 288 TO 1550' W OF LOOP 288	0.49	100%	\$ 4,450,000	\$ 4,450,000
	C-30	C	MASCH BRANCH-NAIL	1335' W OF THOMAS J EGAN TO 775' E OF C WOLFE	0.48	100%	\$ 4,379,000	\$ 4,379,000
	C-31	C	MASCH BRANCH-NAIL	775' E OF C WOLFE TO 690' W OF C WOLFE	0.28	50%	\$ 2,092,000	\$ 1,046,000
	C-32	C	MASCH BRANCH-NAIL	690' W OF C WOLFE TO NAIL	0.58	100%	\$ 4,376,000	\$ 4,376,000
	C-33	SA	WESTGATE	WESTGATE TO 1460' E OF IH-35	0.18	100%	\$ 2,336,000	\$ 2,336,000
	C-34	SA	WINDSOR	US 77 TO HINKLE	0.46	100%	\$ 6,912,000	\$ 6,912,000
	C-35	SA (1/2)	WINDSOR	HINKLE TO BONNIE BRAE	0.99	100%	\$ 6,972,000	\$ 6,972,000
	C-36	SA (1/2)	WINDSOR	WESTGATE TO 145' W OF CLARENDON	0.10	100%	\$ 649,000	\$ 649,000
	C-37	SA (1/2)	WINDSOR	220' W OF WINDSOR FARMS TO IH 35	0.17	100%	\$ 1,162,000	\$ 1,162,000
	C-38	SA	WINDSOR	IH 35 TO MASCH BRANCH	1.24	100%	\$ 17,606,000	\$ 17,606,000
	C-39	SA	BARTHOLD	GANZER TO 2600' S OF GANZER	0.49	100%	\$ 7,425,000	\$ 7,425,000
	C-40	PA	BONNIE BRAE	MILAM TO LOOP 288	3.13	100%	\$ 52,065,000	\$ 52,065,000
	C-41	SA	BONNIE BRAE	LOOP 288 TO US 77	0.24	100%	\$ 3,008,000	\$ 3,008,000
	C-42	SA	BONNIE BRAE	US 77 TO RINEY	0.38	100%	\$ 6,587,000	\$ 6,587,000
	C-43	SA	BONNIE BRAE	RINEY TO WINDSOR	0.66	100%	\$ 10,320,000	\$ 10,320,000
	C-44	SA	BONNIE BRAE	WINDSOR TO US 380	0.68	100%	\$ 11,981,000	\$ 11,981,000
	C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%	\$ 8,310,000	\$ 4,155,000
	C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%	\$ 3,056,000	\$ 1,528,000
	C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%	\$ 3,370,000	\$ 1,685,000
	C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%	\$ 1,087,000	\$ 543,500
	C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%	\$ 4,070,000	\$ 2,035,000
	C-50,E-34	SA	BONNIE BRAE	PRAIRIE TO IH 35E	0.16	50%	\$ 2,457,000	\$ 1,228,500
	C-51	PA	C WOLFE	US 380 TO WESTERN-NAIL	0.51	100%	\$ 8,901,000	\$ 8,901,000
	C-52	C	FALLMEADOW	MEADOWLEDGE TO GARDENVIEW	0.17	100%	\$ 1,303,000	\$ 1,303,000
	C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%	\$ 49,925,000	\$ 24,962,500
	C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%	\$ 6,954,000	\$ 3,477,000
	C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%	\$ 7,433,000	\$ 3,716,500
	C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%	\$ 3,628,000	\$ 1,814,000
	C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%	\$ 3,841,000	\$ 1,920,500
	C-58	SA	LOVERS	FM 1173 TO MASCH BRANCH	0.78	100%	\$ 12,266,000	\$ 12,266,000
	C-59	SA	LOVERS	1085' N OF MASCH BRANCH TO MASCH BRANCH	0.21	100%	\$ 3,349,000	\$ 3,349,000
	C-60	SA	LOVERS LN CONNECTOR	LOVERS TO LOOP 288	0.06	100%	\$ 756,000	\$ 756,000
	C-61	SA	LOVERS LN CONNECTOR	LOOP 288 TO 1085' N OF MASCH BRANCH	0.08	100%	\$ 972,000	\$ 972,000
	C-62	SA	MASCH BRANCH	1295' S OF FM 1173 TO JACKSON	0.79	50%	\$ 11,908,000	\$ 5,954,000
	C-63	SA	MASCH BRANCH	LOVERS TO US 380	0.72	100%	\$ 11,352,000	\$ 11,352,000
	C-64	SA	MASCH BRANCH	US 380 TO JIM CHRISTAL	0.78	100%	\$ 12,137,000	\$ 12,137,000
	C-65	SA	MILAM-LOOP 288	MILAM TO LOOP 288	2.71	100%	\$ 36,182,000	\$ 36,182,000
	C-66	SA	MILAM-US 77	MILAM TO GANZER	1.51	100%	\$ 20,546,000	\$ 20,546,000
	C-67	SA	MILAM-US 77	GANZER TO LONG	0.73	100%	\$ 11,567,000	\$ 11,567,000
	C-68	SA	MILAM-US 77	LONG TO US 77	0.53	100%	\$ 7,359,000	\$ 7,359,000
	C-69	C	NICOSIA	LOOP 288 TO BEALL	0.12	100%	\$ 1,169,000	\$ 1,169,000
	C-70	SA	THOMAS J EGAN	US 380 TO JIM CHRISTAL	0.76	100%	\$ 12,353,000	\$ 12,353,000
	C-71	PA	WESTERN	US 380 TO JIM CHRISTAL	0.80	100%	\$ 14,699,000	\$ 14,699,000
							Service Area Project Cost Subtotal	\$ 587,514,000
							2022 Roadway Impact Fee Study Cost Per Service Area	\$ 37,660
							Total Cost in SERVICE AREA C	\$ 587,551,660

- These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of Denton.
- 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 5.D – 10-Year Roadway Impact Fee CIP
with Conceptual Level Cost Projections – Service Area D**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA D	D-1	SA	BOBCAT	560' W OF FM 2164 TO FM 2164	0.11	50%	\$ 1,601,000	\$ 800,500
	D-2	C	FISHTRAP	MINGO TO GEESLING	0.36	50%	\$ 2,939,000	\$ 1,469,500
	D-3	PA	GANZER	15,500' E OF SHERMAN TO 4600' W OF SHERMAN	3.41	100%	\$ 53,936,000	\$ 53,936,000
	D-4	SA	GRIBBLE SPRINGS	INDIAN WELLS TO 3015' W OF INDIAN WELLS	0.57	50%	\$ 8,861,000	\$ 4,430,500
	D-5	SA	HARTLEE FIELD	4220' E OF COOPER CREEK TO COOPER CREEK	0.80	50%	\$ 12,051,000	\$ 6,025,500
	D-6	SA	HARTLEE FIELD	COOPER CREEK TO 5170' W OF COOPER CREEK	0.98	50%	\$ 14,764,000	\$ 7,382,000
	D-7	C	HARTLEE FIELD	600' E OF SHERMAN TO SHERMAN	0.11	50%	\$ 855,000	\$ 427,500
	D-8	SA	HARTLEE FLD-FM 2164	HARTLEE FIELD TO SHERMAN	0.43	100%	\$ 5,392,000	\$ 5,392,000
	D-9	SA	HARTLEE FLD-FM 2164	SHERMAN TO 3500' W OF SHERMAN	0.66	100%	\$ 8,386,000	\$ 8,386,000
	D-10	SA	HARTLEE FLD-FM 2164	STUART TO 1485' W OF STUART	0.28	50%	\$ 3,809,000	\$ 1,904,500
	D-11	SA	HARTLEE FLD-FM 2164	475' W OF FM 2164 TO FM 2164	0.09	100%	\$ 1,139,000	\$ 1,139,000
	D-12	C	LONG	510' W OF FM 2164 TO FM 2164	0.10	100%	\$ 726,000	\$ 726,000
	D-13	SA	MINGO	E CITY LIMITS TO COOPER CREEK	0.09	100%	\$ 1,315,000	\$ 1,315,000
	D-14	SA	MINGO	COOPER CREEK TO LOOP 288	0.44	100%	\$ 6,583,000	\$ 6,583,000
	D-15	SA	MINGO	LOOP 288 TO US 380	0.43	100%	\$ 7,937,000	\$ 7,937,000
	D-16	C	KINGS ROW	SILVER DOME TO LOOP 288	0.50	100%	\$ 3,779,000	\$ 3,779,000
	D-17	C	SILVER DOME	COOPER CREEK TO FARRIS RD	0.41	50%	\$ 3,117,000	\$ 1,558,500
	D-18	C	COLLINS	HARTLEE FIELD TO 2730' S OF HARTLEE FIELD	0.84	50%	\$ 6,818,000	\$ 3,409,000
	D-19	SA	COOPER CREEK	SHERMAN TO HARTLEE FIELD	1.91	100%	\$ 25,554,000	\$ 25,554,000
	D-20	SA	COOPER CREEK	SILVER DOME TO MINGO	0.83	50%	\$ 12,452,000	\$ 6,226,000
	D-21	PA	COOPER CREEK	MINGO TO US 380	0.32	100%	\$ 7,361,000	\$ 7,361,000
	C-53,D-22	PA	FM 2164	MILAM TO LOOP 288	2.62	50%	\$ 49,925,000	\$ 24,962,500
	D-23	PA	GREEN VALLEY	2395' S OF FM 2153 TO 2935' N OF SHEPARD	1.47	100%	\$ 24,463,000	\$ 24,463,000
	D-24	SA	GREEN VALLEY	WARSCHUN TO SHERMAN	0.40	100%	\$ 6,234,000	\$ 6,234,000
	D-25	SA	INDIAN WELLS	1615' S OF FM 2153 TO 4930' N OF GRIBBLE SPRINGS	0.73	100%	\$ 10,021,000	\$ 10,021,000
	D-26	SA	INDIAN WELLS	4930' N OF GRIBBLE SPRINGS TO 2905' N OF GRIBBLE SPRINGS	0.38	50%	\$ 4,853,000	\$ 2,426,500
	D-27	SA	INDIAN WELLS	2905' N OF GRIBBLE SPRINGS TO GRIBBLE SPRINGS	0.55	50%	\$ 8,296,000	\$ 4,148,000
	C-54,D-28	SA	LOCUST	LOOP 288 TO HERCULES	0.43	50%	\$ 6,954,000	\$ 3,477,000
	C-55,D-29	SA	LOCUST	HERCULES TO BELL	0.45	50%	\$ 7,433,000	\$ 3,716,500
	C-56,D-30	SA	LOCUST	BELL TO WINDSOR	0.24	50%	\$ 3,628,000	\$ 1,814,000
	C-57,D-31	SA	LOCUST	WINDSOR TO FM 2164	0.25	50%	\$ 3,841,000	\$ 1,920,500
	D-32	SA	SHERMAN	LOOP 288 TO HERCULES	0.31	100%	\$ 4,713,000	\$ 4,713,000
	D-33	SA	SHERMAN	HERCULES TO KINGS	0.36	100%	\$ 5,455,000	\$ 5,455,000
	D-34	SA	SHERMAN	KINGS TO WINDSOR	0.38	100%	\$ 7,223,000	\$ 7,223,000
	D-35	SA	SHERMAN	WINDSOR TO WILSONWOOD	0.19	100%	\$ 2,856,000	\$ 2,856,000
	D-36	SA	SHERMAN	WILSONWOOD TO CORONADO	0.22	100%	\$ 3,328,000	\$ 3,328,000
	D-37	SA	SHERMAN	CORONADO TO GREENWOOD	0.31	100%	\$ 4,685,000	\$ 4,685,000
	D-38	SA	SHERMAN	GREENWOOD TO BELL	0.16	100%	\$ 2,357,000	\$ 2,357,000
	D-39	SA	SHERMAN	BELL TO LOCUST	0.32	100%	\$ 4,899,000	\$ 4,899,000
	D-40	C	WINDSOR	LOOP 288 TO DOMINION	0.16	100%	\$ 1,225,000	\$ 1,225,000
Service Area Project Cost Subtotal							\$ 275,665,500	
2022 Roadway Impact Fee Study Cost Per Service Area							\$ 37,660	
Total Cost in SERVICE AREA D							\$ 275,703,160	

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

**Table 5.E – 10-Year Roadway Impact Fee CIP
with Conceptual Level Cost Projections – Service Area E**

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA E	E-1	C	AUDRA	LOOP 288 TO 1185' W OF LOOP 288	0.22	100%	\$ 1,687,000	\$ 1,687,000
	E-2	SA	BLAGG	LAKEVIEW TO GEESLING	0.71	100%	\$ 11,181,000	\$ 11,181,000
	E-3	SA	BLAGG	GEESLING TO 2175' W OF GEESLING	0.41	100%	\$ 7,651,000	\$ 7,651,000
	E-4	SA	BLAGG	235' E OF MAYHILL TO MAYHILL	0.04	50%	\$ 563,000	\$ 281,500
	E-5	PA (1/3)	DALLAS	TEASLEY TO IH 35E	0.87	100%	\$ 3,624,000	\$ 3,624,000
	E-6	C	DUCHES	TRAILHEAD TO WOODROW	0.76	100%	\$ 5,949,000	\$ 5,949,000
	E-7	SA	FM 426	LANEY TO GRISSOM	0.57	100%	\$ 9,953,000	\$ 9,953,000
	E-8	Completed	MCKINNEY	GRISSOM TO LOOP 288	1.65	100%	\$ 1,551,000	\$ 1,551,000
	E-9	SA	MCKINNEY	LOOP 288 TO CARDINAL	0.13	100%	\$ 1,914,000	\$ 1,914,000
	E-10	SA	MCKINNEY	CARDINAL TO MOCKINGBIRD	0.22	100%	\$ 3,270,000	\$ 3,270,000
	E-11	SA	MCKINNEY	MOCKINGBIRD TO MACK	0.61	100%	\$ 9,268,000	\$ 9,268,000
	E-12	SA	MCKINNEY	MACK TO AUDRA	0.29	100%	\$ 4,399,000	\$ 4,399,000
	E-13	SA	MILLS	TRINITY TO MAYHILL	1.40	100%	\$ 23,115,000	\$ 23,115,000
	E-14	SA	MILLS	LAKEVIEW TO MAYHILL	0.41	100%	\$ 5,235,000	\$ 5,235,000
	E-15	SA	MINGO	US 380 TO OLD NORTH	0.14	100%	\$ 2,172,000	\$ 2,172,000
	E-16	SA	MINGO	OLD NORTH TO NOTTINGHAM	0.48	100%	\$ 7,268,000	\$ 7,268,000
	E-17	SA	MINGO	NOTTINGHAM TO PERTAIN	0.56	100%	\$ 8,381,000	\$ 8,381,000
	E-18	SA	MINGO	PERTAIN TO RUDDLELL	0.18	100%	\$ 2,700,000	\$ 2,700,000
	E-19	SA	MINGO	RUDDLELL TO WILLIS	0.11	100%	\$ 1,714,000	\$ 1,714,000
	E-20	SA	MINGO	WILLIS TO WITHERS	0.44	100%	\$ 6,583,000	\$ 6,583,000
	E-21	SA	MINGO	WITHERS TO PAISLEY	0.04	100%	\$ 671,000	\$ 671,000
	E-22	SA	MINGO	PAISLEY TO BELL	0.19	100%	\$ 2,813,000	\$ 2,813,000
	E-23	SA (1/2)	MORSE	MAYHILL TO KIMBERLY	0.22	100%	\$ 1,969,000	\$ 1,969,000
	E-24	SA	SHADY OAKS	WOODROW TO TEASLEY	0.58	100%	\$ 9,967,000	\$ 9,967,000
	E-25	SA	SPENCER	MAYHILL TO LOOP 288	0.44	100%	\$ 6,862,000	\$ 6,862,000
	E-26	C	TREATMENT PLANT	MCKINNEY TO POST OAK	0.63	100%	\$ 4,731,000	\$ 4,731,000
	E-27	SA	TREATMENT PLANT	POST OAK TO 1325' W OF POST OAK	0.25	100%	\$ 5,015,000	\$ 5,015,000
	E-28	SA	TREATMENT PLANT	1325' W OF POST OAK TO MAYHILL	0.75	100%	\$ 11,310,000	\$ 11,310,000
	C-45,E-29	SA	BONNIE BRAE	US 380 TO PANHANDLE	0.55	50%	\$ 8,310,000	\$ 4,155,000
	C-46,E-30	SA	BONNIE BRAE	PANHANDLE TO SCRIPTURE	0.20	50%	\$ 3,056,000	\$ 1,528,000
	C-47,E-31	SA	BONNIE BRAE	SCRIPTURE TO OAK	0.22	50%	\$ 3,370,000	\$ 1,685,000
	C-48,E-32	SA	BONNIE BRAE	OAK TO HICKORY	0.07	50%	\$ 1,087,000	\$ 543,500
	C-49,E-33	SA	BONNIE BRAE	HICKORY TO PRAIRIE	0.27	50%	\$ 4,070,000	\$ 2,035,000
	C-50,E-34	SA	BONNIE BRAE	PAIRIE TO IH 35E	0.16	50%	\$ 2,457,000	\$ 1,228,500
	E-35	C	CARDINAL	ORIOLE TO MCKINNEY	0.42	100%	\$ 3,167,000	\$ 3,167,000
	E-36	PA	GEESLING	US 380 TO BLAGG	0.46	100%	\$ 8,237,000	\$ 8,237,000
	E-37	PA	GEESLING	US 380 TO BLAGG	1.02	100%	\$ 18,210,000	\$ 18,210,000
	E-38	PA (1/3)	LAKEVIEW	POST OAK TO SHADY SHORES	0.26	100%	\$ 2,294,000	\$ 2,294,000
	E-39	PA (1/3)	MAYHILL	US 380 TO PROMINENCE	0.44	100%	\$ 2,467,000	\$ 2,467,000
	E-40	PA (1/3)	MAYHILL	PROMINENCE TO 770' N OF RUSSELL NEWMAN	0.39	100%	\$ 2,155,000	\$ 2,155,000
	E-41	PA (1/3)	MAYHILL	770' N OF RUSSELL NEWMAN TO RUSSELL NEWMAN	0.15	50%	\$ 819,000	\$ 409,500
	E-42	PA (1/3)	MAYHILL	RUSSELL NEWMAN TO 460' S OF RUSSELL NEWMAN	0.09	50%	\$ 487,000	\$ 243,500
	E-43	PA (1/3)	MAYHILL	460' S OF RUSSELL NEWMAN TO MILLS	0.20	100%	\$ 1,142,000	\$ 1,142,000
	E-44	PA (1/3)	MAYHILL	MILLS TO MCKINNEY	0.37	100%	\$ 2,066,000	\$ 2,066,000
	E-45	PA (1/3)	MAYHILL	MCKINNEY TO MORSE	0.39	100%	\$ 2,161,000	\$ 2,161,000
	E-46	PA (1/3)	MAYHILL	MORSE TO SPENCER	0.67	100%	\$ 3,717,000	\$ 3,717,000
	E-47	PA (1/3)	MAYHILL	SPENCER TO EDWARDS	0.60	100%	\$ 3,864,000	\$ 3,864,000
	E-48	PA (1/3)	MAYHILL	2725' N OF COLORADO TO COLORADO	0.52	100%	\$ 4,477,000	\$ 4,477,000
	E-49	PA (1/3)	MAYHILL	COLORADO TO IH 35E	0.44	100%	\$ 1,840,000	\$ 1,840,000
	E-50	PA	MAYHILL CONNECTOR	MAYHILL TO QUAILCREEK	0.13	100%	\$ 2,071,000	\$ 2,071,000
	E-51	C	MOCKINGBIRD	MCKINNEY TO 625' N OF DUCHES	0.16	100%	\$ 1,217,000	\$ 1,217,000
	E-52	SA	MOCKINGBIRD	DUCHES TO SHADY OAKS	0.41	100%	\$ 7,039,000	\$ 7,039,000
	E-53	SA	MOCKINGBIRD	SHADY OAKS TO SPENCER	0.53	100%	\$ 6,721,000	\$ 6,721,000
	E-54	PA	POST OAK	MILLS TO SPENCER	1.30	100%	\$ 20,228,000	\$ 20,228,000
	E-55	PA	POST OAK	TREATMENT PLANT TO EDWARDS	1.27	100%	\$ 21,525,000	\$ 21,525,000
	E-56	PA	POST OAK	EDWARDS TO POKRUS PAGE	0.51	100%	\$ 8,015,000	\$ 8,015,000
	E-57	C	SWISHER	EDWARDS TO POKRUS PAGE	0.50	100%	\$ 3,750,000	\$ 3,750,000
	E-58	PA (1/3)	TEASLEY	DALLAS TO IH 35E	0.35	100%	\$ 2,077,000	\$ 2,077,000
	E-59	C	N STAR	SPENCER TO ROY	0.32	100%	\$ 2,427,000	\$ 2,427,000
	E-60	C	ROY	MAYHILL TO N STAR	0.21	100%	\$ 1,594,000	\$ 1,594,000
	Service Area Project Cost Subtotal							\$ 305,523,500
	2022 Roadway Impact Fee Study Cost Per Service Area							\$ 37,660
	Total Cost in SERVICE AREA E							\$ 305,561,160

- These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Projects within the City of Denton.
- 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 Denton's Roadway Impact Fees is the vehicle-mile of travel during the afternoon peak-hour (as explained on Pg. 20). 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 2022 to 2032 is based upon projected changes in residential units and employment for the period. In order to determine this growth, estimates of residential units, basic employment, service employment, and retail employment for 2022 were made, along with growth projections for each of these demographic statistics through 2032. 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 employment. 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 employment land uses, the process is similar. The Land Use Assumptions section of this report provides existing and projected number of building square footages for three (3) categories of employment – basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the North American Industrial Classification System (NAICS).

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*. This characteristic is more appropriate than the number of employees, because building square footage is tied more closely to trip generation and is known at the time of application for any development that would require the assessment of an impact fee.

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

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 11th Edition* and the National Household Travel Survey performed by the FHWA. The *ITE Trip Generation Manual, 11th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips.

The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the National Household Travel Survey conducted by the Federal Highway Administration (FHWA).

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

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

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

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 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 Denton 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 Denton 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.

Table 6 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 6. Transportation Demand Factor Calculations

Variable	Single Family	Multi-Family	Basic	Service	Retail
T	0.94	0.51	0.65	1.44	5.19
P_b	0%	0%	0%	0%	34%
L	9.79	9.79	10.02	14.65	5.60
L_{max} *	4.90	4.90	5.01	6.00	2.80
TDF	4.61	2.50	3.26	8.64	9.60
* 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 7**. This table shows the total vehicle-miles by service area for the years 2022 and 2032. These estimates and projections lead to the Vehicle-Miles of Travel for both 2022 and 2032.

Table 7. 10-Year Growth Projections

2022 - 2032 Growth Projections¹

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			EMPLOYMENT SQUARE FEET ⁴			TRANS. DEMAND FACTOR ⁵			EMPLOYMENT VEHICLE-MILES ⁹			TOTAL VEHICLE MILES ¹⁰
	Single Family Units	Trip Rate TDF ²	VEHICLE MILES ³	Multi-Family Units	Trip Rate TDF ²	VEHICLE MILES ³	BASIC	SERVICE	RETAIL	BASIC	SERVICE	RETAIL	
A	3,212	0.94	14,807	970	0.51	2,425	2,843,000	591,000	871,000	0.65	1.44	5.19	39,968
B	2,009		9,261	387		968	415,000	238,000	285,000				16,374
C	1,538	4.61	7,090	1,015	2.50	2,538	3,518,000	689,000	446,000	3.26	8.64	9.60	31,332
D	847		3,905	215		538	815,000	206,000	287,000				11,634
E	1,219		5,620	1,291		3,228	1,831,000	519,000	505,000				24,148
Totals	8,825		40,683	3,878		9,695	9,422,000	2,243,000	2,394,000	30,716	19,379	22,983	123,456

VEHICLE-MILES OF INCREASE (2022 - 2032)

SERVICE AREA	VEH-MILES
A	39,968
B	16,374
C	31,332
D	11,634
E	24,148

Notes:

- ¹ From City of Denton 2022 Land Use Assumptions for Roadway Impact Fees
- ² Transportation Demand Factor for each Service Area (from LUMMET) using Single Family Detached Housing land use and trip generation rate
- ³ Calculated by multiplying TDF by the number of dwelling units
- ⁴ From City of Denton 2022 Land Use Assumptions for Roadway Impact Fees
- ⁵ Trip generation rate and Transportation Demand Factors from LUMMET for each land use
- ⁶ 'Basic' corresponds to General Light Industrial land use and trip generation rate
- ⁷ 'Service' corresponds to General Office land use and trip generation rate
- ⁸ 'Retail' corresponds to Shopping Plaza (40-150k) land use and trip generation rate
- ⁹ Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
- ¹⁰ Residential plus Employment vehicle-mile totals for each Service Area

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 Roadway Impact Fee CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 8** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation. The calculation of the maximum assessable impact fee is shown in **Table 9**. Each row in the table is numbered to simplify explanation of the calculation.

Table 8. Maximum Assessable Roadway Impact Fee Computation

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

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

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

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

4	<i>Net Amount of Vehicle-Miles of Capacity Added</i>	A measurement of the amount of vehicle-miles added by the Roadway Impact Fee CIP that will not be utilized by existing demand (Line 1 – Line 2 – Line 3)
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This calculation identifies the portion of the Roadway Impact Fee 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 projects within each service area (from Table 5: 10-Year Roadway Impact Fee Capital Improvements Plan with Conceptual Level Cost Opinions)
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This line simply identifies the total cost of all of the 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). $[(\text{Line 4} / \text{Line 1}) * (\text{Line 5})]$
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Using the ratio of vehicle-miles added by the Roadway Impact Fee CIP available to serve future growth to the total vehicle-miles added, the total cost of the CIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	<i>Cost to Meet Existing Needs and Usage</i>	The difference between the Total Cost of the Roadway Impact Fee CIP (Line 5) and the Cost of the Net Capacity supplied (Line 6). (Line 5 – Line 6)
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This line is provided for information purposes only – it is to present the portion of the total cost of the Roadway Impact Fee CIP that is required to meet existing demand.

8	<i>Total Vehicle-Miles of New Demand over Ten Years</i>	Based upon the growth projection provided in the Land Use Assumptions , an estimate of the number of new vehicle-miles within the service area over the next ten years. (from Table 7)
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This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

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

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

11	<i>Cost of Roadway Impact Fee CIP Attributable to New Growth</i>	The result of multiplying the Cost of Net Capacity Added (Line 6) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (Line 9).
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This value is the total Roadway Impact Fee CIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

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 capital improvements plan; or
- (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan...”

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

Line	Title	Description
12	<i>Financing Costs</i>	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
13	<i>Interest Earnings</i>	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
14	<i>Existing Impact Fee Fund Balance</i>	(from Appendix D – Plan for Awarding the Transportation Impact Fee Credit)
15	<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 11 + Line 12 + Line 13 – Line 14)
16	<i>Pre-Credit Maximum Fee Per Service Unit</i>	Found by dividing the Cost of the TIP and Financing Attributable to New Growth (Line 15) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 15 / Line 8)
17	<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 Transportation Impact Fee Credit)
18	<i>Recoverable Cost of the Roadway Impact Fee CIP and Financing</i>	The difference between the Cost of the TIP and Financing Attributable to New Growth (Line 15) and the Credit for Ad Valorem Taxes (Line 17). (Line 15 + Line 17)
19	<i>Maximum Assessable Fee Per Service Unit</i>	Found by dividing the Recoverable Cost of the TIP and Financing (Line 18) by the Total Vehicle-Miles of New Demand Over Ten Years (Line 8). (Line 18 / 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. 80% debt / 20% 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 Capital Improvements Advisory Committee (CIAC) 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 11) 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, it is assumed that the City will debt finance 80% of the future project costs and cash finance 20%. For debt financing, the cost of financing is based on the City staff's estimates of future debt costs for bonds issued with 20-

year terms, as shown in **Appendix D**. 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 3-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 years 8, 9, and 10 are assumed to be spent in the final 3 years.

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 2.00% based on discussions with City staff.

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 Roadway Impact Fee CIP. As an alternative, a credit equal to 50% of the total cost of implementing the Roadway Impact Fee CIP may be used. The City has elected to pursue the determination of a credit for the portion of ad valorem tax revenues generated by new service units during the program

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

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

The following summarizes the financial model's determination of the maximum assessable impact fee:

- Recoverable Impact Fee Transportation Improvements Costs (**Table 8**, line 11)
- Plus: Financing Costs (**Table 8**, line 12)
- Less: Interest Earnings (**Table 8**, line 13)
- Pre-Credit Recoverable Costs for Impact Fee (**Table 8**, line 15)
- Less: Credit for Ad Valorem Revenues (**Table 8**, line 17)
- Maximum Recoverable Costs for Impact Fee (**Table 8**, line 18)

Table 9. Maximum Assessable Roadway Impact Fee

SERVICE AREA:		A	B	C	D	E
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B) ^a	120,658	89,974	145,092	61,918	92,971
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, APPENDIX B)	8,471	29,557	11,526	11,586	23,997
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, APPENDIX C)	1,348	22,182	2,406	8,418	7,367
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	110,839	38,235	131,160	41,914	61,607
5	TOTAL COST OF THE ROADWAY IMPACT FEE CIP AND STUDY WITHIN SERVICE AREA (FROM TABLES 5A TO 5E)	\$ 268,239,160	\$ 290,253,660	\$ 587,551,660	\$ 275,703,160	\$ 305,561,160
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	\$ 246,410,186	\$ 123,345,063	\$ 531,133,872	\$ 186,631,064	\$ 202,479,336
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	\$ 21,828,974	\$ 166,908,597	\$ 56,417,788	\$ 89,072,096	\$ 103,081,824
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 7 AND LAND USE ASSUMPTIONS)	39,968	16,374	31,332	11,634	24,148
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	36.0%	42.8%	23.8%	27.7%	39.1%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	36.0%	42.8%	23.8%	27.7%	39.1%
11	COST OF ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	\$ 88,707,667	\$ 52,791,687	\$ 126,409,862	\$ 51,696,805	\$79,169,420
12	FINANCING COSTS (FROM APPENDIX D)	\$ 43,092,001	\$ 24,683,794	\$ 61,414,578	\$ 25,105,399	\$ 38,714,769
13	INTEREST EARNINGS (FROM APPENDIX D)	\$ (21,126,791)	\$ (12,622,463)	\$ (30,142,851)	\$ (12,702,369)	\$ (19,534,195)
14	EXISTING IMPACT FEE FUND BALANCE	\$ 4,394,807	\$ 2,004,188	\$ 3,170,473	\$ 1,685,562	\$ 4,840,794
15	COST OF THE ROADWAY IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO NEW GROWTH (LINE 11 + LINE 12 + LINE 13 - LINE 14)	\$ 106,278,070	\$ 62,848,830	\$ 154,511,115	\$ 62,414,273	\$ 93,509,199
16	PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 15 / LINE 8)	\$ 2,659	\$ 3,838	\$ 4,931	\$ 5,365	\$ 3,872
17	CREDIT FOR AD VALOREM TAXES (FROM APPENDIX D)	\$ (6,535,564)	\$ (1,580,744)	\$ (7,396,751)	\$ (1,157,132)	\$ (3,628,065)
18	RECOVERABLE COST OF ROADWAY IMPACT FEE CIP AND FINANCING (LINE 15 + LINE 17)	\$ 99,742,506	\$ 61,268,086	\$ 147,114,364	\$ 61,257,141	\$ 89,881,134
19	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 18 / LINE 8)	\$ 2,496	\$ 3,742	\$ 4,695	\$ 5,265	\$ 3,722

- a. For Service Areas A and B, the Total Vehicle-Miles of Capacity Added by the Roadway Impact Fee CIP includes capacity added by select thoroughfares that will be built by developments without City cost participation, in addition to capacity added by the Roadway Impact Fee CIP. Detailed information for these additional facilities is provided in **Appendix B**.

D. Service Unit Demand Per Unit of Development

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

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

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on 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 10 - Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Intermodal Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.02	50%	5.01	5.01	9.37
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.65			0.65	10.02	50%	5.01	5.01	3.26
Industrial Park	130	1,000 SF GFA	0.34			0.34	10.02	50%	5.01	5.01	1.70
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Residential Condominium/Townhome	230	Dwelling Unit	0.36			0.36	9.79	50%	4.90	4.90	1.76
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	Beds	0.24			0.24	9.79	50%	4.90	4.90	1.18
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.21	3.21	1.89
Motel	320	Room	0.36			0.36	6.43	50%	3.21	3.21	1.16
RECREATIONAL											
Golf Driving Range	432	Tees/Driving Positions	1.25			1.25	7.86	50%	3.93	3.93	4.91
Golf Course	430	Acre	0.28			0.28	7.86	50%	3.93	3.93	1.10
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.93	9.83
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	7.86	50%	3.93	3.93	5.23
Miniature Golf Course	431	Holes	0.33			0.33	7.86	50%	3.93	3.93	1.30
Multiplex Movie Theater	445	Movie Screens	13.96			13.96	15.77	50%	7.88	6.00	83.76
Racquet / Tennis Club	491	Tennis Court	3.82			3.82	7.86	50%	3.93	3.93	15.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.15	4.15	2.03
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.74	1.74	10.84
Elementary School	520	Students	0.16			0.16	3.49	50%	1.74	1.74	0.28
Middle School/Junior High School	522	Students	0.15			0.15	3.49	50%	1.74	1.74	0.26
High School	530	Students	0.14			0.14	3.49	50%	1.74	1.74	0.24
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	5.22	0.57
University / College	550	Students	0.15			0.15	10.44	50%	5.22	5.22	0.78
MEDICAL											
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.92	4.92	18.15
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.92	4.92	4.23
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.92	4.92	0.69
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	9.85	50%	4.92	4.92	12.15
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80
General Office Building	710	1,000 SF GFA	1.44			1.44	14.65	50%	7.32	6.00	8.64
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.92	4.92	19.34
Single Tenant Office Building	715	1,000 SF GFA	1.76			1.76	14.65	50%	7.32	6.00	10.56
Office Park	750	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80

Key to Sources of Pass-by Rates:

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

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

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

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

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.22	2.22	4.15
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.22	2.22	6.19
Gasoline/Service Station	944	Vehicle Fueling Position	13.91	42%	A	8.07	1.20	50%	0.60	0.60	4.84
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	18.42	56%	B	8.10	1.20	50%	0.60	0.60	4.86
New Car Sales	841	1,000 SF GFA	2.42	20%	B	1.94	5.60	50%	2.80	2.80	5.43
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.22	2.22	6.46
Self-Service Car Wash	947	Wash Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.75	28%	A	2.70	4.45	50%	2.22	2.22	5.99
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.03	50%	A	16.52	5.64	50%	2.82	2.82	46.59
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	33.21	50%	B	16.61	5.64	50%	2.82	2.82	46.84
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.05	43%	A	5.16	5.64	50%	2.82	2.82	14.55
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	5.64	50%	2.82	2.82	12.32
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	38.99	70%	A	11.70	5.64	50%	2.82	2.82	32.99
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.83	30%	C	3.38	5.60	50%	2.80	2.80	9.46
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.61
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	5.60	50%	2.80	2.80	3.39
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.29	49%	A	5.25	5.60	50%	2.80	2.80	14.70
Shopping Center (>150k)	820	1,000 SF GLA	3.40	34%	A	2.24	5.60	50%	2.80	2.80	6.27
Shopping Plaza (40-150k)	821	1,000 SF GLA	5.19	34%	A	3.43	5.60	50%	2.80	2.80	9.60
Strip Retail Plaza (<40k)	822	1,000 SF GLA	6.59	34%	A	4.35	5.60	50%	2.80	2.80	12.18
Supermarket	850	1,000 SF GFA	9.24	36%	A	5.91	5.60	50%	2.80	2.80	16.55
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.84
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.22	2.22	16.16
Drive-In Bank	912	Drive-in Lanes	27.07	47%	A	14.35	4.45	50%	2.22	2.22	31.86
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	6.41	50%	3.20	3.20	3.26

Key to Sources of Pass-by Rates:

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

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

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

Table 11 - Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
PORT AND TERMINAL		
Intermodal 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
Warehousing	150	Devoted to storage of materials but may have 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
Residential Condominium/Townhome	230	Single-family ownership units that have at least one other single-family owned unit within the same building
Senior Adult Housing-Single-Family	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Multifamily	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	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
Elementary School	520	Serves students who have not yet entered middle or junior high school
Middle School/Junior High School	522	Serves students who have completed elementary school but have not yet entered high school
High School	530	Serves students who have completed middle or junior high school
Junior / Community College	540	Higher education campus providing undergraduate degrees, often focused on local students
University / College	550	Higher education campus providing undergraduate and graduate degrees
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 1 (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	945	Gasoline sales with convenience store 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 without a drive-thru window
High Turnover (Sit-Down) Restaurant	932	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
Quality Restaurant	931	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Coffee/Donut Shop with Drive-Thru Window	937	Restaurants that specialize in Coffee and/or Donuts with a drive-thru window
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 (>150k)	820	Integrated group of commercial establishments; planning, owned, and managed as a unit. >150k sq. ft.
Shopping Plaza (40-150k)	821	Integrated group of commercial establishments; planning, owned, and managed as a unit. 40-150k sq. ft.
Strip Retail Plaza (<40k)	822	Integrated group of commercial establishments; planning, owned, and managed as a unit. <40k sq. ft.
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 a part of a 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 10 [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: 4.61
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	<i>From Table 9, Line 14 [Maximum Assessable Fee Per Service Unit]</i> Service Area A: \$2,496
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 * 4.61 * \$2,496 Maximum Assessable Impact Fee = \$11,507

Example 2:

Development Type – 125,000 square foot Home Improvement Superstore in Service Area D

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 10 [Land Use – Vehicle-Mile Equivalency Table]</i> Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.39
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)
	<i>From Table 9, Line 14 [Maximum Assessable Fee Per Service Unit]</i> Service Area D: \$5,265
Step 3	Determine Maximum Assessable Impact Fee
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 125 * 3.39 * \$5,265 Maximum Assessable Impact Fee = \$2,231,044

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 Improvement 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 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 first public hearing on the Land Use Assumptions and Roadway Impact Fee CIP and a second public hearing on the Roadway Impact Fee Ordinance.

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

B. Collection and Use of Transportation 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 Denton 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 Denton, as shown in the previously referenced **Table 9**.

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

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

Below is the listing of the 2022 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile):

SERVICE AREA:	A	B	C	D	E
2022 Roadway Impact Fee Study Maximum Assessable Fee Per Vehicle-Mile	\$2,496	\$3,742	\$4,695	\$5,265	\$3,722

APPENDICES

A. Conceptual Level Project Cost Projections

SERVICE AREA A
SERVICE AREA B
SERVICE AREA C
SERVICE AREA D
SERVICE AREA E
FUNCTIONAL CLASSIFICATION EXAMPLE COSTING SHEETS

B. Roadway Impact Fee CIP Service Units of Supply

C. Existing Roadway Facilities Inventory

D. Plan for Awarding the Transportation Impact Fee Credit Summary

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

F. Consideration for the Hunter Ranch and Cole Ranch Operating Agreements

Appendix A – Conceptual Level Project Cost Projections

City of Denton - 2022 Roadway Impact Fee Study
Service Area A Impact Fee CIP

#	Roadway Name	Limits		Length (Feet)	Costing Classification	Roadway Classification	Roadway Status	Construction Cost		Contingency/ ROW	Engineering/ Survey/S/E	Railroad Crossings	Intersections		Streams/Channel Crossings	Inspection/ Materials Testing	Percent in Service Area	Total Cost	Cost in Service Area
		From	To					Pavement and Allowances	Cost				Total Drainage Cost						
A-1	CORBIN	IH-35W	CORBIN	3,055	SA Recon	SA	Widening	\$ 6,485,996	\$ 973,000	\$ -	\$ 1,538,000	\$ -	\$ -	\$ -	\$ 1,440,000	\$ 227,010	100%	\$ 10,164,000	\$ 10,164,000
A-2	CORBIN	500' S OF SPRINGSIDE	CORBIN	1,410	SA Recon	SA	New	\$ 2,911,383	\$ 371,000	\$ -	\$ 602,000	\$ -	\$ -	\$ -	\$ -	\$ 87,869	100%	\$ 3,379,000	\$ 3,379,000
A-3	FM 1515	IH-35W	CORBIN	5,990	PA Recon	PA	Widening	\$ 15,001,383	\$ 2,251,000	\$ -	\$ 2,401,000	\$ 1,200,000	\$ -	\$ -	\$ 1,755,000	\$ 525,048	100%	\$ 23,533,000	\$ 23,533,000
A-4	FM 1515	WESTERN	WESTERN	1,175	PA Recon	PA	Widening	\$ 2,842,675	\$ 442,000	\$ -	\$ 471,000	\$ -	\$ -	\$ -	\$ -	\$ 102,964	100%	\$ 3,969,000	\$ 3,969,000
A-5	FM 1515	WESTERN	WESTCOURT	1,555	PA Recon	PA	Widening	\$ 3,894,349	\$ 565,000	\$ -	\$ 624,000	\$ -	\$ -	\$ 500,000	\$ -	\$ 136,302	100%	\$ 7,495,000	\$ 7,495,000
A-6	FM 1515	WESTCOURT	MASCH BRANCH	620	PA Recon	PA	Widening	\$ 1,552,731	\$ 233,000	\$ -	\$ 249,000	\$ -	\$ -	\$ -	\$ -	\$ 54,346	100%	\$ 2,089,000	\$ 2,089,000
A-7	FM 1515	TOM COLE	3435' W OF TOM COLE	3,435	PA Recon	PA	Widening	\$ 8,602,629	\$ 1,291,000	\$ -	\$ 1,377,000	\$ -	\$ -	\$ 500,000	\$ -	\$ 301,902	100%	\$ 13,827,000	\$ 13,827,000
A-8	FM 1515	3435' W OF TOM COLE	530' E OF C WOLFE	3,750	PA Recon	PA	Widening	\$ 9,391,517	\$ 1,409,000	\$ -	\$ 1,953,000	\$ -	\$ -	\$ 500,000	\$ -	\$ 328,703	100%	\$ 13,132,000	\$ 13,132,000
A-9	HLIVELY	C WOLFE	2145' W OF H LIVELY	2,145	PA Recon	PA	Widening	\$ 5,371,948	\$ 806,000	\$ -	\$ 860,000	\$ -	\$ -	\$ -	\$ -	\$ 188,018	50%	\$ 7,226,000	\$ 3,613,000
A-10	HLIVELY	2145' W OF H LIVELY	2150' W OF ED ROBSON	3,915	PA Recon	PA	Widening	\$ 9,804,743	\$ 1,471,000	\$ -	\$ 1,569,000	\$ -	\$ -	\$ -	\$ -	\$ 343,166	100%	\$ 13,188,000	\$ 13,188,000
A-11	IH-35-CORBIN	IH-35	CORBIN	4,420	C New	C	New	\$ 4,676,377	\$ 702,000	\$ -	\$ 749,000	\$ -	\$ -	\$ -	\$ 750,000	\$ 163,638	100%	\$ 7,040,000	\$ 7,040,000
A-16 C-13	JIM CHRISTAL	THOMAS J EGAN	515' E OF C WOLFE	3,945	SA Recon	SA	Widening	\$ 8,375,533	\$ 1,257,000	\$ -	\$ 1,341,000	\$ -	\$ -	\$ -	\$ 1,440,000	\$ 293,144	50%	\$ 12,707,000	\$ 6,353,500
A-17	PRECISION-WESTERN	PRECISION	WESTERN	3,420	C New	C	New	\$ 3,617,599	\$ 543,000	\$ -	\$ 579,000	\$ 1,200,000	\$ -	\$ -	\$ 500,000	\$ 126,616	100%	\$ 6,566,000	\$ 6,566,000
A-19	ROBSON RANCH	ED ROBSON	YARBROUGH	7,150	PA Recon	PA	Widening	\$ 17,906,492	\$ 2,886,000	\$ -	\$ 2,886,000	\$ -	\$ -	\$ -	\$ 1,250,000	\$ 625,727	50%	\$ 25,335,000	\$ 12,667,500
A-20	SPRINGSIDE	CORBIN	UNDERWOOD	1,835	SA Recon	SA	Widening	\$ 3,895,844	\$ 585,000	\$ -	\$ 624,000	\$ -	\$ -	\$ 900,000	\$ -	\$ -	100%	\$ 6,141,000	\$ 6,141,000
A-21	SPRINGSIDE	UNDERWOOD	WESTCOURT	865	SA Recon	SA	Widening	\$ 1,836,460	\$ 276,000	\$ -	\$ 284,000	\$ -	\$ -	\$ 500,000	\$ -	\$ 64,276	100%	\$ 2,971,000	\$ 2,971,000
A-22	TJ EGAN-LOOP 288	LOOP 288	2440' W OF LOOP 288	2,440	C New	C	New	\$ 2,680,977	\$ 388,000	\$ -	\$ 413,000	\$ -	\$ -	\$ -	\$ 250,000	\$ 90,334	100%	\$ 3,722,000	\$ 3,722,000
A-23	C WOLFE	1140' S OF TOM COLE	FM 2449	7,270	PA Recon	PA	Widening	\$ 18,207,020	\$ 2,732,000	\$ -	\$ 2,814,000	\$ -	\$ -	\$ 1,000,000	\$ 750,000	\$ 637,246	50%	\$ 26,240,000	\$ 13,120,000
A-24	C WOLFE	FM 2449	HLIVELY	3,315	PA Recon	PA	Widening	\$ 2,302,101	\$ 326,000	\$ -	\$ 1,329,000	\$ -	\$ -	\$ 600,000	\$ 250,000	\$ 290,574	50%	\$ 12,018,000	\$ 6,009,000
A-25	SPRINGSIDE	IH-35-CORBIN	SPRINGSIDE	2,050	C New	C	Widening	\$ 2,168,444	\$ 326,000	\$ -	\$ 347,000	\$ -	\$ -	\$ -	\$ 750,000	\$ 75,896	100%	\$ 3,667,000	\$ 3,667,000
A-26	J CHRISTAL-HLIVELY	FM 2449	HLIVELY	3,305	C New	C	New	\$ 3,495,955	\$ 525,000	\$ -	\$ 560,000	\$ -	\$ -	\$ 400,000	\$ 250,000	\$ 122,358	100%	\$ 5,353,000	\$ 5,353,000
A-27	PRECISION	JIM CHRISTAL	1635' N OF FM 1515	2,395	C New	C	New	\$ 2,527,799	\$ 370,000	\$ -	\$ 404,000	\$ -	\$ -	\$ 300,000	\$ -	\$ 88,298	100%	\$ 3,694,000	\$ 3,694,000
A-31	WESTCOURT	FM 1515	SPRINGSIDE	4,165	SA (1/2)	SA (1/2)	Widening	\$ 3,971,505	\$ 596,000	\$ -	\$ 636,000	\$ -	\$ -	\$ -	\$ -	\$ 139,005	100%	\$ 5,343,000	\$ 5,343,000
A-32	WESTERN	JIM CHRISTAL	AIRPORT	6,485	PA (1/3)	PA (1/3)	Widening	\$ 3,805,620	\$ 571,000	\$ -	\$ 609,000	\$ -	\$ -	\$ 1,500,000	\$ -	\$ 133,197	100%	\$ 6,619,000	\$ 6,619,000
A-33	WESTERN	FM 1515	SPRINGSIDE	4,175	PA New	PA	New	\$ 9,173,469	\$ 1,317,000	\$ -	\$ 1,469,000	\$ -	\$ -	\$ -	\$ 1,755,000	\$ 321,262	100%	\$ 14,102,000	\$ 14,102,000
TOTAL								\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$ 347,875,000	\$ 265,291,500

City of Denton - 2022 Roadway Impact Fee Study
Service Area B Impact Fee CIP

#	Roadway Name	Limits		Length (ft)	Roadway Classification	Roadway Status	Construction Cost		Congestion/ ROW	Engineering/ Survey/STE	Railroad Crossings		Intersections		Streams/Chamne Total Drainage Cost	Inspection/ Materials Testing 3.5%	Previous City Contribution	Percent in Service Area	Total Cost	Cost in Service Area
		From	To				Pavement and Allowances	Cost			Cost	Cost								
B-1	ALLRED	BONNIE BRAE	BRUSH CREEK	4,285	C	Widening	\$ 4,532,577	\$ 680,000	\$ 726,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 158,640	\$ -	\$ 6,097,000	\$ 3,046,500	
B-2	ALLRED	BRUSH CREEK	JOHN PAINE	1,610	C	Widening	\$ 4,032,081	\$ 603,000	\$ 596,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 411,123	\$ -	\$ 5,443,200	\$ 2,712,000	
B-3	BRUSH CREEK	815 W OF COUNTRY CLUB	JOHN PAINE	1,610	PA	Widening	\$ 2,130,000	\$ 210,000	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 272,000	\$ -	\$ 2,402,000	\$ 1,201,000	
B-4	BRUSH CREEK	1935 W OF COUNTRY CLUB	JOHN PAINE	1,935	PA	Widening	\$ 5,656,020	\$ 727,000	\$ 727,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 770,000	\$ -	\$ 6,426,000	\$ 3,213,000	
B-5	BRUSH CREEK	2189 E OF FORT WORTH	FORT WORTH	2,180	PA	Widening	\$ 5,659,602	\$ 819,000	\$ 874,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 109,513	\$ -	\$ 6,759,000	\$ 3,379,500	
B-6	BRUSH CREEK	2189 E OF FORT WORTH	589 E OF ALLRED	3,615	PA	New	\$ 7,948,226	\$ 1,272,000	\$ 1,272,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 278,680	\$ -	\$ 10,688,000	\$ 5,344,000	
B-7	CORBIN	BONNIE BRAE	IH 35W	3,505	SA	Widening	\$ 7,441,380	\$ 1,117,000	\$ 1,191,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 260,448	\$ -	\$ 10,760,000	\$ 5,380,000	
B-8	GRECKDALE	PIMLICO	RIVERCHASE	3,230	C	New	\$ 3,416,621	\$ 513,000	\$ 547,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 119,892	\$ -	\$ 3,536,000	\$ 1,768,000	
B-9	GRECKDALE	THISLE WAY	OAKBLUFF	2,080	C	New	\$ 2,200,177	\$ 331,000	\$ 353,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 77,006	\$ -	\$ 2,277,000	\$ 1,138,500	
B-10	EL PASCO	BELMONT	COUNTRY CLUB	1,910	C	New	\$ 2,020,355	\$ 304,000	\$ 324,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,712	\$ -	\$ 2,091,000	\$ 1,045,500	
B-11	FM 1515	BONNIE BRAE	IH 35W	770	PA	Widening	\$ 1,928,391	\$ 290,000	\$ 309,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 67,384	\$ -	\$ 2,095,000	\$ 1,047,500	
B-12	HICKORY CREEK	FM 2499	NAUTICA	1,175	PA (I/3)	Widening	\$ 689,530	\$ 104,000	\$ 111,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,134	\$ 676,116.28	\$ 1,605,000	\$ 819,000	
B-13	HICKORY CREEK	NAUTICA	TEASLEY	1,310	PA (I/3)	Widening	\$ 768,753	\$ 116,000	\$ 124,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 26,906	\$ 753,787.72	\$ 1,789,000	\$ 894,500	
B-14	HICKORY CREEK	TEASLEY	MONTECITO	4,475	PA (I/3)	Widening	\$ 2,626,083	\$ 384,000	\$ 421,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 91,913	\$ 4,505,033.56	\$ 8,638,000	\$ 4,319,000	
B-15	HICKORY CREEK	MONTECITO	1435 W OF BIDDY BYE	2,230	PA	Widening	\$ 1,308,640	\$ 197,000	\$ 210,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 45,802	\$ 2,244,966.44	\$ 4,006,000	\$ 2,003,000	
B-16	HICKORY CREEK	1435 W OF BIDDY BYE	MONTECITO	1,980	PA	New	\$ 4,853,386	\$ 654,000	\$ 697,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 152,369	\$ -	\$ 7,612,000	\$ 3,806,000	
B-17	HOBSON LANE	TEASLEY	MONTECITO	1,422	SA	Widening	\$ 1,422,461	\$ 214,000	\$ 228,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 49,786	\$ -	\$ 1,914,000	\$ 957,000	
B-18	HOBSON LANE	MONTECITO	FORRESTRIDGE	1,495	SA	Widening	\$ 3,173,998	\$ 477,000	\$ 508,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 111,090	\$ -	\$ 3,685,000	\$ 1,842,500	
B-19	HOBSON LANE	FORRESTRIDGE	COUNTRY CLUB	3,765	SA	Widening	\$ 8,035,841	\$ 1,206,000	\$ 1,286,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 281,254	\$ -	\$ 11,559,000	\$ 5,770,000	
B-20	PARVIN	MCCORMICK	HIGHLAND PARK	2,685	C	New	\$ 1,374,924	\$ 207,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 48,122	\$ -	\$ 1,599,000	\$ 799,500	
B-21	ROBINSON	239 E OF WHEELER RIDGE	TEASLEY	2,735	SA	Widening	\$ 5,936,612	\$ 871,000	\$ 930,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 203,231	\$ -	\$ 8,061,000	\$ 4,061,000	
B-22	RYAN	MONTECITO	FORRESTRIDGE	4,620	SA	Widening	\$ 8,534,764	\$ 1,281,000	\$ 1,368,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 288,137	\$ -	\$ 10,968,000	\$ 5,468,000	
B-23	RYAN	MONTECITO	FORRESTRIDGE	4,620	SA	Widening	\$ 8,534,764	\$ 1,281,000	\$ 1,368,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 288,137	\$ -	\$ 10,968,000	\$ 5,468,000	
B-24	RYAN	FORRESTRIDGE	COUNTRY CLUB	3,425	SA	Widening	\$ 1,107,000	\$ 161,000	\$ 170,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,919	\$ -	\$ 1,278,000	\$ 639,000	
B-25	VINTAGE	FORT WORTH	BONNIE BRAE	4,005	PA (I/3)	Widening	\$ 2,702,371	\$ 408,000	\$ 433,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 94,983	\$ 6,385,003.13	\$ 11,721,000	\$ 11,721,000	
B-26	VINTAGE	NAPA VALLEY	NAPA VALLEY	765	PA (I/3)	Widening	\$ 448,926	\$ 68,000	\$ 72,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,712	\$ 1,060,700.85	\$ 1,665,000	\$ 1,665,000	
B-27	VINTAGE	NAPA VALLEY	IH 35W	3,435	PA (I/3)	Widening	\$ 2,015,775	\$ 303,000	\$ 323,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,552	\$ 4,762,754.78	\$ 7,975,000	\$ 7,975,000	
B-28	WILLOWWOOD	1250 W OF HIGHLAND PARK	BONNIE BRAE	1,285	C	Widening	\$ 1,359,244	\$ 204,000	\$ 218,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,574	\$ -	\$ 2,079,000	\$ 2,079,000	
B-29	BONNIE BRAE	IH 35E	FM 1515	725	SA	Widening	\$ 1,285,335	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,285,000	\$ 1,285,000	\$ 1,285,000	
B-30	BONNIE BRAE	FM 1515	WILLOWWOOD	5,740	SA	Widening	\$ 10,176,311	\$ -	\$ -	\$ 1,175,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,351,000	\$ 11,351,000	
B-31	BONNIE BRAE	HIGHLAND PARK	ROSELAWN	2,550	SA	New	\$ 4,520,835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,520,835	\$ 4,520,835	
B-32	COUNTRY CLUB	FORT WORTH	HOBSON	430	SA	Widening	\$ 912,922	\$ 137,000	\$ 147,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 31,952	\$ -	\$ 1,229,000	\$ 1,229,000	
B-33	COUNTRY CLUB	HOBSON	RYAN	5,285	SA	Widening	\$ 11,220,454	\$ 1,684,000	\$ 1,796,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 382,716	\$ -	\$ 15,093,000	\$ 15,093,000	
B-34	COUNTRY CLUB	RYAN	HICKORY CREEK	3,485	PA	Widening	\$ 7,398,918	\$ 1,110,000	\$ 1,184,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 288,862	\$ -	\$ 11,902,000	\$ 5,951,000	
B-35	FORT WORTH	COUNTRY CLUB	VINTAGE	9,985	PA	Widening	\$ 17,431,177	\$ 2,617,000	\$ 2,791,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 619,511	\$ -	\$ 26,417,000	\$ 26,417,000	
B-36	FORT WORTH	VINTAGE	BONNIE BRAE	5,655	PA	Widening	\$ 2,125,407	\$ 2,266,000	\$ 2,406,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 485,684	\$ -	\$ 19,299,000	\$ 19,299,000	
B-37	FORT WORTH	BONNIE BRAE	BRUSH CREEK	1,250	PA	Widening	\$ 3,130,506	\$ 470,000	\$ 501,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 109,658	\$ -	\$ 4,811,000	\$ 4,811,000	
B-38	FORT WORTH	BRUSH CREEK	GRAFFORD	5,845	PA	Widening	\$ 14,538,244	\$ 2,186,000	\$ 2,343,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 512,339	\$ -	\$ 20,190,000	\$ 20,190,000	
B-39	JOHN PAINE	JOHNSON	ATHENS	2,210	Completed	Widening	\$ 17,276	\$ 27,000	\$ 29,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,170	\$ -	\$ 238,000	\$ 238,000	
B-40	JOHN PAINE	VINTAGE	1045 S OF VINTAGE	1,045	SA	New	\$ 1,861,281	\$ 288,000	\$ 298,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65,145	\$ -	\$ 3,254,000	\$ 3,254,000	
B-41	PARVIN/ROSELAWN	PARVIN	ROSELAWN	2,725	C	New	\$ 2,725,444	\$ 433,000	\$ 462,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100,886	\$ -	\$ 3,816,000	\$ 3,816,000	
B-42	ROSELAWN	ROSELAWN	ROSELAWN	1,515	PA (I/3)	Widening	\$ 1,168,000	\$ 176,000	\$ 184,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,949	\$ -	\$ 1,589,000	\$ 1,589,000	
B-43	TEASLEY	LONGMEYER	LONGMEYER	3,000	PA (I/3)	Widening	\$ 3,168,328	\$ 446,000	\$ 476,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 46,000	\$ -	\$ 4,080,000	\$ 4,080,000	
B-44	TEASLEY	LILLIAN S MILLER	PENNSYLVANIA	1,880	PA (I/3)	Widening	\$ 178,000	\$ 189,117	\$ 189,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 38,619	\$ -	\$ 1,483,000	\$ 1,483,000	
B-45	TEASLEY	PENNSYLVANIA	HOBSON	1,085	PA (I/3)	Widening	\$ 636,715	\$ 96,000	\$ 102,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 22,265	\$ -	\$ 857,000	\$ 857,000	
							\$ 306,191,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 306,191,000	\$ 240,216,000	

City of Denton – 2022 Roadway Impact Fee Study
Service Area C Impact Fee CIP

#	Roadway Name	Limits		Roadway Classification	Roadway Status	Construction Cost Pavement and Allowances	Contingency/ ROW	Engineering/ Survey/ST/E	Railroad Crossings	Intersections		Streams/Chann el Crossings	Inspection/ Materials Testing	Percent in Service Area	Total Cost	Cost in Service Area
		From	To							Cost	Cost					
C-1	BARTHOLD	MASCH BRANCH	5200' W OF IH 35	PA	Widening	\$ 13,010,381	\$ 1,952,000	\$ 2,082,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 17,750,000	\$ 8,875,000
C-2	BOBAC	FM 2164	IH 35	SA	New	\$ 25,888,720	\$ 3,884,000	\$ 4,143,000	\$ -	\$ -	\$ -	\$ 1,440,000.00	\$ -	100%	\$ 37,762,000	\$ 37,762,000
C-3	FM 1173	4605' W OF IH 35	LOVERS	SA	Widening	\$ 9,716,763	\$ 1,467,000	\$ 1,565,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 13,401,000	\$ 13,401,000
C-4	FM 1173	4605' W OF IH 35	LOVERS	SA	Widening	\$ 4,648,535	\$ 698,000	\$ 744,000	\$ 1,200,000	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 7,704,000	\$ 3,852,000
C-5	FM 2164+H 35	FM 2164	IH 35	SA	New	\$ 25,692,796	\$ 3,854,000	\$ 4,110,000	\$ -	\$ -	\$ -	\$ 1,000,000.00	\$ -	100%	\$ 39,748,000	\$ 39,748,000
C-6	GANZER	FM 2164	GANZER	PA	New	\$ 27,679,262	\$ 4,182,000	\$ 4,461,000	\$ -	\$ -	\$ -	\$ 1,250,000.00	\$ -	100%	\$ 39,748,000	\$ 39,748,000
C-7	GANZER	2907' E OF IH 35	GANZER	PA	Widening	\$ 7,262,773	\$ 1,090,000	\$ 1,163,000	\$ -	\$ -	\$ -	\$ 1,755,000.00	\$ -	100%	\$ 11,525,000	\$ 11,525,000
C-8	GANZER	1620' E OF BARTHOLD	BARTHOLD	PA	Widening	\$ 4,057,135	\$ 609,000	\$ 650,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 5,708,000	\$ 2,854,000
C-9	GANZER	BARTHOLD	RECTOR	PA	Widening	\$ 6,473,885	\$ 972,000	\$ 1,036,000	\$ -	\$ -	\$ -	\$ -	\$ -	50%	\$ 9,208,000	\$ 4,604,000
A-13-C-10	JIM CHRISTAL	OLD SH 24	WESTERN	SA	Widening	\$ 6,167,534	\$ 926,000	\$ 987,000	\$ 1,200,000	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 9,746,000	\$ 4,873,000
A-14-C-11	JIM CHRISTAL	MASCH BRANCH	THOMAS JEGAN	SA	Widening	\$ 7,451,995	\$ 1,118,000	\$ 1,193,000	\$ -	\$ -	\$ -	\$ 1,440,000.00	\$ -	50%	\$ 11,964,000	\$ 5,982,000
A-15-C-12	JIM CHRISTAL	MASCH BRANCH	THOMAS JEGAN	SA	Widening	\$ 12,865,376	\$ 1,903,000	\$ 2,030,000	\$ -	\$ -	\$ -	\$ 1,440,000.00	\$ -	50%	\$ 18,920,000	\$ 9,461,000
A-16-C-13	JIM CHRISTAL	THOMAS JEGAN	515' E OF C WOLFEE	SA	Widening	\$ 1,341,000	\$ 1,257,000	\$ 1,341,000	\$ -	\$ -	\$ -	\$ 440,000.00	\$ -	50%	\$ 2,791,000	\$ 1,395,500
C-14	JIM CHRISTAL	945' W OF C WOLFEE	NAIL	SA	Widening	\$ 6,613,360	\$ 988,000	\$ 1,059,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 9,677,000	\$ 4,838,500
C-15	JIM CHRISTAL	NAIL	2045' W OF NAIL	SA	Widening	\$ 4,341,660	\$ 652,000	\$ 695,000	\$ -	\$ -	\$ -	\$ -	\$ -	50%	\$ 5,037,000	\$ 2,518,500
C-16	MARSHALL	2045' N OF HAMPTON	HAMPTON	C	New	\$ 3,009,377	\$ 452,000	\$ 482,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 5,249,000	\$ 5,249,000
C-17	MARSHALL	HAMPTON	US 380	C	Widening	\$ 3,268,532	\$ 491,000	\$ 523,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,397,000	\$ 4,397,000
C-18	MASCH BRANCH	MASCH BRANCH	DARBY SMITH	SA	Widening	\$ 7,324,611	\$ 1,098,000	\$ 1,172,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 10,602,000	\$ 10,602,000
C-19	WESTWARD	NORTHWAY	BONNIE BRAE	SA	New	\$ 1,242,889	\$ 187,000	\$ 199,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,672,000	\$ 1,672,000
C-20	US 77	2460' W OF US 77	BONNIE BRAE	SA (12)	Widening	\$ 2,945,750	\$ 352,000	\$ 376,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 3,156,000	\$ 3,156,000
C-21	US 77	2460' W OF US 77	BONNIE BRAE	SA (12)	Widening	\$ 934,486	\$ 141,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,258,000	\$ 1,258,000
C-22	US 77	WINDSOR	WINDSOR	PA (13)	Widening	\$ 1,426,007	\$ 214,000	\$ 229,000	\$ -	\$ -	\$ -	\$ 500,000.00	\$ -	100%	\$ 2,819,000	\$ 2,819,000
C-23	US 77	RINEY	RINEY	PA (13)	Widening	\$ 1,344,088	\$ 187,000	\$ 200,000	\$ -	\$ -	\$ -	\$ 400,000.00	\$ -	100%	\$ 2,075,000	\$ 2,075,000
C-24	US 77	RINEY	RINEY	PA (13)	Widening	\$ 2,923,853	\$ 349,000	\$ 372,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 3,126,000	\$ 3,126,000
C-25	US 77	BONNIE BRAE	RINEY	PA (13)	Widening	\$ 1,009,355	\$ 152,000	\$ 162,000	\$ -	\$ -	\$ -	\$ 500,000.00	\$ -	100%	\$ 1,859,000	\$ 1,859,000
C-26	US 77	LOOP 288	BONNIE BRAE	PA (13)	Widening	\$ 2,205,306	\$ 406,000	\$ 433,000	\$ -	\$ -	\$ -	\$ 1,100,000.00	\$ -	100%	\$ 4,739,000	\$ 4,739,000
C-27	US 77	IH 35	LOOP 288	C	New	\$ 1,869,822	\$ 208,000	\$ 220,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 2,094,000	\$ 2,094,000
C-28	MASCH BRANCH-NAIL	MASCH BRANCH	1295' W OF MASCH BRANCH	C	New	\$ 2,750,222	\$ 413,000	\$ 441,000	\$ -	\$ -	\$ -	\$ 750,000.00	\$ -	100%	\$ 4,450,000	\$ 4,450,000
C-29	MASCH BRANCH-NAIL	1050' E OF LOOP 288	1550' W OF LOOP 288	C	New	\$ 2,697,333	\$ 405,000	\$ 432,000	\$ -	\$ -	\$ -	\$ 750,000.00	\$ -	100%	\$ 4,379,000	\$ 4,379,000
C-30	MASCH BRANCH-NAIL	1335' W OF THOMAS JEGAN	1775' E OF C WOLFEE	C	New	\$ 1,654,933	\$ 234,000	\$ 249,000	\$ -	\$ -	\$ -	\$ -	\$ -	50%	\$ 2,072,000	\$ 1,046,000
C-31	MASCH BRANCH-NAIL	775' E OF C WOLFEE	600' W OF C WOLFEE	C	New	\$ 3,952,668	\$ 498,000	\$ 521,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,376,000	\$ 4,376,000
C-32	MASCH BRANCH-NAIL	600' W OF C WOLFEE	600' W OF C WOLFEE	C	New	\$ 1,716,601	\$ 261,000	\$ 276,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 2,316,000	\$ 2,316,000
C-33	WESTGATE	WESTGATE	1460' E OF IH-35	SA	Widening	\$ 5,137,843	\$ 771,000	\$ 823,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 6,912,000	\$ 6,912,000
C-34	WINDSOR	WINDSOR	WINDSOR	SA	Widening	\$ 4,961,639	\$ 750,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 6,712,000	\$ 6,712,000
C-35	WINDSOR	WINDSOR	WINDSOR	SA	Widening	\$ 892,969	\$ 130,000	\$ 139,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,022,000	\$ 1,022,000
C-36	WINDSOR	WINDSOR	WINDSOR	SA	Widening	\$ 1,169,863	\$ 176,000	\$ 186,000	\$ 1,200,000	\$ -	\$ -	\$ 750,000.00	\$ -	100%	\$ 2,945,000	\$ 1,745,000
C-37	WINDSOR	WINDSOR	WINDSOR	SA	Widening	\$ 3,915,966	\$ 626,000	\$ 664,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,581,000	\$ 4,581,000
C-38	BARTHOLD	GANZER	260' S OF GANZER	SA	Widening	\$ 35,288,213	\$ 5,446,000	\$ 5,807,000	\$ -	\$ -	\$ -	\$ 1,500,000.00	\$ -	100%	\$ 52,065,000	\$ 52,065,000
C-39	BONNIE BRAE	MIAMI	LOOP 288	SA	New	\$ 4,335,124	\$ 651,000	\$ 695,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 5,036,000	\$ 5,036,000
C-40	BONNIE BRAE	US 77	US 77	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-41	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-42	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-43	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-44	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-45	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-46	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-47	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-48	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-49	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-50	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-51	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-52	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-53	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-54	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-55	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-56	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-57	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-58	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-59	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-60	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-61	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-62	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-63	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-64	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000
C-65	BONNIE BRAE	WINDSOR	WINDSOR	SA	Widening	\$ 7,672,708	\$ 1,151,000	\$ 1,228,000	\$ -	\$ -	\$ -	\$ -	\$ -	100%	\$ 10,320,000	\$ 10,320,000

City of Denton – 2022 Roadway Impact Fee Study
Service Area C Impact Fee CIP

#	Roadway Name	Limits		Length (FT)	Roadway Classification	Roadway Status	Construction Cost		Contingency/ ROW	Engineering/ Survey/STIE	Railroad Crossings	Intersections	Streams/Chann el Crossings	Inspection/ Materials Testing	Percent in Service Area	Total Cost	Cost in Service Area
		From	To				Pavement and Allowances										
C-66	MILAM/US 77	MILAM	GANZER	7,975	SA	New	\$ 14,204,509	\$ 2,131,000	\$ 2,273,000	\$ -	\$ -	\$ -	\$ 1,440,000.00	\$ 497,158	100%	\$ 20,546,000	\$ 20,546,000
C-67	MILAM/US 77	GANZER	LONG	3,875	SA	Widening	\$ 8,226,918	\$ 1,235,000	\$ 1,317,000	\$ -	\$ -	\$ 500,000.00	\$ -	\$ 287,942	100%	\$ 11,567,000	\$ 11,567,000
C-68	MILAM/US 77	LONG	US 77	2,800	SA	New	\$ 4,987,163	\$ 749,000	\$ 788,000	\$ -	\$ -	\$ 400,000.00	\$ 250,000.00	\$ 174,551	100%	\$ 7,359,000	\$ 7,359,000
C-69	NICOSIA	LOOP 288	BEALL	645	C	New	\$ 682,266	\$ 103,000	\$ 110,000	\$ -	\$ -	\$ -	\$ 250,000.00	\$ 23,879	100%	\$ 1,169,000	\$ 1,169,000
C-70	THOMAS J EGAN	US 380	JIM CHRISTAL	4,010	SA	Widening	\$ 8,513,533	\$ 1,278,000	\$ 1,363,000	\$ -	\$ -	\$ 900,000.00	\$ -	\$ 297,974	100%	\$ 12,353,000	\$ 12,353,000
C-71	WESTERN	US 380	JIM CHRISTAL	4,245	PA	Widening	\$ 10,631,197	\$ 1,595,000	\$ 1,701,000	\$ -	\$ -	\$ 400,000.00	\$ -	\$ 372,092	100%	\$ 14,699,000	\$ 14,699,000
TOTAL																	\$ 695,918,000 \$ 587,514,000

City of Denton – 2022 Roadway Impact Fee Study
Service Area D Impact Fee CIP

#	Roadway Name	Limits		Length (FT)	Roadway Classification	Roadway Status	Construction Cost		Contingency/ ROW	Engineering/ Survey/STE	Railroad Crossings	Intersections	Streams/Chann el Crossings	Inspection/ Materials Testing	Percent in Service Area	Total Cost	Cost in Service Area	
		From	To				Pavement and Allowances	Cost										
D-1	BOBCAT	560' W OF FM 2164	FM 2164	560	SA	Widening	\$ 1,188,922	\$ -	\$ 179,000	\$ 191,000	\$ -	\$ -	\$ -	\$ 41,612	50%	\$ 1,601,000	\$ 800,500	
D-2	FISHTRAP	MINGO	GEESLING	1,890	SA	New	\$ 1,999,199	\$ -	\$ 300,000	\$ 320,000	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 2,939,000	\$ 1,489,500	
D-3	GANZER	15,500' E OF SHERMAN	4600' W OF SHERMAN	17,985	PA	New	\$ 39,543,260	\$ -	\$ 5,932,000	\$ 6,327,000	\$ -	\$ -	\$ 750,000.00	\$ -	100%	\$ 53,936,000	\$ 53,936,000	
D-4	GRIBBLE SPRINGS	INDIAN WELLS	3015' W OF INDIAN WELLS	3,015	SA	Widening	\$ 6,401,073	\$ -	\$ 961,000	\$ 1,025,000	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 8,861,000	\$ 4,430,500	
D-5	HARTLEE FIELD	4220' E OF COOPER CREEK	COOPER CREEK	4,220	SA	Widening	\$ 8,959,379	\$ -	\$ 1,344,000	\$ 1,434,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 12,051,000	\$ 6,025,500	
D-6	HARTLEE FIELD	COOPER CREEK	5170' W OF COOPER CREEK	5,170	SA	Widening	\$ 10,976,301	\$ -	\$ 1,647,000	\$ 1,757,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 14,764,000	\$ 7,382,000	
D-7	HARTLEE FIELD	600' E OF SHERMAN	SHERMAN	600	C	Widening	\$ 634,667	\$ -	\$ 96,000	\$ 102,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 855,000	\$ 427,500	
D-8	HARTLEE FLD-FM 2164	HARTLEE FIELD	SHERMAN	2,250	SA	New	\$ 4,007,542	\$ -	\$ 602,000	\$ 642,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 5,392,000	\$ 5,392,000	
D-9	HARTLEE FLD-FM 2164	SHERMAN	3500' W OF SHERMAN	3,500	SA	New	\$ 6,233,954	\$ -	\$ 936,000	\$ 998,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 8,386,000	\$ 8,386,000	
D-10	HARTLEE FLD-FM 2164	STUART	1485' W OF STUART	1,485	SA	New	\$ 2,644,978	\$ -	\$ 397,000	\$ 424,000	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 3,809,000	\$ 1,904,500	
D-11	HARTLEE FLD-FM 2164	475' W OF FM 2164	FM 2164	475	SA	New	\$ 846,037	\$ -	\$ 127,000	\$ 136,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,139,000	\$ 1,139,000	
D-12	LONG	510' W OF FM 2164	FM 2164	510	C	New	\$ 539,467	\$ -	\$ 81,000	\$ 87,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 726,000	\$ 726,000	
D-13	MINGO	E CITY LIMITS	COOPER CREEK	460	SA	Widening	\$ 976,615	\$ -	\$ 147,000	\$ 157,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,315,000	\$ 1,315,000	
D-14	MINGO	COOPER CREEK	LOOP 288	2,305	SA	Widening	\$ 4,893,689	\$ -	\$ 735,000	\$ 783,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 6,583,000	\$ 6,583,000	
D-15	MINGO	LOOP 288	LOOP 288	2,275	SA	Widening	\$ 4,829,997	\$ -	\$ 725,000	\$ 773,000	\$ -	\$ -	\$ 1,440,000.00	\$ -	100%	\$ 7,937,000	\$ 7,937,000	
D-16	KINGS ROW	SILVER DOME	LOOP 288	2,655	C	Widening	\$ 2,808,399	\$ -	\$ 422,000	\$ 450,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 3,779,000	\$ 3,779,000	
D-17	SILVER DOME	COOPER CREEK	FARRIS RD	2,190	C	Widening	\$ 2,316,533	\$ -	\$ 348,000	\$ 371,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 3,117,000	\$ 1,558,500	
D-18	COLLINS	HARTLEE FIELD	2730' S OF HARTLEE FIELD	4,440	SA	Widening	\$ 4,696,532	\$ -	\$ 705,000	\$ 752,000	\$ -	\$ -	\$ 500,000.00	\$ -	50%	\$ 6,818,000	\$ 3,409,000	
D-19	COOPER CREEK	SHERMAN	HARTLEE FIELD	10,065	C	New	\$ 17,927,070	\$ -	\$ 2,690,000	\$ 2,869,000	\$ -	\$ -	\$ 1,440,000.00	\$ -	100%	\$ 25,554,000	\$ 25,554,000	
D-20	COOPER CREEK	SILVER DOME	MINGO	4,360	SA	Widening	\$ 9,256,609	\$ -	\$ 1,389,000	\$ 1,482,000	\$ -	\$ -	\$ 626,000	\$ -	50%	\$ 12,452,000	\$ 6,226,000	
D-21	COOPER CREEK	MINGO	US 380	1,680	PA	Widening	\$ 4,207,399	\$ -	\$ 632,000	\$ 674,000	\$ 1,200,000	\$ -	\$ -	\$ 147,259	100%	\$ 7,361,000	\$ 7,361,000	
C-53 D-22	FM 2164	MILAM	LOOP 288	13,855	PA	Widening	\$ 34,868,524	\$ -	\$ 5,205,000	\$ 5,552,000	\$ -	\$ -	\$ 1,755,000.00	\$ -	50%	\$ 49,925,000	\$ 24,962,500	
D-23	GREEN VALLEY	2395' S OF FM 2153	2035' N OF SHEPARD	7,765	PA	New	\$ 17,072,750	\$ -	\$ 2,561,000	\$ 2,732,000	\$ -	\$ -	\$ 1,000,000.00	\$ -	100%	\$ 24,463,000	\$ 6,234,000	
D-24	GREEN VALLEY	WARSCHUN	SHERMAN	2,095	SA	Widening	\$ 4,447,843	\$ -	\$ 668,000	\$ 712,000	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 6,234,000	\$ 6,234,000	
D-25	INDIAN WELLS	1615' S OF FM 2153	4930' N OF GRIBBLE SPRINGS	3,870	SA	New	\$ 6,892,972	\$ -	\$ 1,034,000	\$ 1,103,000	\$ -	\$ -	\$ 250,000.00	\$ -	100%	\$ 10,021,000	\$ 10,021,000	
D-26	INDIAN WELLS	4930' N OF GRIBBLE SPRINGS	2905' N OF GRIBBLE SPRINGS	2,025	SA	New	\$ 3,606,788	\$ -	\$ 542,000	\$ 578,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 4,853,000	\$ 2,426,500	
D-27	INDIAN WELLS	2905' N OF GRIBBLE SPRINGS	GRIBBLE SPRINGS	2,025	SA	Widening	\$ 6,167,534	\$ -	\$ 926,000	\$ 978,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 8,296,000	\$ 4,148,000	
C-54 D-28	LOCUST	LOOP 288	HERCULES	2,260	SA	Widening	\$ 4,788,151	\$ -	\$ 720,000	\$ 768,000	\$ -	\$ -	\$ 500,000.00	\$ -	50%	\$ 6,954,000	\$ 3,477,000	
C-55 D-29	LOCUST	HERCULES	BELL	2,375	SA	Widening	\$ 5,042,304	\$ -	\$ 757,000	\$ 807,000	\$ -	\$ -	\$ 250,000.00	\$ -	50%	\$ 7,433,000	\$ 3,716,500	
C-56 D-30	LOCUST	BELL	WINDSOR	1,270	SA	Widening	\$ 2,856,306	\$ -	\$ 405,000	\$ 432,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 3,628,000	\$ 1,814,000	
C-57 D-31	LOCUST	WINDSOR	FM 2164	1,345	SA	Widening	\$ 3,603,075	\$ -	\$ 428,000	\$ 457,000	\$ -	\$ -	\$ -	\$ -	50%	\$ 3,841,000	\$ 1,920,500	
D-32	SHERMAN	LOOP 288	HERCULES	1,650	SA	Widening	\$ 3,603,075	\$ -	\$ 528,000	\$ 561,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,713,000	\$ 4,713,000	
D-33	SHERMAN	HERCULES	KINGS	1,910	SA	Widening	\$ 4,055,074	\$ -	\$ 609,000	\$ 649,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 5,455,000	\$ 5,455,000	
D-34	SHERMAN	KINGS	WINDSOR	2,025	SA	Widening	\$ 4,299,228	\$ -	\$ 645,000	\$ 688,000	\$ -	\$ -	\$ 1,440,000.00	\$ -	100%	\$ 7,223,000	\$ 7,223,000	
D-35	SHERMAN	WINDSOR	WILSONWOOD	1,005	SA	Widening	\$ 2,123,078	\$ -	\$ 319,000	\$ 340,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 2,856,000	\$ 2,856,000	
D-36	SHERMAN	WILSONWOOD	CORONADO	1,165	SA	Widening	\$ 2,473,383	\$ -	\$ 372,000	\$ 396,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 3,328,000	\$ 3,328,000	
D-37	SHERMAN	CORONADO	GREENWOOD	1,640	SA	Widening	\$ 3,481,844	\$ -	\$ 523,000	\$ 568,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,685,000	\$ 4,685,000	
D-38	SHERMAN	GREENWOOD	BELL	825	SA	Widening	\$ 1,751,337	\$ -	\$ 263,000	\$ 281,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 2,357,000	\$ 2,357,000	
D-39	SHERMAN	BELL	LOCUST	1,715	SA	Widening	\$ 3,641,075	\$ -	\$ 547,000	\$ 583,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 4,899,000	\$ 4,899,000	
D-40	WINDSOR	LOOP 288	DOMINION	860	C	New	\$ 909,689	\$ -	\$ 137,000	\$ 146,000	\$ -	\$ -	\$ -	\$ -	100%	\$ 1,225,000	\$ 1,225,000	
TOTAL																	\$ 351,764,000	\$ 275,665,500

City of Denton - 2022 Roadway Impact Fee Study
Service Area E Impact Fee CIP

#	Roadway Name	Limits		Roadway Classification	Roadway Status	Construction Cost Pavement and Allowances	Contingency/ ROW 15%	Engineering/ Survey/S&E 16%	Railroad Crossings	Intersections Cost	Streams/Channel Crossings Total Drainage Cost	Inspection/ Materials Testing 3.5%	Previous City Contribution	Percent in Service Area	Total Cost	Cost in Service Area
		From	To													
E-1	AUDRA	LOOP 288	1185 W OF LOOP 288	C	New	\$ 1,253,466	\$ 189,000	\$ 201,000	-	\$ -	\$ -	\$ 43,871	-	100%	\$ 1,687,000	\$ 1,687,000
E-2	BLAGG	LAKEVIEW	GEESLING	SA	Widening	\$ 7,940,303	\$ 1,192,000	\$ 1,271,000	-	\$ 500,000.00	\$ -	\$ -	\$ 277,911	100%	\$ 11,181,000	\$ 11,181,000
E-3	BLAGG	2175 W OF GEESLING	2175 W OF GEESLING	SA	Widening	\$ 4,617,689	\$ 693,000	\$ 738,000	-	\$ -	\$ 1,440,000.00	\$ -	-	100%	\$ 7,651,000	\$ 7,651,000
E-4	BLAGG	239 E OF MAYHILL	MAYHILL	SA	New	\$ 418,585	\$ 63,000	\$ 67,000	-	\$ -	\$ -	\$ 14,659	-	50%	\$ 563,000	\$ 281,500
E-5	DALLAS	TEASLEY	IH 38E	PA	Widening	\$ 2,693,589	\$ 405,000	\$ 431,000	-	\$ -	\$ -	\$ -	\$ 94,275	100%	\$ 3,624,000	\$ 3,624,000
E-6	DUCHESS	TRAILHEAD	WOODROW	C	New	\$ 4,238,389	\$ 636,000	\$ 678,000	-	\$ -	\$ 250,000.00	\$ -	-	100%	\$ 5,949,000	\$ 5,949,000
E-7	FW 426	LANEY	GRISCOM	PA	Widening	\$ 6,359,611	\$ 954,000	\$ 1,010,000	-	\$ 1,400,000.00	\$ -	\$ 222,551	\$ 1,550,811.44	100%	\$ 9,953,000	\$ 9,953,000
E-8	MCKINNEY	LOOP 288	GRISCOM	Completed	Widening	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	-	100%	\$ 1,951,000	\$ 1,951,000
E-9	MCKINNEY	LOOP 288	CARDINAL	SA	Widening	\$ 1,422,461	\$ 214,000	\$ 228,000	-	\$ -	\$ -	\$ 49,786	-	100%	\$ 1,914,000	\$ 1,914,000
E-10	MCKINNEY	LOOP 288	CARDINAL	SA	Widening	\$ 2,450,922	\$ 385,000	\$ 389,000	-	\$ -	\$ -	\$ -	\$ 80,082	100%	\$ 3,270,000	\$ 3,270,000
E-11	MCKINNEY	MOCKINGBIRD	MOCKINGBIRD	SA	Widening	\$ 6,889,350	\$ 1,034,000	\$ 1,103,000	-	\$ -	\$ -	\$ 241,128	-	100%	\$ 9,268,000	\$ 9,268,000
E-12	MCKINNEY	MOCKINGBIRD	MOCKINGBIRD	SA	Widening	\$ 1,549,558	\$ 245,000	\$ 254,000	-	\$ -	\$ -	\$ -	-	100%	\$ 2,116,000	\$ 2,116,000
E-13	MILLS	TRINITY	MAYHILL	SA	Widening	\$ 15,742	\$ 2,962,000	\$ 2,519,000	-	\$ 500,000.00	\$ 1,440,000.00	\$ 550,990	-	100%	\$ 23,116,000	\$ 23,116,000
E-14	MILLS	LAKEVIEW	MAYHILL	SA	Widening	\$ 3,891,768	\$ 594,000	\$ 629,000	-	\$ -	\$ -	\$ 136,212	-	100%	\$ 5,215,000	\$ 5,215,000
E-15	MINGO	US 380	OLD NORTH	SA	Widening	\$ 1,613,537	\$ 243,000	\$ 259,000	-	\$ -	\$ -	\$ 56,474	-	100%	\$ 2,172,000	\$ 2,172,000
E-16	MINGO	OLD NORTH	NOTTINGHAM	SA	Widening	\$ 5,403,227	\$ 811,000	\$ 865,000	-	\$ -	\$ -	\$ 189,113	-	100%	\$ 7,268,000	\$ 7,268,000
E-17	MINGO	NOTTINGHAM	PERTAIN	SA	Widening	\$ 6,231,227	\$ 935,000	\$ 997,000	-	\$ -	\$ -	\$ 218,093	-	100%	\$ 8,381,000	\$ 8,381,000
E-18	MINGO	PERTAIN	RUEDELL	SA	Widening	\$ 2,006,306	\$ 301,000	\$ 322,000	-	\$ -	\$ -	\$ 70,221	-	100%	\$ 2,700,000	\$ 2,700,000
E-19	MINGO	RUEDELL	WILLIS	SA	Widening	\$ 1,273,845	\$ 192,000	\$ 204,000	-	\$ -	\$ -	\$ 44,585	-	100%	\$ 1,714,000	\$ 1,714,000
E-20	MINGO	WILLIS	WITHERS	SA	Widening	\$ 4,893,689	\$ 735,000	\$ 783,000	-	\$ -	\$ -	\$ 171,279	-	100%	\$ 6,583,000	\$ 6,583,000
E-21	MINGO	WITHERS	PAISLEY	SA	Widening	\$ 498,923	\$ 75,000	\$ 80,000	-	\$ -	\$ -	\$ 17,462	-	100%	\$ 671,000	\$ 671,000
E-22	MINGO	PAISLEY	BELL	SA	Widening	\$ 2,091,229	\$ 314,000	\$ 335,000	-	\$ 500,000.00	\$ -	\$ -	\$ 73,193	100%	\$ 2,813,000	\$ 2,813,000
E-23	MORSE	MAYHILL	KIMBERLY	SA (1/2)	Widening	\$ 1,091,823	\$ 164,000	\$ 175,000	-	\$ -	\$ -	\$ -	\$ 39,214	100%	\$ 1,969,000	\$ 1,969,000
E-24	SHADY OAKS	WOODROW	TEASLEY	SA	Widening	\$ 6,517,842	\$ 978,000	\$ 1,043,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ 228,124	100%	\$ 9,967,000	\$ 9,967,000
E-25	SPENCER	LOOP 288	MAYHILL	SA	Widening	\$ 4,914,920	\$ 738,000	\$ 787,000	\$ -	\$ -	\$ 250,000.00	\$ 172,022	-	100%	\$ 6,862,000	\$ 6,862,000
E-26	TREATMENT PLANT	MCKINNEY	POST OAK	C	New	\$ 3,517,110	\$ 528,000	\$ 563,000	\$ -	\$ -	\$ -	\$ 123,099	-	100%	\$ 4,731,000	\$ 4,731,000
E-27	TREATMENT PLANT	POST OAK	1325 W OF POST OAK	SA	New	\$ 2,350,997	\$ 354,000	\$ 376,000	\$ -	\$ 400,000.00	\$ 1,440,000.00	\$ 82,600	-	100%	\$ 5,015,000	\$ 5,015,000
E-28	TREATMENT PLANT	1325 W OF POST OAK	MAYHILL	SA	Widening	\$ 8,407,379	\$ 1,262,000	\$ 1,346,000	\$ -	\$ -	\$ -	\$ 294,258	-	100%	\$ 11,310,000	\$ 11,310,000
C-45-E-29	BONNIE BRAE	US 380	PANHANDLE	SA	Widening	\$ 6,178,150	\$ 987,000	\$ 980,000	\$ -	\$ -	\$ -	\$ 216,235	-	50%	\$ 8,310,000	\$ 4,155,000
C-46-E-30	BONNIE BRAE	PANHANDLE	SCRIPTURE	SA	Widening	\$ 2,671,691	\$ 341,000	\$ 364,000	\$ -	\$ -	\$ -	\$ 79,509	-	50%	\$ 3,056,000	\$ 1,528,000
C-47-E-31	BONNIE BRAE	SCRIPTURE	OAK	SA	Widening	\$ 2,505,229	\$ 376,000	\$ 401,000	\$ -	\$ -	\$ -	\$ 87,683	-	50%	\$ 3,370,000	\$ 1,685,000
C-48-E-32	BONNIE BRAE	OAK	HICKORY	SA	Widening	\$ 806,769	\$ 122,000	\$ 130,000	\$ -	\$ -	\$ -	\$ 28,237	-	50%	\$ 1,087,000	\$ 543,500
C-49-E-33	BONNIE BRAE	HICKORY	PAIRIE	SA	Widening	\$ 3,025,383	\$ 454,000	\$ 485,000	\$ -	\$ -	\$ -	\$ 105,888	-	50%	\$ 4,070,000	\$ 2,035,000
C-50-E-34	BONNIE BRAE	PAIRIE	IH 38E	SA	Widening	\$ 1,825,845	\$ 274,000	\$ 293,000	\$ -	\$ -	\$ -	\$ 63,905	-	50%	\$ 2,457,000	\$ 1,228,500
E-35	CARDINAL	ORIOLE	MCKINNEY	C	New	\$ 2,353,555	\$ 354,000	\$ 377,000	\$ -	\$ -	\$ -	\$ 82,374	-	100%	\$ 3,167,000	\$ 3,167,000
E-36	GEESLING	US 380	BLAGG	PA	Widening	\$ 6,123,269	\$ 919,000	\$ 980,000	\$ -	\$ -	\$ -	\$ 214,316	-	100%	\$ 8,237,000	\$ 8,237,000
E-37	GEESLING	US 380	BLAGG	PA	New	\$ 11,861,879	\$ 1,760,000	\$ 1,898,000	\$ -	\$ 500,000.00	\$ 1,755,000.00	\$ 415,166	-	100%	\$ 18,210,000	\$ 18,210,000
E-38	LAKEVIEW	POST OAK	SHADY SHORES	PA	Widening	\$ 812,765	\$ 122,000	\$ 131,000	\$ 1,200,000	\$ -	\$ -	\$ -	\$ 28,447	100%	\$ 2,984,000	\$ 2,984,000
E-39	MAYHILL	PROMINENCE	770 N OF RUSSELL NEWMAN	PA (1/3)	Widening	\$ 1,370,258	\$ 205,000	\$ 220,000	\$ -	\$ -	\$ -	\$ 47,959	\$ 622,420.41	100%	\$ 2,467,000	\$ 2,467,000
E-40	MAYHILL	RUSSELL NEWMAN	RUSSELL NEWMAN	PA (1/3)	Widening	\$ 1,197,142	\$ 180,000	\$ 192,000	\$ -	\$ -	\$ -	\$ 41,900	\$ 543,792.72	100%	\$ 2,155,000	\$ 2,155,000
E-41	MAYHILL	460 S OF RUSSELL NEWMAN	460 S OF RUSSELL NEWMAN	PA (1/3)	Widening	\$ 454,796	\$ 69,000	\$ 73,000	\$ -	\$ -	\$ -	\$ 15,918	\$ 206,387.92	50%	\$ 819,000	\$ 409,500
E-42	MAYHILL	MILLS	MILLS	PA (1/3)	Widening	\$ 268,944	\$ 41,000	\$ 44,000	\$ -	\$ -	\$ -	\$ 9,448	\$ 122,619.93	50%	\$ 487,000	\$ 243,500
E-43	MAYHILL	MCKINNEY	MCKINNEY	PA (1/3)	Widening	\$ 633,781	\$ 95,000	\$ 102,000	\$ -	\$ -	\$ -	\$ 22,162	\$ 237,890.26	100%	\$ 1,142,000	\$ 1,142,000
E-44	MAYHILL	MORSE	MORSE	PA (1/3)	Widening	\$ 1,147,281	\$ 173,000	\$ 184,000	\$ -	\$ -	\$ -	\$ 40,154	\$ 221,134.69	100%	\$ 2,066,000	\$ 2,066,000
E-45	MAYHILL	SPENCER	SPENCER	PA (1/3)	Widening	\$ 2,200,078	\$ 181,000	\$ 193,000	\$ -	\$ -	\$ -	\$ 42,003	\$ 545,125.55	100%	\$ 2,161,000	\$ 2,161,000
E-46	MAYHILL	SPENCER	POCKRUS PAGE	PA (1/3)	Widening	\$ 2,685,699	\$ 391,000	\$ 413,000	\$ -	\$ -	\$ -	\$ 12,249	\$ 158,309.91	100%	\$ 3,494,000	\$ 3,494,000
E-47	MAYHILL	SPENCER	COLORADO	PA (1/3)	Widening	\$ 1,599,123	\$ 240,000	\$ 256,000	\$ -	\$ 500,000.00	\$ -	\$ 55,950	\$ 726,389.79	100%	\$ 4,377,000	\$ 4,377,000
E-48	MAYHILL	2725 N OF COLORADO	IH 38E	PA (1/3)	Widening	\$ 1,367,324	\$ 205,000	\$ 219,000	\$ 1,200,000	\$ -	\$ -	\$ 47,856	-	100%	\$ 1,840,000	\$ 1,840,000
E-49	MAYHILL	COLORADO	QUAILCREEK	PA	New	\$ 1,539,076	\$ 231,000	\$ 247,000	\$ -	\$ -	\$ -	\$ 53,868	-	100%	\$ 2,071,000	\$ 2,071,000
E-50	MAYHILL CONNECTOR	MAYHILL	625 N OF DUCHESS	C	New	\$ 994,400	\$ 136,000	\$ 145,000	\$ -	\$ -	\$ -	\$ 31,654	-	100%	\$ 1,217,000	\$ 1,217,000
E-51	MCKINGBIRD	MCKINNEY	SHADY OAKS	SA	New	\$ 3,865,051	\$ 580,000	\$ 610,000	\$ -	\$ 400,000.00	\$ 1,440,000.00	\$ 135,277	-	100%	\$ 7,039,000	\$ 7,039,000
E-52	MCKINGBIRD	DUCHESS	SHADY OAKS	SA	New	\$ 4,996,069	\$ 750,000	\$ 800,000	\$ -	\$ -	\$ -	\$ 174,862	-	100%	\$ 20,228,000	\$ 20,228,000
E-53	POST OAK	MILLS	SPENCER	PA	New	\$ 15,038,971	\$ 2,256,000	\$ 2,407,000	\$ -	\$ -	\$ -	\$ 526,364	-	100%	\$ 21,525,000	\$ 21,525,000
E-54	POST OAK	EDWARDS	EDWARDS	PA	New	\$ 14,698,176	\$ 2,205,000	\$ 2,352,000	\$ -	\$ -	\$ 1,755,000.00	\$ 514,436	-	100%	\$ 8,015,000	\$ 8,015,000
E-55	POST OAK	TREATMENT PLANT	POCKRUS PAGE	PA	New	\$ 5,958,423	\$ 894,000	\$ 954,000	\$ -	\$ -	\$ -	\$ 208,545	-	100%	\$ 3,750,000	\$ 3,750,000
E-56	POST OAK	EDWARDS	EDWARDS	C	New	\$ 2,787,244	\$ 419,000	\$ 446,000	\$ -	\$ -	\$ -	\$ 97,554	-	100%	\$ 3,750,000	\$ 3,750,000
E-57	SWISHER	DALLAS	POCKRUS PAGE	C	Widening	\$ 1,097,380	\$ 165,000	\$ 176,000	\$ -	\$ 600,000.00	\$ -	\$ -	\$ 38,408	100%	\$ 2,077,000	\$ 2,077,000
E-58	TEASLEY	IH 35E	IH 35E	PA (1/3)	New	\$ 1,803,511	\$ 271,000	\$ 289,000	\$ -	\$ -	\$ -	\$ 63,123	-	100%	\$ 2,427,000	\$ 2,427,000
E-59	N STAR	SPENCER	ROY	C	New	\$ 1,184,711	\$ 178,000	\$ 190,000	\$ -	\$ -	\$ -	\$ 41,465	-	100%	\$ 1,594,000	\$ 1,594,000
E-60	ROY	MAYHILL	N STAR	C	New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	100%	\$ 317,633,000	\$ 305,523,000
TOTAL																

City of Denton

Kimley-Horn

2022 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Primary Arterial (New) Limits: Classification: PA ROW Width (feet): 135 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	24,700	CY	\$ 18.00	\$ 444,600
2	12" Lime Stabilization (with Lime @ 46#/sy)	47,000	SY	\$ 20.75	\$ 975,250
3	11" Concrete Pavement and Curb	44,600	SY	\$ 80.00	\$ 3,568,000
4	8' Concrete Sidewalk and 10' Concrete Trail (6" Depth)	95,100	SF	\$ 7.50	\$ 713,250
5	4" Topsoil	2,700	CY	\$ 45.00	\$ 121,500
6	Block Sodding	24,100	SY	\$ 12.00	\$ 289,200
7	12' Wide Turn Lane (300 LF Long)	8,600	SY	\$ 80.00	\$ 688,000
Paving Subtotal:					\$ 6,799,800

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 339,500.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	2%	\$ 135,800.00
✓ Traffic Control	Maintain Existing Traffic	2%	\$ 135,800.00
✓ Pavement Markings/Signs		2%	\$ 135,800.00
✓ Roadway Drainage	Standard Internal System	30%	\$ 2,036,700.00
Concrete Driveways	Driveways (Every 100')	\$ -	\$ -
✓ Irrigation	Basic	3%	\$ 203,700.00
✓ Illumination	Street Light Foundations and Conduit	7%	\$ 475,300.00
✓ Water	Minor Adjustments	10%	\$ 678,900.00
✓ Sewer	Minor Adjustments	10%	\$ 678,900.00
✓ SWPPP		2%	\$ 135,800.00
Other:			\$ -
Allowance Subtotal:			\$ 4,956,200

Paving and Allowance SUBTOTAL: \$ 11,756,000

Subtotal Price per Lane Mile \$ 1,960,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 11,756,000
Construction Contingency/Right-of-Way		15%	\$ 1,764,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 1,881,000
Inspections/Material Testing		3.5%	\$ 412,000
Roadway Cost TOTAL:			\$ 15,813,000
Price per Linear Foot (PA):			\$ 3,000
Price per Lane Mile			\$ 2,636,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2022 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Primary Arterial (Widening) Limits: Classification: PA ROW Width (feet): 135 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	24,700	CY	\$ 18.00	\$ 444,600
2	12" Lime Stabilization (with Lime @ 46#/sy)	47,000	SY	\$ 20.75	\$ 975,250
3	11" Concrete Pavement and Curb	44,600	SY	\$ 80.00	\$ 3,568,000
4	8' Concrete Sidewalk and 10' Concrete Trail (6" Depth)	95,100	SF	\$ 7.50	\$ 713,250
5	4" Topsoil	2,700	CY	\$ 45.00	\$ 121,500
6	Block Sodding	24,100	SY	\$ 12.00	\$ 289,200
7	12' Wide Turn Lane (300 LF Long)	8,600	SY	\$ 80.00	\$ 688,000
Paving Subtotal:					\$ 6,799,800

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 339,500.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	10%	\$ 678,900.00
✓ Traffic Control	Maintain Existing Traffic	10%	\$ 678,900.00
✓ Pavement Markings/Signs		2%	\$ 135,800.00
✓ Roadway Drainage	Standard Internal System	30%	\$ 2,036,700.00
✓ Concrete Driveways	Driveways (Every 100')	\$ 5,000.00	\$ 528,000.00
✓ Irrigation	Basic	3%	\$ 203,700.00
✓ Illumination	Street Light Foundations and Conduit	7%	\$ 475,300.00
✓ Water	Minor Adjustments	10%	\$ 678,900.00
✓ Sewer	Minor Adjustments	10%	\$ 678,900.00
✓ SWPPP		4%	\$ 271,600.00
Other:			\$ -
Allowance Subtotal:			\$ 6,706,200
Paving and Allowance SUBTOTAL:			\$ 13,506,000
Subtotal Price per Lane Mile			\$ 2,251,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 13,506,000
Construction Contingency/Right-of-Way		15%	\$ 2,026,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 2,161,000
Inspections/Material Testing		3.5%	\$ 473,000
Roadway Cost TOTAL:			\$ 18,166,000
Price per Linear Foot (PA):			\$ 3,500
Price per Lane Mile			\$ 3,028,000

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City of Denton

Kimley-Horn

2020 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Primary Arterial (Half Roadway) Limits: Classification: PA (4/6) ROW Width (feet): 135 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	16,600	CY	\$ 18.00	\$ 298,800
2	12" Lime Stabilization (with Lime @ 46#/sy)	31,400	SY	\$ 20.75	\$ 651,550
3	11" Concrete Pavement and Curb	29,700	SY	\$ 80.00	\$ 2,376,000
4	10' Concrete Trail (6" Depth)	52,800	SF	\$ 7.50	\$ 396,000
5	4" Topsoil	2,200	CY	\$ 45.00	\$ 99,000
6	Block Sodding	19,400	SY	\$ 12.00	\$ 232,800
7	12' Wide Turn Lane (300 LF Long)	8,600	SY	\$ 80.00	\$ 688,000
Paving Subtotal:					\$ 4,742,150

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 236,400.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	5%	\$ 236,400.00
✓ Traffic Control	Maintain Existing Traffic	5%	\$ 236,400.00
✓ Pavement Markings/Signs		2%	\$ 94,600.00
✓ Roadway Drainage	Standard Internal System	20%	\$ 945,600.00
✓ Concrete Driveways	Driveways (Every 100')	\$ 5,000.00	\$ 264,000.00
✓ Irrigation	Basic	3%	\$ 141,900.00
✓ Illumination	Street Light Foundations and Conduit	3%	\$ 141,900.00
✓ Water	Minor Adjustments	3%	\$ 141,900.00
✓ Sewer	Minor Adjustments	3%	\$ 141,900.00
✓ SWPPP		4%	\$ 189,200.00
Other:			\$ -
Allowance Subtotal:			\$ 2,770,200
Paving and Allowance SUBTOTAL:			\$ 7,513,000
Subtotal Price per Lane Mile			\$ 1,879,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 7,513,000
Construction Contingency/Right-of-Way		15%	\$ 1,127,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 1,203,000
Inspections/Material Testing		3.5%	\$ 263,000
Roadway Cost TOTAL:			\$ 10,106,000
Price per Linear Foot (PA):			\$ 2,000
Price per Lane Mile			\$ 2,527,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2020 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Primary Arterial (Median Lanes) Limits: Classification: PA (1/3) ROW Width (feet): 135 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	7,400	CY	\$ 18.00	\$ 133,200
2	12" Lime Stabilization (with Lime @ 46#/sy)	5,300	SY	\$ 20.75	\$ 109,975
3	11" Concrete Pavement and Curb	14,700	SY	\$ 80.00	\$ 1,176,000
4	No Sidewalk - Median Widening	0	SF	\$ 7.50	\$ -
5	4" Topsoil	700	CY	\$ 45.00	\$ 31,500
6	Block Sodding	5,900	SY	\$ 12.00	\$ 70,800
7	12' Wide Turn Lane (300 LF Long)	8,600	SY	\$ 80.00	\$ 688,000
Paving Subtotal:					\$ 2,209,475

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 109,900.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	2%	\$ 44,000.00
✓ Traffic Control	Maintain Existing Traffic	10%	\$ 219,800.00
✓ Pavement Markings/Signs		2%	\$ 44,000.00
✓ Roadway Drainage	Standard Internal System	10%	\$ 219,800.00
Concrete Driveways	Driveways (Every 100')	\$ -	\$ -
✓ Irrigation	Basic	3%	\$ 66,000.00
✓ Illumination	Street Light Foundations and Conduit	3%	\$ 66,000.00
✓ Water	Minor Adjustments	3%	\$ 66,000.00
✓ Sewer	Minor Adjustments	3%	\$ 66,000.00
✓ SWPPP		4%	\$ 88,000.00
Other:			\$ -
Allowance Subtotal:			\$ 989,500
Paving and Allowance SUBTOTAL:			\$ 3,199,000
Subtotal Price per Lane Mile			\$ 1,600,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 3,199,000
Construction Contingency/Right-of-Way		15%	\$ 480,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 512,000
Inspections/Material Testing		3.5%	\$ 112,000
Roadway Cost TOTAL:			\$ 4,303,000
Price per Linear Foot (PA):			\$ 900
Price per Lane Mile			\$ 2,152,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2022 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Secondary Arterial (New) Limits: Classification: SA ROW Width (feet): 110 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	22,300	CY	\$ 18.00	\$ 401,400
2	12" Lime Stabilization (with Lime @ 46#/sy)	42,300	SY	\$ 20.75	\$ 877,725
3	11" Concrete Pavement and Curb	39,900	SY	\$ 80.00	\$ 3,192,000
4	6' Concrete Sidewalk (4" Depth)	63,400	SF	\$ 6.50	\$ 412,100
5	4" Topsoil	2,100	CY	\$ 45.00	\$ 94,500
6	Block Sodding	18,800	SY	\$ 12.00	\$ 225,600
7	12' Wide Turn Lane (200 LF Long)	6,400	SY	\$ 80.00	\$ 512,000
Paving Subtotal:					\$ 5,715,325

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 260,100.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	2%	\$ 104,100.00
✓ Traffic Control	Maintain Existing Traffic	2%	\$ 104,100.00
✓ Pavement Markings/Signs		2%	\$ 104,100.00
✓ Roadway Drainage	Standard Internal System	30%	\$ 1,560,100.00
Concrete Driveways	Driveways (Every 100')	\$ -	\$ -
✓ Irrigation	Basic	3%	\$ 156,100.00
✓ Illumination	Street Light Foundations and Conduit	7%	\$ 364,100.00
✓ Water	Minor Adjustments	10%	\$ 520,100.00
✓ Sewer	Minor Adjustments	10%	\$ 520,100.00
✓ SWPPP		2%	\$ 104,100.00
Other:			\$ -
Allowance Subtotal:			\$ 3,797,000
Paving and Allowance SUBTOTAL:			\$ 9,513,000
Subtotal Price per Lane Mile			\$ 2,379,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 9,513,000
Construction Contingency/Right-of-Way		15%	\$ 1,427,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 1,523,000
Inspections/Material Testing		3.5%	\$ 333,000
Roadway Cost TOTAL:			\$ 12,796,000
Price per Linear Foot (PA):			\$ 2,500
Price per Lane Mile			\$ 3,199,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2022 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Secondary Arterial (Widening) Limits: Classification: SA ROW Width (feet): 110 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	22,300	CY	\$ 18.00	\$ 401,400
2	12" Lime Stabilization (with Lime @ 46#/sy)	42,300	SY	\$ 20.75	\$ 877,725
3	11" Concrete Pavement and Curb	39,900	SY	\$ 80.00	\$ 3,192,000
4	6' Concrete Sidewalk (4" Depth)	63,400	SF	\$ 6.50	\$ 412,100
5	4" Topsoil	2,100	CY	\$ 45.00	\$ 94,500
6	Block Sodding	18,800	SY	\$ 12.00	\$ 225,600
7	12' Wide Turn Lane (200 LF Long)	6,400	SY	\$ 80.00	\$ 512,000
Paving Subtotal:					\$ 5,715,325

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 285,700.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	10%	\$ 571,300.00
✓ Traffic Control	Maintain Existing Traffic	10%	\$ 571,300.00
✓ Pavement Markings/Signs		2%	\$ 114,300.00
✓ Roadway Drainage	Standard Internal System	30%	\$ 1,713,700.00
✓ Concrete Driveways	Driveways (Every 100')	\$ 5,000.00	\$ 528,000.00
✓ Irrigation	Basic	3%	\$ 171,400.00
✓ Illumination	Street Light Foundations and Conduit	7%	\$ 399,900.00
✓ Water	Minor Adjustments	10%	\$ 571,300.00
✓ Sewer	Minor Adjustments	10%	\$ 571,300.00
✓ SWPPP		4%	\$ 228,500.00
Other:			\$ -
Allowance Subtotal:			\$ 5,726,700

Paving and Allowance SUBTOTAL: \$ 11,443,000**Subtotal Price per Lane Mile \$ 2,861,000****Denton Mobility Plan - Roadway Costing**

Item Description	Notes	Allowance	Item Cost
Construction			\$ 11,443,000
Construction Contingency/Right-of-Way		15%	\$ 1,717,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 1,831,000
Inspections/Material Testing		3.5%	\$ 401,000

Roadway Cost TOTAL: \$ 15,392,000**Price per Linear Foot (PA): \$ 3,000****Price per Lane Mile \$ 3,848,000**

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2020 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Secondary Arterial (Half Roadway) Limits: Classification: SA (1/2) ROW Width (feet): 110 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	11,200	CY	\$ 18.00	\$ 201,600
2	12" Lime Stabilization (with Lime @ 46#/sy)	21,200	SY	\$ 20.75	\$ 439,900
3	11" Concrete Pavement and Curb	20,000	SY	\$ 80.00	\$ 1,600,000
4	6' Concrete Sidewalk (4" Depth)	31,700	SF	\$ 6.50	\$ 206,050
5	4" Topsoil	1,700	CY	\$ 45.00	\$ 76,500
6	Block Sodding	14,700	SY	\$ 12.00	\$ 176,400
7	12' Wide Turn Lane (200 LF Long)	6,400	SY	\$ 80.00	\$ 512,000
Paving Subtotal:					\$ 3,212,450

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 160,100.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	5%	\$ 160,100.00
✓ Traffic Control	Maintain Existing Traffic	5%	\$ 160,100.00
✓ Pavement Markings/Signs		2%	\$ 64,100.00
✓ Roadway Drainage	Standard Internal System	20%	\$ 640,400.00
✓ Concrete Driveways	Driveways (Every 100')	\$ 5,000.00	\$ 264,000.00
✓ Irrigation	Basic	3%	\$ 96,100.00
✓ Illumination	Street Light Foundations and Conduit	3%	\$ 96,100.00
✓ Water	Minor Adjustments	3%	\$ 96,100.00
✓ Sewer	Minor Adjustments	3%	\$ 96,100.00
✓ SWPPP		4%	\$ 128,100.00
Other:			\$ -
Allowance Subtotal:			\$ 1,961,300
Paving and Allowance SUBTOTAL:			\$ 5,174,000
Subtotal Price per Lane Mile			\$ 2,587,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 5,174,000
Construction Contingency/Right-of-Way		15%	\$ 777,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 828,000
Inspections/Material Testing		3.5%	\$ 182,000
Roadway Cost TOTAL:			\$ 6,961,000
Price per Linear Foot (PA):			\$ 1,400
Price per Lane Mile			\$ 3,481,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

City of Denton

Kimley-Horn

2022 Denton Mobility Plan - Roadway Costing

Planning Level Opinion of Probable Construction Cost

Project Information

Street Name: Collector (New) Limits: Classification: C ROW Width (feet): 65 Length (feet): 5,280	Notes:
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Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Unclassified Street Earthwork	13,200	CY	\$ 18.00	\$ 237,600
2	8" Lime Stabilization (with Lime @ 46#/sy)	25,300	SY	\$ 20.75	\$ 524,975
3	8" Concrete Pavement and Curb	24,100	SY	\$ 70.00	\$ 1,687,000
4	5' Concrete Sidewalk (4" Depth)	52,800	SF	\$ 6.50	\$ 343,200
5	4" Topsoil	1,000	CY	\$ 45.00	\$ 45,000
6	Block Sodding	8,800	SY	\$ 12.00	\$ 105,600
7	Parking Lane	4,700	SY	\$ 70.00	\$ 329,000
Paving Subtotal:					\$ 3,272,375

Major Construction Component Allowances:

Item Description	Notes:	Allowance	Item Cost
✓ Mobilization		5%	\$ 163,400.00
✓ Removals/Prepare Right-of-Way	Only for Reconstruction	2%	\$ 65,400.00
✓ Traffic Control	Maintain Existing Traffic	2%	\$ 65,400.00
✓ Pavement Markings/Signs		2%	\$ 65,400.00
✓ Roadway Drainage	Standard Internal System	30%	\$ 979,900.00
Concrete Driveways	Driveways (Every 100')	\$ -	\$ -
✓ Irrigation	Basic	3%	\$ 98,000.00
✓ Illumination	Street Light Foundations and Conduit	7%	\$ 228,700.00
✓ Water	Minor Adjustments	10%	\$ 326,700.00
✓ Sewer	Minor Adjustments	10%	\$ 326,700.00
✓ SWPPP		2%	\$ 65,400.00
Other:			\$ -
Allowance Subtotal:			\$ 2,385,000
Paving and Allowance SUBTOTAL:			\$ 5,658,000
Subtotal Price per Lane Mile			\$ 2,829,000

Denton Mobility Plan - Roadway Costing

Item Description	Notes	Allowance	Item Cost
Construction			\$ 5,658,000
Construction Contingency/Right-of-Way		15%	\$ 849,000
Railroad Crossings	Priced Per Roadway Segment		
Intersections	Priced Per Roadway Segment		
Streams/Channel Crossings	Priced Per Roadway Segment		
Engineering/Survey/SUE		16%	\$ 906,000
Inspections/Material Testing		3.5%	\$ 199,000
Roadway Cost TOTAL:			\$ 7,612,000
Price per Linear Foot (PA):			\$ 1,500
Price per Lane Mile			\$ 3,806,000

NOTE: The planning level cost projections provided have been developed for the Denton Mobility Plan, and should not be used for any future Capital Improvement Planning within the City of Denton. No Engineering evaluation was used in the development of the costs. Generic costs and percentages were developed for paving unit prices, allowances, intersections, drainage crossings, and railroad crossings. Percentages have also been provided for contingencies/ROW, Engineering/Survey/SUE, Inspections/Material Testing, and Staff Time. The costs and percentages are based on the information known to the Engineer at this time and represent only the Engineer's judgement as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Appendix B – Roadway Impact Fee CIP Service Units of Supply

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area A

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN SERVICE AREA	VEHMI CAPACITY PER LN	VEHMI SUPPLY PK-HR	VEHMI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY VEHMI ¹	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO														
A-1	CORBIN	IH-35W	CORBIN	3,055	0.58	4	SECONDARY ARTERIAL	SA	Widening	9	100%	750	1740	5	1735	\$ 10,164,000	\$ 10,164,000.00
A-2	CORBIN	500' S OF SPRINGSIDE	CORBIN	1,410	0.27	4	SECONDARY ARTERIAL	SA	New		100%	750	810	0	810	\$ 3,378,000	\$ 3,378,000.00
A-3	FM 1515	IH 35W	CORBIN	5,990	1.10	6	PRIMARY ARTERIAL	PA	Widening	761	100%	850	5763	860	4903	\$ 23,533,000	\$ 23,533,000.00
A-4	FM 1515	WESTERN	WESTERN	1,175	0.22	6	PRIMARY ARTERIAL	PA	Widening	460	100%	850	1122	101	1021	\$ 3,959,000	\$ 3,959,000.00
A-5	FM 1515	WESTCOURT	MASCH BRANCH	1,555	0.29	6	PRIMARY ARTERIAL	PA	Widening	325	100%	850	1479	325	1154	\$ 7,495,000	\$ 7,495,000.00
A-6	FM 1515	WESTCOURT	MASCH BRANCH	620	0.12	6	PRIMARY ARTERIAL	PA	Widening	552	100%	850	612	66	546	\$ 2,089,000	\$ 2,089,000.00
A-7	FM 1515	TOM COLE	3435' W OF TOM COLE	3,435	0.65	6	PRIMARY ARTERIAL	PA	Widening	663	100%	850	3315	431	2884	\$ 13,827,000	\$ 13,827,000.00
A-8	FM 1515	3435' W OF TOM COLE	530' E OF C WOLFE	3,750	0.71	6	PRIMARY ARTERIAL	PA	Widening	619	100%	850	3621	439	3182	\$ 13,132,000	\$ 13,132,000.00
A-9	H Lively	2145' W OF H Lively	2145' W OF H Lively	2,145	0.41	6	PRIMARY ARTERIAL	PA	Widening	48	50%	850	1046	10	1038	\$ 7,226,000	\$ 7,226,000.00
A-10	H Lively	2145' W OF H Lively	2150' W OF ED ROBSON	3,915	0.74	2	PRIMARY ARTERIAL	PA	Widening	234	100%	850	1258	173	1085	\$ 13,188,000	\$ 13,188,000.00
A-11	IH-35-CORBIN	IH-35	CORBIN	4,420	0.84	2	COLLECTOR	C	New		100%	550	924	0	924	\$ 7,040,000	\$ 7,040,000.00
A-12	JIM CHRISTAL	Qld SH 24	Qld SH 24	3,110	0.59	4	SECONDARY ARTERIAL	SA	Widening	1,290	100%	750	1770	761	1009	\$ 10,332,000	\$ 10,332,000.00
A-13-C-10	JIM CHRISTAL	OLD SH 24	WESTERN	2,905	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,056	100%	750	825	290	535	\$ 9,746,000	\$ 9,746,000.00
A-14-C-11	JIM CHRISTAL	MASCH BRANCH	MASCH BRANCH	3,510	0.66	4	SECONDARY ARTERIAL	SA	Widening	910	100%	750	900	300	690	\$ 11,964,000	\$ 11,964,000.00
A-15-C-12	JIM CHRISTAL	THOMAS J EGAN	THOMAS J EGAN	5,975	1.13	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1695	135	1580	\$ 18,502,000	\$ 18,502,000.00
A-16-C-13	JIM CHRISTAL	THOMAS J EGAN	515' E OF C WOLFE	3,945	0.75	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1125	90	1035	\$ 12,707,000	\$ 12,707,000.00
A-17	PRECISION-WESTERN	PRECISION	WESTERN	3,420	0.65	2	COLLECTOR	C	New		100%	550	715	0	715	\$ 6,566,000	\$ 6,566,000.00
A-18	ROBSON RANCH	IH 35W	ED ROBSON	8,720	1.65	6	PRIMARY ARTERIAL	PA	Widening	808	50%	850	4208	667	3541	\$ 30,974,000	\$ 30,974,000.00
A-19	ROBSON RANCH	ED ROBSON	YARBROUGH	7,150	1.35	6	PRIMARY ARTERIAL	PA	Widening	627	100%	850	3443	423	3020	\$ 25,335,000	\$ 25,335,000.00
A-20	SPRINGSIDE	CORBIN	UNDERWOOD	1,835	0.35	4	SECONDARY ARTERIAL	SA	Widening	833	100%	750	1050	217	833	\$ 6,141,000	\$ 6,141,000.00
A-21	SPRINGSIDE	UNDERWOOD	WESTCOURT	865	0.16	4	SECONDARY ARTERIAL	SA	Widening	31	100%	750	480	5	475	\$ 2,971,000	\$ 2,971,000.00
A-22	TJ EGAN-LOOP 288	LOOP 288	2440' W OF LOOP 288	2,440	0.46	2	COLLECTOR	C	New		100%	550	506	0	506	\$ 3,722,000	\$ 3,722,000.00
A-23	C WOLFE	1140' S OF TOM COLE	FM 2449	7,270	1.38	6	PRIMARY ARTERIAL	PA	Widening	225	50%	850	3519	155	3364	\$ 26,240,000	\$ 13,120,000
A-24	C WOLFE	FM 2449	H Lively	3,315	0.63	6	PRIMARY ARTERIAL	PA	Widening	964	50%	850	1607	304	1303	\$ 12,018,000	\$ 6,009,000
A-25	CORBIN	IH-35-CORBIN	SPRINGSIDE	2,050	0.39	2	COLLECTOR	C	Widening	620	100%	550	429	242	187	\$ 3,667,000	\$ 3,667,000.00
A-26	J CHRISTAL-H Lively	FM 2449	H Lively	3,305	0.63	2	COLLECTOR	C	New	New	100%	550	693	0	693	\$ 5,353,000	\$ 5,353,000.00
A-27	PRECISION	JIM CHRISTAL	1635' N OF FM 1515	2,385	0.45	2	COLLECTOR	C	New	New	100%	550	495	0	495	\$ 3,694,000	\$ 3,694,000.00
A-28	THOMAS J EGAN	JIM CHRISTAL	2915' S OF JIM CRISTAL	2,915	0.55	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1650	0	1650	\$ 6,984,000	\$ 6,984,000.00
A-29	THOMAS J EGAN	1830' N OF FM 1515	FM 1515	1,830	0.35	4	SECONDARY ARTERIAL	SA	New	New	50%	750	525	0	525	\$ 4,635,000	\$ 2,317,500
A-30	UNDERWOOD	UNDERWOOD CONNECTOR	SPRINGSIDE	4,000	0.76	6	PRIMARY ARTERIAL	PA	Widening	692	100%	850	3876	526	3350	\$ 15,229,000	\$ 15,229,000.00
A-31	WESTCOURT	FM 1515	SPRINGSIDE	4,165	0.79	4	SECONDARY ARTERIAL	PA	Widening	552	100%	750	2370	438	1934	\$ 5,343,000	\$ 5,343,000.00
A-32	WESTERN	JIM CHRISTAL	AIRPORT	6,485	1.23	6	PRIMARY ARTERIAL	PA (1/2)	Widening	253	100%	850	6273	311	5962	\$ 6,619,000	\$ 6,619,000.00
A-33	WESTERN	FM 1515	SPRINGSIDE	4,175	0.79	6	PRIMARY ARTERIAL	PA	New	New	100%	850	4029	0	4029	\$ 14,102,000	\$ 14,102,000.00
ROADWAYS BEING PROVIDED BY HUNTER RANCH AND COLE RANCH WITHOUT CITY PARTICIPATION																	
	AMXX	LOOP 288	C WOLFE	6,955	1.30	2	SECONDARY ARTERIAL	SA	New	New	100%	750	1950	0	1950	\$ -	\$ -
	FM 2449	LOOP 288	780' W OF LOOP 288	778	0.15	6	PRIMARY ARTERIAL	PA	New	New	100%	850	765	0	765	\$ -	\$ -
	FM 2449	780' W OF LOOP 288	4380' E OF C WOLFE	1,904	0.38	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1836	0	1836	\$ -	\$ -
	FM 2449	4380' E OF C WOLFE	C WOLFE	4,582	0.83	6	PRIMARY ARTERIAL	PA	Widening	1364	100%	850	4233	1132	3101	\$ -	\$ -
	FM 2499	OUTER LOOP	UNDERWOOD	5,687	1.08	2	COLLECTOR	C	New	New	100%	550	1168	0	1168	\$ -	\$ -
	H Lively	I-35W	C WOLFE	14,275	2.70	6	PRIMARY ARTERIAL	PA	New	New	30%	850	4131	0	4131	\$ -	\$ -
	AMXX-H Lively	FM 1515	H Lively	9,395	1.78	2	COLLECTOR	C	New	New	100%	550	1958	0	1958	\$ -	\$ -
	FM 1515-H Lively	FM 1515	H Lively	12,255	2.32	4	SECONDARY ARTERIAL	SA	New	New	50%	750	6960	0	6960	\$ -	\$ -
	HUNTER ARTERIAL	HUNTER ARTERIAL	UNDERWOOD	10,451	1.98	4	SECONDARY ARTERIAL	SA	New	New	100%	750	2970	0	2970	\$ -	\$ -
	HUNTER COLLECTOR A	HUNTER COLLECTOR	ROBSON RANCH	11,391	2.16	2	COLLECTOR	C	New	New	100%	550	2376	0	2376	\$ -	\$ -
	HUNTER COLLECTOR C	HUNTER ARTERIAL	HUNTER COLLECTOR B	13,264	2.51	6	COLLECTOR	C	New	New	100%	550	8283	0	8283	\$ -	\$ -
	HUNTER COLLECTOR A	HUNTER ARTERIAL	ROBSON RANCH	13,264	2.51	6	COLLECTOR	C	New	New	100%	550	8283	0	8283	\$ -	\$ -
	UNDERWOOD	UNDERWOOD	FM 2449	2,886	0.55	2	COLLECTOR	C	New	New	100%	550	605	0	605	\$ -	\$ -
	UNDERWOOD	UNDERWOOD CONNECTOR	HUNTER COLLECTOR A	2,026	0.38	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1938	0	1938	\$ -	\$ -
	UNDERWOOD	LOOP 288	1610' N OF H Lively	5,908	1.12	6	PRIMARY ARTERIAL	PA	Widening	60	100%	850	5712	67	5645	\$ -	\$ -
	UNDERWOOD	1610' N OF H Lively	H Lively	1,608	0.30	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1530	0	1530	\$ -	\$ -
	UNDERWOOD	H Lively	ROBSON RANCH	12,039	2.28	6	SECONDARY ARTERIAL	SA	New	New	100%	750	10280	0	10280	\$ -	\$ -
SUBTOTAL													120,658	8,471	112,187	\$ 347,875,000	\$ 268,201,500
2022 Roadway Impact Fee Cost per Service Area																	
TOTAL COST IN SERVICE AREA \$ 268,239,160																	
TOTAL PROJECT COST IN SERVICE AREA \$ 268,239,160																	

$$1. \text{ Veh-Mi Supply Pk-Hr Total} = [\text{Length (mi)}] * [\text{Exist Lanes}] * [\text{Veh-Mi Capacity Pk-Hr Per Ln}] * [\% \text{ in Service Area}]$$
$$2. \text{ Veh-Mi Demand Pk-Hr Total} = [\text{Length (mi)}] * [\text{PM Peak Hour Vol}] * \% \text{ In Service Area}$$
$$3. \text{ Excess Capacity Pk-Hr Veh-Mi} = [\text{Veh-Mi Supply Pk-Hr Total}] - [\text{Veh-Mi Demand Pk-Hr Total}]$$

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

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area B

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN SERVICE AREA	VEHMI CAPACITY PER LN	VEHMI SUPPLY PK-HR	VEHMI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO														
B-1	ALLRED	BONNIE BRAE	BRUSH CREEK	4,285	0.81	2	COLLECTOR	C	Widening	13	50%	550	446	5	441	\$ 6,097,000	\$ 3,048,500
B-2	ALLRED	BRUSH CREEK	JOHN PAINE	1,610	0.30	6	PRIMARY ARTERIAL	PA	Widening	1,171	50%	850	589	176	339	\$ 5,424,000	\$ 2,712,000.00
B-3	BRUSH CREEK	815 E OF COUNTRY CLUB	COUNTRY CLUB	815	0.15	6	PRIMARY ARTERIAL	PA	Widening	2,261	100%	850	765	136	426	\$ 2,747,000	\$ 2,747,000
B-4	BRUSH CREEK	2180' E OF FORT WORTH	1935' W OF COUNTRY CLUB	1,935	0.37	6	PRIMARY ARTERIAL	PA	Widening	299	100%	850	187	111	1776	\$ 6,769,000	\$ 6,769,000
B-5	BRUSH CREEK	2180' E OF FORT WORTH	FORT WORTH	2,180	0.41	6	PRIMARY ARTERIAL	PA	Widening	239	100%	850	2091	123	1,968	\$ 7,344,000	\$ 7,344,000
B-6	BRUSH CREEK	FORT WORTH	590' E OF ALLRED	3,615	0.68	6	PRIMARY ARTERIAL	PA	New	New	100%	850	3468	0	3,468	\$ 10,698,000	\$ 10,698,000
B-7	CORBIN	BONNIE BRAE	IH-35W	3,505	0.66	4	SECONDARY ARTERIAL	SA	Widening	9	100%	750	1980	6	1,974	\$ 10,760,000	\$ 10,760,000
B-8	CREKDALE	PIMICO	RIVERCHASE	3,230	0.61	2	COLLECTOR	C	New	New	100%	550	671	0	671	\$ 5,346,000	\$ 5,346,000
B-9	CREKDALE	THISTLE WAY	OAKBLUFF	2,080	0.39	2	COLLECTOR	C	New	New	100%	550	429	0	429	\$ 3,461,000	\$ 3,461,000
B-10	EL PASO	BELMONT	COUNTRY CLUB	1,910	0.36	2	COLLECTOR	C	New	New	100%	550	396	0	396	\$ 3,369,000	\$ 3,369,000
B-11	FM 1515	BONNIE BRAE	IH 35W	770	0.15	6	PRIMARY ARTERIAL	PA	Widening	1,974	100%	850	765	296	469	\$ 2,595,000	\$ 2,595,000
B-12	HICKORY CREEK	FM 2489	NAUTICA	1,175	0.22	6	PRIMARY ARTERIAL	PA (1/3)	Widening	2,942	100%	850	1272	647	475	\$ 1,605,000	\$ 1,605,000
B-13	HICKORY CREEK	NAUTICA	TEASLEY	1,310	0.25	6	PRIMARY ARTERIAL	PA (1/3)	Widening	2,942	100%	850	1275	735	540	\$ 1,789,000	\$ 1,789,000
B-14	HICKORY CREEK	TEASLEY	MONTECITO	4,475	0.85	6	PRIMARY ARTERIAL	PA (1/3)	Widening	436	100%	850	4335	371	3,984	\$ 8,638,000	\$ 8,638,000
B-15	HICKORY CREEK	MONTECITO	1435' W OF BIDDY BYE	2,230	0.42	6	PRIMARY ARTERIAL	PA (1/3)	Widening	2,261	50%	850	1071	475	596	\$ 4,006,000	\$ 2,003,000
B-16	HICKORY CREEK	1435' W OF BIDDY BYE	815' E OF COUNTRY CLUB	1,980	0.38	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1938	0	1,938	\$ 7,612,000	\$ 7,612,000
B-17	HOBSON LANE	TEASLEY	MONTECITO	670	0.13	4	SECONDARY ARTERIAL	SA	Widening	555	100%	750	380	72	318	\$ 1,914,000	\$ 1,914,000
B-18	HOBSON LANE	MONTECITO	FORRESTRIDGE	1,495	0.28	4	SECONDARY ARTERIAL	SA	Widening	552	100%	750	840	155	685	\$ 5,710,000	\$ 5,710,000
B-19	HOBSON LANE	FORRESTRIDGE	COUNTRY CLUB	3,785	0.72	4	SECONDARY ARTERIAL	SA	Widening	249	100%	750	2160	179	1,981	\$ 11,559,000	\$ 11,559,000
B-20	PARVIN	MCCORMICK	HIGHLAND PARK	2,665	0.50	2	COLLECTOR	C	New	New	100%	550	550	0	550	\$ 2,159,000	\$ 2,159,000
B-21	ROBINSON	230' E OF WHEELER RIDGE	TEASLEY	2,735	0.52	4	SECONDARY ARTERIAL	SA	Widening	1,188	100%	750	1560	618	942	\$ 8,061,000	\$ 8,061,000
B-22	RYAN	TEASLEY	MONTECITO	4,020	0.76	4	SECONDARY ARTERIAL	SA	Widening	755	100%	750	2280	574	1,706	\$ 11,980,000	\$ 11,980,000
B-23	RYAN	FORRESTRIDGE	FORRESTRIDGE	3,305	0.63	4	SECONDARY ARTERIAL	SA	Widening	552	100%	750	1580	348	1,542	\$ 10,878,000	\$ 10,878,000
B-24	RYAN	FORRESTRIDGE	COUNTRY CLUB	3,475	0.66	4	SECONDARY ARTERIAL	SA	Widening	45	100%	750	1980	30	1,950	\$ 10,824,000	\$ 10,824,000
B-25	VINTAGE	FORT WORTH	BONNIE BRAE	3,475	0.65	6	PRIMARY ARTERIAL	PA (1/3)	Widening	423	100%	850	4437	368	4,069	\$ 11,721,000	\$ 11,721,000
B-26	VINTAGE	BONNIE BRAE	NAPA VALLEY	4,605	0.87	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	714	282	452	\$ 1,665,000	\$ 1,665,000
B-27	VINTAGE	NAPA VALLEY	IH 35W	3,435	0.65	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	3315	1218	2,097	\$ 7,975,000	\$ 7,975,000
B-28	WILLOWWOOD	1250' W OF HIGHLAND PARK	BONNIE BRAE	1,285	0.24	2	COLLECTOR	C	Widening	1,039	100%	550	264	249	15	\$ 2,079,000	\$ 2,079,000
B-29	BONNIE BRAE	FM 1515	WILLOWWOOD	725	0.14	4	SECONDARY ARTERIAL	SA	Widening	2,992	100%	750	420	419	1	\$ 1,285,000	\$ 1,285,000
B-30	BONNIE BRAE	IH 35E	ROSELAWN	5,740	1.09	4	SECONDARY ARTERIAL	SA	New	New	50%	750	3270	2183	1,087	\$ 11,351,000	\$ 11,351,000
B-31	BONNIE BRAE	HIGHLAND PARK	HOBSON	2,550	0.48	4	SECONDARY ARTERIAL	SA	Widening	2,003	100%	750	3270	2183	1,087	\$ 11,351,000	\$ 11,351,000
B-32	COUNTRY CLUB	FORT WORTH	HOBSON	430	0.08	4	SECONDARY ARTERIAL	SA	New	New	50%	750	720	0	720	\$ 4,521,000	\$ 2,260,500
B-33	COUNTRY CLUB	RYAN	HICKORY CREEK	5,285	1.00	4	SECONDARY ARTERIAL	SA	Widening	1,436	100%	750	240	115	125	\$ 1,229,000	\$ 1,229,000
B-34	COUNTRY CLUB	RYAN	VINTAGE	3,485	0.66	4	SECONDARY ARTERIAL	SA	Widening	1,284	100%	750	3000	1284	1,716	\$ 15,093,000	\$ 15,093,000
B-35	FORT WORTH	VINTAGE	BONNIE BRAE	6,965	1.32	6	PRIMARY ARTERIAL	PA	Widening	552	50%	750	990	182	808	\$ 11,902,000	\$ 5,951,000
B-36	FORT WORTH	VINTAGE	BONNIE BRAE	5,655	1.07	6	PRIMARY ARTERIAL	PA	Widening	2,741	100%	850	6732	3618	3,114	\$ 26,417,000	\$ 26,417,000
B-37	FORT WORTH	BONNIE BRAE	BRUSH CREEK	1,250	0.24	6	PRIMARY ARTERIAL	PA	Widening	2,398	100%	850	5457	2566	2,891	\$ 19,290,000	\$ 19,290,000
B-38	FORT WORTH	BRUSH CREEK	CRAWFORD	1,545	0.24	6	PRIMARY ARTERIAL	PA	Widening	4,723	100%	850	1224	1134	90	\$ 4,811,000	\$ 4,811,000
B-39	JOHN PAINE	JOHNSON	ATHENS	5,845	1.11	6	PRIMARY ARTERIAL	PA	Widening	3,580	100%	850	5661	3985	1,676	\$ 20,190,000	\$ 20,190,000
B-40	JOHN PAINE	VINTAGE	1045' S OF VINTAGE	2,210	0.42	4	SECONDARY ARTERIAL	Completed	Widening	1,280	100%	750	1260	536	722	\$ 236,000	\$ 236,000
B-41	PARVIN-ROSELAWN	PARVIN	ROSELAWN	1,045	0.20	4	SECONDARY ARTERIAL	SA	New	New	100%	750	600	0	600	\$ 3,254,000	\$ 3,254,000
B-42	TEASLEY	IH 35E	LONDONDERRY	2,725	0.52	2	COLLECTOR	C	New	New	100%	550	572	0	572	\$ 3,876,000	\$ 3,876,000
B-43	TEASLEY	LONDONDERRY	HOBSON	1,315	0.25	6	PRIMARY ARTERIAL	PA (1/3)	Widening	3,407	100%	850	1275	852	423	\$ 1,039,000	\$ 1,039,000
B-44	TEASLEY	LILLIAN B MILLER	PENNSYLVANIA	5,140	0.97	6	PRIMARY ARTERIAL	PA (1/3)	Widening	3,135	100%	850	4947	3041	1,906	\$ 4,558,000	\$ 4,558,000
B-45	TEASLEY	PENNSYLVANIA	HOBSON	1,890	0.36	6	PRIMARY ARTERIAL	PA (1/3)	Widening	3,217	100%	850	1836	678	513	\$ 1,493,000	\$ 1,493,000
				1,085	0	6	PRIMARY ARTERIAL	PA (1/3)	Widening	3,133	100%	850	1071	658	413	\$ 857,000	\$ 857,000
ROADWAYS BEING PROVIDED BY HUNTER RANCH AND COLE RANCH WITHOUT CITY PARTICIPATION																	
	ALLRED	JOHN PAINE	365' W OF IH-35W	1,482	0.28	6	PRIMARY ARTERIAL	PA	Widening	1,308	100%	850	1428	366	1,062	\$ -	\$ -
	ALLRED	365' W OF IH-35W	IH-35W	365	0.07	6	PRIMARY ARTERIAL	PA	Widening	1,438	100%	850	357	101	256	\$ -	\$ -
	JOHN PAINE	VINTAGE	ALLRED	6,370	1.21	4	SECONDARY ARTERIAL	SA	New	New	100%	750	3630	0	3,630	\$ -	\$ -
	JOHN PAINE	ALLRED	TEXOMA	2,660	0.50	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1500	0	1,500	\$ -	\$ -
SUBTOTAL													89,974	29,557	60,417	\$ 306,191,000	\$ 290,216,000

$$1. \text{ Veh-Mi Supply Pk-Hr Total} = [\text{Length (mi)}] * [\text{Exist Lanes}] * [\text{Veh-Mi Capacity Pk-Hr Per Ln}] * [\% \text{ in Service Area}]$$
$$2. \text{ Veh-Mi Demand Pk-Hr Total} = [\text{Length (mi)}] * [\text{PM Peak Hour Vol}] * [\% \text{ In Service Area}]$$
$$3. \text{ Excess Capacity Pk-Hr Veh-Mi} = [\text{Veh-Mi Supply Pk-Hr Total}] - [\text{Veh-Mi Demand Pk-Hr Total}]$$

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

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL ¹	VEH-MI TOTAL PK-HR ²	EXCESS CAPACITY PK-HR ³ VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO														
C-1	BARTHOLD	MASCH BRANCH	5200' W OF IH 35	5,195	0.98	6	PRIMARY ARTERIAL	PA	Widening	250	50%	850	2469	123	2,376	\$ 17,750,000	\$ 8,975,000
C-2	BOBCAT	FM 2164	IH 35	14,535	2.75	4	SECONDARY ARTERIAL	SA	New	New	100%	750	8250	0	8250	\$ 37,762,000	\$ 37,762,000
C-3	FM 1173	IH 35	4605' W OF IH 35	4,605	0.87	4	SECONDARY ARTERIAL	SA	Widening	648	100%	750	2610	564	2046	\$ 13,401,000	\$ 13,401,000
C-4	FM 1173	IH 35	LOVERS	2,190	0.41	4	SECONDARY ARTERIAL	SA	Widening	648	50%	750	615	133	482	\$ 7,704,000	\$ 3,552,000
C-5	FM 2164-IH 35	FM 2164	IH 35	14,425	2.73	4	SECONDARY ARTERIAL	SA	New	New	100%	750	8250	0	8,190	\$ 37,057,000	\$ 37,057,000
C-6	GANZER	FM 2164	GANZER	12,680	2.40	6	PRIMARY ARTERIAL	PA	New	New	100%	850	12240	0	12,240	\$ 39,748,000	\$ 39,748,000
C-7	GANZER	2900' E OF IH 35	IH 35	2,900	0.55	6	PRIMARY ARTERIAL	PA	Widening	229	100%	850	2805	126	2,679	\$ 11,525,000	\$ 11,525,000
C-8	GANZER	1620' E OF BARTHOLD	BARTHOLD	1,620	0.31	6	PRIMARY ARTERIAL	PA	Widening	175	50%	850	791	27	764	\$ 5,708,000	\$ 2,854,000
C-9	GANZER	OLD SH 24	RECTOR	2,585	0.49	6	PRIMARY ARTERIAL	PA	Widening	74	50%	850	1250	18	1,232	\$ 9,208,000	\$ 4,604,000
A-13-C-10	JIM CHRISTAL	WESTERN	MASCH BRANCH	2,905	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,056	50%	750	825	290	535	\$ 9,746,000	\$ 4,673,000
A-14-C-11	JIM CHRISTAL	THOMAS J EGAN	THOMAS J EGAN	3,510	0.66	4	SECONDARY ARTERIAL	SA	Widening	910	50%	750	990	300	690	\$ 11,964,000	\$ 5,982,000
A-15-C-12	JIM CHRISTAL	THOMAS J EGAN	515' E OF C WOLFE	5,975	1.13	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1695	135	1,560	\$ 18,502,000	\$ 9,251,000
A-16-C-13	JIM CHRISTAL	THOMAS J EGAN	945' W OF C WOLFE	3,945	0.75	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1125	90	1,035	\$ 12,607,000	\$ 6,953,500
C-14	JIM CHRISTAL	NAIL	NAIL	3,115	0.59	4	SECONDARY ARTERIAL	SA	Widening	142	50%	750	885	42	843	\$ 9,547,000	\$ 4,773,500
C-15	JIM CHRISTAL	2045' W OF Nail	2045' W OF Nail	2,045	0.39	4	SECONDARY ARTERIAL	SA	Widening	119	50%	750	595	23	562	\$ 5,841,000	\$ 2,920,500
C-16	MARSHALL	2845' N OF HAMPTON	HAMPTON	2,845	0.54	2	COLLECTOR	C	New	New	100%	550	594	0	594	\$ 5,249,000	\$ 5,249,000
C-17	MARSHALL	HAMPTON	DARBY SMITH	3,080	0.59	2	COLLECTOR	C	Widening	552	100%	550	649	328	323	\$ 4,397,000	\$ 4,397,000
C-18	MASCH BRANCH	MASCH BRANCH	BONNIE BRAE	3,450	0.65	4	SECONDARY ARTERIAL	SA	Widening	405	100%	750	1950	263	1,687	\$ 10,602,000	\$ 10,602,000
C-19	WESTWARD	NORTHWAY	2460' W OF US 77	1,175	0.22	2	COLLECTOR	C	New	New	100%	550	242	0	242	\$ 1,672,000	\$ 1,672,000
C-20	RINEY	US 77	BONNIE BRAE	2,460	0.47	4	SECONDARY ARTERIAL	SA (1/2)	Widening	24	100%	750	1410	11	1,399	\$ 3,156,000	\$ 3,156,000
C-21	RINEY	2460' W OF US 77	BONNIE BRAE	980	0.19	4	SECONDARY ARTERIAL	SA (1/2)	Widening	24	100%	750	570	4	566	\$ 1,258,000	\$ 1,258,000
C-22	US 77	WINDSOR	FM 2164	1,180	0.22	6	PRIMARY ARTERIAL	PA (1/3)	Widening	706	100%	850	1122	155	967	\$ 1,432,000	\$ 1,432,000
C-23	US 77	RINEY	WINDSOR	2,430	0.46	6	PRIMARY ARTERIAL	PA (1/3)	Widening	374	100%	850	2346	172	2,174	\$ 2,819,000	\$ 2,819,000
C-24	US 77	RINEY	RINEY	2,120	0.40	6	PRIMARY ARTERIAL	PA (1/3)	Widening	374	100%	850	2040	149	1,891	\$ 2,075,000	\$ 2,075,000
C-25	US 77	BONNIE BRAE	RINEY	3,960	0.75	6	PRIMARY ARTERIAL	PA (1/3)	Widening	297	100%	850	3825	223	3,602	\$ 3,126,000	\$ 3,126,000
C-26	US 77	LOOP 288	BONNIE BRAE	1,720	0.33	6	PRIMARY ARTERIAL	PA (1/3)	Widening	461	100%	850	1683	162	1,521	\$ 1,859,000	\$ 1,859,000
C-27	US 77	IH 35	LOOP 288	4,610	0.87	6	PRIMARY ARTERIAL	PA (1/3)	Widening	461	100%	850	4437	401	4,036	\$ 4,739,000	\$ 4,739,000
C-28	MASCH BRANCH-NAIL	MASCH BRANCH	1295' W OF MASCH BRANCH	1,295	0.25	2	COLLECTOR	C	New	New	100%	550	275	0	275	\$ 2,094,000	\$ 2,094,000
C-29	MASCH BRANCH-NAIL	1050' E OF LOOP 288	1550' W OF LOOP 288	2,600	0.49	2	COLLECTOR	C	New	New	100%	550	539	0	539	\$ 4,450,000	\$ 4,450,000
C-30	MASCH BRANCH-NAIL	1335' W OF THOMAS J EGAN	775' E OF C WOLFE	2,550	0.48	2	COLLECTOR	C	New	New	100%	550	528	0	528	\$ 4,379,000	\$ 4,379,000
C-31	MASCH BRANCH-NAIL	775' E OF C WOLFE	690' W OF C WOLFE	1,470	0.28	2	COLLECTOR	C	New	New	100%	550	154	0	154	\$ 2,092,000	\$ 2,092,000
C-32	MASCH BRANCH-NAIL	690' W OF C WOLFE	NAIL	3,075	0.58	2	COLLECTOR	C	New	New	100%	550	638	0	638	\$ 4,376,000	\$ 4,376,000
C-33	WESTGATE	975	1460' E OF IH-35	975	0.18	4	SECONDARY ARTERIAL	SA	New	New	100%	750	540	0	540	\$ 2,336,000	\$ 2,336,000
C-34	WINDSOR	HINKLE	HINKLE	2,420	0.46	4	SECONDARY ARTERIAL	SA	Widening	383	100%	750	1380	176	1,204	\$ 6,912,000	\$ 6,912,000
C-35	WINDSOR	5240	BONNIE BRAE	5,240	0.99	4	SECONDARY ARTERIAL	SA (1/2)	Widening	478	100%	750	2970	473	2,497	\$ 6,972,000	\$ 6,972,000
C-36	WINDSOR	WESTGATE	145' W OF CLARENDON	505	0.10	4	SECONDARY ARTERIAL	SA (1/2)	Widening	124	100%	750	300	12	288	\$ 649,000	\$ 649,000
C-37	WINDSOR	220' W OF WINDSOR FARMS	IH 35	905	0.17	4	SECONDARY ARTERIAL	SA (1/2)	Widening	124	100%	750	510	21	489	\$ 1,162,000	\$ 1,162,000
C-38	WINDSOR	IH 35	MASCH BRANCH	6,535	1.24	4	SECONDARY ARTERIAL	SA	New	New	100%	750	3720	0	3,720	\$ 17,606,000	\$ 17,606,000
C-39	BARTHOLD	GANZER	2600' S OF GANZER	2,600	0.49	4	SECONDARY ARTERIAL	SA	Widening	103	100%	750	1470	51	1,419	\$ 7,426,000	\$ 7,426,000
C-40	BONNIE BRAE	MILAM	LOOP 288	16,505	3.13	6	PRIMARY ARTERIAL	PA	New	New	100%	850	15963	0	15,963	\$ 52,065,000	\$ 52,065,000
C-41	BONNIE BRAE	LOOP 288	US 77	1,255	0.24	4	SECONDARY ARTERIAL	SA	New	New	100%	750	720	0	720	\$ 3,006,000	\$ 3,006,000
C-42	BONNIE BRAE	US 77	RINEY	1,985	0.38	4	SECONDARY ARTERIAL	SA	Widening	341	100%	750	1140	130	1,010	\$ 6,587,000	\$ 6,587,000
C-43	BONNIE BRAE	RINEY	WINDSOR	3,510	0.66	4	SECONDARY ARTERIAL	SA	Widening	220	100%	750	1980	145	1,635	\$ 10,320,000	\$ 10,320,000
C-44	BONNIE BRAE	WINDSOR	BONNIE BRAE	3,385	0.68	4	SECONDARY ARTERIAL	SA	Widening	959	100%	750	2040	652	1,388	\$ 11,981,000	\$ 11,981,000
C-45-E-29	BONNIE BRAE	WINDSOR	PANHANDLE	2,910	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	825	343	482	\$ 8,310,000	\$ 4,155,000
C-46-E-30	BONNIE BRAE	US 380	PANHANDLE	2,910	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	300	175	125	\$ 3,056,000	\$ 1,528,000
C-47-E-31	BONNIE BRAE	PANHANDLE	SCRIPTURE	1,070	0.20	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	330	193	137	\$ 3,370,000	\$ 1,685,000
C-48-E-32	BONNIE BRAE	SCRIPTURE	OAK	1,180	0.22	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	105	61	44	\$ 1,087,000	\$ 543,500
C-49-E-33	BONNIE BRAE	OAK	HICKORY	380	0.07	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	405	237	168	\$ 4,070,000	\$ 2,035,000
C-50-E-34	BONNIE BRAE	HICKORY	PRAIRIE	1,425	0.27	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	240	140	100	\$ 2,457,000	\$ 1,228,500
C-51	BONNIE BRAE	PRAIRIE	IH 35E	860	0.16	4	SECONDARY ARTERIAL	SA	Widening	1,754	50%	750	240	140	100	\$ 2,457,000	\$ 1,228,500
C-52	FALLMEADOW	US 380	WESTERN-NAIL	2,705	0.51	2	PRIMARY ARTERIAL	PA	New	New	100%	550	867	0	867	\$ 8,901,000	\$ 8,901,000
C-53-D-22	LOCUST	MEADOWEDGE	GARDENVIEW	915	0.17	2	COLLECTOR	C	New	New	100%	550	187	0	187	\$ 1,303,000	\$ 1,303,000
C-54-D-28	LOCUST	LOOP 288	LOOP 288	13,855	2.62	6	PRIMARY ARTERIAL	PA	Widening	2,098	50%	850	6681	2749	3,932	\$ 49,925,000	\$ 24,962,500
C-55-D-29	LOCUST	HERCULES	HERCULES	2,260	0.43	4	SECONDARY ARTERIAL	SA	Widening	1,923	50%	750	645	413	232	\$ 6,954,000	\$ 3,477,000
C-56-D-30	LOCUST	HERCULES	BELL	2,375	0.45	4	SECONDARY ARTERIAL	SA	Widening	1,429	50%	750	675	320	353	\$ 7,433,000	\$ 3,716,500
C-57-D-31	LOCUST	BELL	WINDSOR	1,270	0.24	4	SECONDARY ARTERIAL	SA	Widening	999	50%	750	360	120	240	\$ 3,628,000	\$ 1,814,000
C-58	LOCUST	FM 2164	LOCUST	1,345	0.25	4	SECONDARY ARTERIAL	SA	Widening	941	50%	750	375	118	257	\$ 3,841,000	\$ 1,926,000
C-59	LOCUST	FM 1173	MASCH BRANCH	4,120	0.78	4	SECONDARY ARTERIAL	SA	Widening	129	100%	750	2340	101	2,239	\$ 12,266,000	\$ 12,266,000
C-60	LOCUST	1085' N OF MASCH BRANCH	MASCH BRANCH	1,085	0.21	4	SECONDARY ARTERIAL	SA	Widening	160	100%	750	630	34	596	\$ 3,349,000	\$ 3,349,000
C-61	LOCUST	LOVERS	LOVERS	315	0.06	4	SECONDARY ARTERIAL	SA	New	New	100%	750	180	0	180	\$ 756,000	\$ 756,000
C-62	LOCUST	LOVERS	LOVERS	405	0.08	4	SECONDARY ARTERIAL	SA	New	New	100%	750	240	0	240	\$ 972,000	\$ 972,000
C-63	MASCH BRANCH	1295' S OF FM 1173	JACKSON	4,170	0.79	4	SECONDARY ARTERIAL	SA	Widening	444	50%	750	1185	176	1,009	\$ 11,908,000	\$ 5,954,000
C-64	MASCH BRANCH	LOVERS	US 380	3,800	0.72	4	SECONDARY ARTERIAL	SA	Widening	100	100%	750	2088	72	2,088	\$ 11,352,000	\$ 11,352,000
C-65	MILAM-LOOP 288	MILAM	JIM CHRISTAL	4,110	0.78	4	SECONDARY ARTERIAL	SA	Widening	147	100%	750	2340	115	2,225	\$ 12,137,000	\$ 12,137,000
C-66	MILAM-LOOP 288	MILAM	LOOP 288	14,335	2.71	4	SECONDARY ARTERIAL	SA	New	New	100%	750	8130	0	8,130	\$ 36,182,000	\$ 36,182,000

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

5/1/2024

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN SERVICE AREA	VEHMI CAPACITY	VEHMI SUPPLY	VEHMI TOTAL DEMAND	EXCESS CAPACITY	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO									PK-HR	PK-HR	PK-HR			
C-66	MILAM-US 77	MILAM	GANZER	7,975	1.51	4	SECONDARY ARTERIAL	SA	New	New	100%	750	4530	0	4,530	\$ 20,546,000	\$ 20,546,000
C-67	MILAM-US 77	GANZER	LONG	3,875	0.73	4	SECONDARY ARTERIAL	SA	Widening	95	100%	750	2190	69	2,121	\$ 11,567,000	\$ 11,567,000
C-68	MILAM-US 77	LONG	US 77	2,800	0.53	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1590	0	1,590	\$ 7,359,000	\$ 7,359,000
C-69	NICOSIA	LOOP 288	BEALL	645	0.12	2	COLLECTOR	C	New	New	100%	550	132	0	132	\$ 1,169,000	\$ 1,169,000
C-70	THOMAS J EGAN	US 380	JIM CHRISTAL	4,010	0.76	4	SECONDARY ARTERIAL	SA	Widening	552	100%	750	2280	420	1,860	\$ 12,353,000	\$ 12,353,000
C-71	WESTERN	US 380	JIM CHRISTAL	4,245	0.80	6	PRIMARY ARTERIAL	PA	Widening	164	100%	850	4080	132	3,948	\$ 14,699,000	\$ 14,699,000
SUBTOTAL												145,092	11,526	133,566	\$ 695,918,000	\$ 587,514,000	

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].

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area D

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN SERVICE AREA	VEHMI CAPACITY PK-HR PER LN	VEHMI TOTAL DEMAND	EXCESS CAPACITY PK-HR VEHMI ²	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO													
D-1	BOBCAT	560' W OF FM 2164	FM 2164	560	0.11	4	SECONDARY ARTERIAL	SA	Widening	38	50%	750	165	163	\$ 1,601,000	\$ 800,500
D-2	FISHTRAP	MINCO	GEESLING	1,890	0.36	2	COLLECTOR	C	New	New	50%	550	198	0	\$ 2,939,000	\$ 1,469,500.00
D-3	GANZER	15,500' E OF SHERMAN	4600' W OF SHERMAN	17,985	3.41	6	PRIMARY ARTERIAL	PA	New	New	100%	850	17391	0	\$ 53,936,000	\$ 53,936,000.00
D-4	GRIBBLE SPRINGS	INDIAN WELLS	3015' W OF INDIAN WELLS	3,015	0.57	2	SECONDARY ARTERIAL	SA	Widening	624	50%	750	428	178	\$ 8,861,000	\$ 4,430,500
D-5	HARTLEE FIELD	4220' E OF COOPER CREEK	COOPER CREEK	4,220	0.80	4	SECONDARY ARTERIAL	SA	Widening	624	50%	750	1200	250	\$ 12,051,000	\$ 6,025,500
D-6	HARTLEE FIELD	COOPER CREEK	5170' W OF COOPER CREEK	5,170	0.98	4	SECONDARY ARTERIAL	SA	Widening	37	50%	750	1470	18	\$ 14,764,000	\$ 7,382,000
D-7	HARTLEE FIELD	600' E OF SHERMAN	SHERMAN	600	0.11	2	COLLECTOR	C	Widening	4	50%	550	61	61	\$ 855,000	\$ 427,500
D-8	HARTLEE FLD-FM 2164	HARTLEE FIELD	SHERMAN	2,250	0.43	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1290	0	\$ 5,392,000	\$ 5,392,000.00
D-9	HARTLEE FLD-FM 2164	SHERMAN	3500' W OF SHERMAN	3,500	0.66	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1980	0	\$ 8,386,000	\$ 8,386,000.00
D-10	HARTLEE FLD-FM 2164	STUART	1485' W OF STUART	1,485	0.28	4	SECONDARY ARTERIAL	SA	New	New	50%	750	420	0	\$ 3,809,000	\$ 1,904,500
D-11	HARTLEE FLD-FM 2164	FM 2164	FM 2164	475	0.09	4	SECONDARY ARTERIAL	SA	New	New	100%	750	270	0	\$ 1,139,000	\$ 1,139,000.00
D-12	LONG	510' W OF FM 2164	FM 2164	510	0.10	2	COLLECTOR	C	New	New	100%	550	110	0	\$ 726,000	\$ 726,000.00
D-13	MINCO	E CITY LIMITS	COOPER CREEK	460	0.09	4	SECONDARY ARTERIAL	SA	Widening	280	100%	750	270	23	\$ 1,315,000	\$ 1,315,000.00
D-14	MINCO	COOPER CREEK	LOOP 286	2,305	0.44	4	SECONDARY ARTERIAL	SA	Widening	552	100%	750	1320	243	\$ 6,983,000	\$ 6,983,000.00
D-15	MINCO	LOOP 288	US 380	2,275	0.43	4	SECONDARY ARTERIAL	SA	Widening	552	100%	750	1290	237	\$ 7,937,000	\$ 7,937,000.00
D-16	KINGS ROW	SILVER DOME	LOOP 288	2,655	0.50	2	COLLECTOR	C	Widening	552	100%	550	550	276	\$ 3,779,000	\$ 3,779,000.00
D-17	SILVER DOME	COOPER CREEK	FARRIS RD	2,190	0.41	2	COLLECTOR	C	Widening	552	100%	550	226	113	\$ 3,117,000	\$ 1,568,500
D-18	COLLINS	HARTLEE FIELD	2730' S OF HARTLEE FIELD	4,440	0.84	4	COLLECTOR	C	Widening	218	50%	550	92	832	\$ 6,180,000	\$ 3,409,000
D-19	COOPER CREEK	SHERMAN	HARTLEE FIELD	10,065	1.91	6	SECONDARY ARTERIAL	SA	New	New	100%	750	8595	0	\$ 25,554,000	\$ 25,554,000.00
D-20	COOPER CREEK	SILVER DOME	MINCO	4,360	0.83	6	SECONDARY ARTERIAL	SA	Widening	1,822	100%	750	1888	756	\$ 12,452,000	\$ 6,226,000
D-21	COOPER CREEK	MINCO	US 380	1,680	0.31	6	PRIMARY ARTERIAL	PA	Widening	2,250	100%	850	1632	720	\$ 7,361,000	\$ 7,361,000.00
C-53-D-22	FM 2164	MILAM	LOOP 288	13,855	2.62	6	PRIMARY ARTERIAL	PA	Widening	2,098	100%	850	6881	2749	\$ 49,925,000	\$ 24,962,500
D-23	GREEN VALLEY	2395' S OF FM 2153	2935' N OF SHEPARD	7,765	1.47	2	SECONDARY ARTERIAL	PA	New	New	100%	750	2205	0	\$ 2,205	\$ 24,463,000
D-24	GREEN VALLEY	WARSCHUN	SHERMAN	2,095	0.40	2	SECONDARY ARTERIAL	SA	Widening	1,856	100%	750	600	742	\$ 6,234,000	\$ 6,234,000.00
D-25	INDIAN WELLS	1615' S OF FM 2163	4930' N OF GRIBBLE SPRINGS	3,870	0.73	2	SECONDARY ARTERIAL	SA	New	New	100%	750	1095	0	\$ 10,021,000	\$ 10,021,000.00
D-26	INDIAN WELLS	2025	2905' N OF GRIBBLE SPRINGS	2,025	0.38	2	SECONDARY ARTERIAL	SA	New	New	50%	750	285	0	\$ 853,000	\$ 2,426,500
C-54-D-28	LOCUST	LOOP 288	GRIBBLE SPRINGS	2,905	0.55	2	SECONDARY ARTERIAL	SA	Widening	1,923	50%	750	413	395	\$ 6,296,000	\$ 4,148,000
D-27	LOCUST	HERCULES	BELL	2,375	0.43	4	SECONDARY ARTERIAL	SA	Widening	967	50%	750	645	413	\$ 6,954,000	\$ 3,477,000
C-55-D-29	LOCUST	BELL	WINDSOR	2,375	0.45	4	SECONDARY ARTERIAL	SA	Widening	1,429	50%	750	675	353	\$ 7,433,000	\$ 3,716,500
C-56-D-30	LOCUST	BELL	WINDSOR	1,270	0.24	4	SECONDARY ARTERIAL	SA	Widening	999	50%	750	360	240	\$ 3,626,000	\$ 1,814,000
D-32	LOCUST	BELL	FM 2164	1,545	0.25	4	SECONDARY ARTERIAL	SA	Widening	941	50%	750	375	118	\$ 3,841,000	\$ 1,920,500
D-33	SHERMAN	LOOP 288	HERCULES	1,650	0.31	4	SECONDARY ARTERIAL	SA	Widening	2,214	100%	750	930	686	\$ 4,713,000	\$ 4,713,000.00
D-34	SHERMAN	HERCULES	KINGS	1,910	0.36	4	SECONDARY ARTERIAL	SA	Widening	1,923	100%	750	1080	692	\$ 5,455,000	\$ 5,455,000.00
D-35	SHERMAN	KINGS	WINDSOR	2,025	0.38	4	SECONDARY ARTERIAL	SA	Widening	1,781	100%	750	1170	463	\$ 7,223,000	\$ 7,223,000.00
D-35	SHERMAN	WINDSOR	WILSONWOOD	1,000	0.19	4	SECONDARY ARTERIAL	SA	Widening	1,651	100%	750	570	314	\$ 2,856,000	\$ 2,856,000.00
D-36	SHERMAN	WILSONWOOD	CORONADO	1,165	0.22	4	SECONDARY ARTERIAL	SA	Widening	1,646	100%	750	660	362	\$ 3,328,000	\$ 3,328,000.00
D-37	SHERMAN	CORONADO	GREENWOOD	1,640	0.31	4	SECONDARY ARTERIAL	SA	Widening	1,659	100%	750	930	514	\$ 4,685,000	\$ 4,685,000.00
D-38	SHERMAN	GREENWOOD	BELL	825	0.16	4	SECONDARY ARTERIAL	SA	Widening	2,075	100%	750	480	332	\$ 2,357,000	\$ 2,357,000.00
D-39	SHERMAN	BELL	LOCUST	1,715	0.32	4	SECONDARY ARTERIAL	SA	Widening	1,934	100%	750	960	341	\$ 4,899,000	\$ 4,899,000.00
D-40	WINDSOR	LOOP 288	DOMINION	880	0.16	2	COLLECTOR	C	New	New	100%	550	176	0	\$ 1,225,000	\$ 1,225,000.00
TOTAL													11,586	50,332	\$ 351,764,000	\$ 275,665,500

$$1. \text{ Veh-Mi Supply Pk-Hr Total} = [\text{Length (mi)}] * [\text{Exist Lanes}] * [\text{Veh-Mi Capacity Pk-Hr Per Ln}] * [\% \text{ in Service Area}]$$
$$2. \text{ Veh-Mi Demand Pk-Hr Total} = [\text{Length (mi)}] * [\text{PM Peak Hour Vol}] * [\% \text{ In Service Area}]$$

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].

City of Denton - 2022 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area E

Project ID #	ROADWAY	LIMITS		LENGTH (FT)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR	% 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 ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
		FROM	TO													
E-1	AUDRA	LOOP 288	1185' W OF LOOP 288	1,185	2	COLLECTOR	C	New	New	100%	550	2130	392	0	\$ 1,687,000	\$ 1,687,000
E-2	BLAGG	LAKEVIEW	GEESLING	3,740	0.71	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1738	392	1738	\$ 7,181,000	\$ 11,181,000
E-3	BLAGG	GEESLING	2175' W OF GEESLING	2,175	0.41	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1230	0	1230	\$ 7,651,000	\$ 7,651,000
E-4	BLAGG	235' E OF MAYHILL	YH 35E	235	0.04	4	PRIMARY ARTERIAL	SA	New	50%	750	60	0	60	\$ 563,000	\$ 281,500
E-5	DALLAS	TEASLEY	IH 35E	4,590	0.87	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	4437	2083	2354	\$ 3,624,000	\$ 3,624,000
E-6	DUCHESS	TRAILHEAD	WOODROW	4,005	0.76	2	COLLECTOR	C	New	100%	550	836	0	836	\$ 5,949,000	\$ 5,949,000
E-7	FM 426	LANEY	GRISCOM	2,995	0.57	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1710	261	1,449	\$ 9,953,000	\$ 9,953,000
E-8	MCKINNEY	LOOP 288	GRISCOM	8,735	1.65	4	SECONDARY ARTERIAL	SA	Widening	100%	750	4950	225	4,165	\$ 1,551,000	\$ 1,551,000
E-9	MCKINNEY	LOOP 288	CARDINAL	670	0.13	4	SECONDARY ARTERIAL	SA	Widening	100%	750	390	225	1,495	\$ 1,914,000	\$ 1,914,000
E-10	MCKINNEY	CARDINAL	MOCKINGBIRD	1,145	0.22	4	SECONDARY ARTERIAL	SA	Widening	100%	750	660	331	279	\$ 3,270,000	\$ 3,270,000
E-11	MCKINNEY	MOCKINGBIRD	MACK	3,245	0.61	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1830	387	1,493	\$ 9,268,000	\$ 9,268,000
E-12	MCKINNEY	MACK	AUDRA	1,540	0.29	4	SECONDARY ARTERIAL	SA	Widening	100%	750	870	396	474	\$ 4,396,000	\$ 4,396,000
E-13	MILLS	TRINITY	MAYHILL	7,415	1.40	4	SECONDARY ARTERIAL	SA	New	100%	750	4200	773	3,427	\$ 23,115,000	\$ 23,115,000
E-14	MILLS	LAKEVIEW	MAYHILL	2,185	0.41	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1230	0	1,230	\$ 5,235,000	\$ 5,235,000
E-15	MINGO	US 380	OLD NORTH	760	0.14	4	SECONDARY ARTERIAL	SA	Widening	100%	750	420	77	343	\$ 2,172,000	\$ 2,172,000
E-16	MINGO	OLD NORTH	NOTTINGHAM	2,545	0.48	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1440	253	1,187	\$ 7,268,000	\$ 7,268,000
E-17	MINGO	NOTTINGHAM	PERTAIN	2,935	0.56	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1680	51	1,629	\$ 8,381,000	\$ 8,381,000
E-18	MINGO	PERTAIN	RUDELL	945	0.18	4	SECONDARY ARTERIAL	SA	Widening	100%	750	540	36	504	\$ 2,700,000	\$ 2,700,000
E-19	MINGO	RUDELL	WILLIS	600	0.11	4	SECONDARY ARTERIAL	SA	Widening	100%	750	330	36	294	\$ 1,714,000	\$ 1,714,000
E-20	MINGO	WILLIS	WITHERS	2,305	0.44	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1320	229	1,091	\$ 6,983,000	\$ 6,983,000
E-21	MINGO	WITHERS	PAISLEY	235	0.04	4	SECONDARY ARTERIAL	SA	Widening	100%	750	120	21	99	\$ 671,000	\$ 671,000
E-22	MINGO	MORSE	BELL	985	0.19	4	SECONDARY ARTERIAL	SA	Widening	100%	750	570	114	456	\$ 2,813,000	\$ 2,813,000
E-23	SHADY OAKS	MAYHILL	KIMBERLY	1,145	0.22	4	SECONDARY ARTERIAL	SA	Widening	100%	750	660	317	343	\$ 1,869,000	\$ 1,869,000
E-24	SPENCER	WOODROW	TEASLEY	3,070	0.58	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1740	92	1,648	\$ 9,867,000	\$ 9,867,000
E-25	TREATMENT PLANT	MAYHILL	LOOP 288	2,315	0.44	4	SECONDARY ARTERIAL	SA	Widening	100%	750	1320	546	774	\$ 6,862,000	\$ 6,862,000
E-26	TREATMENT PLANT	POST OAK	POST OAK	3,325	0.63	2	COLLECTOR	C	New	100%	550	693	0	693	\$ 4,731,000	\$ 4,731,000
E-27	TREATMENT PLANT	POST OAK	1325' W OF POST OAK	1,325	0.25	6	SECONDARY ARTERIAL	SA	New	100%	750	1125	0	1,125	\$ 5,015,000	\$ 5,015,000
E-28	BONNIE BRAE	US 380	MAYHILL	3,960	0.75	6	SECONDARY ARTERIAL	SA	Widening	100%	750	3375	414	2,961	\$ 11,310,000	\$ 11,310,000
C-45/E-29	BONNIE BRAE	US 380	PANHANDLE	2,910	0.55	4	SECONDARY ARTERIAL	SA	Widening	50%	750	825	482	343	\$ 8,310,000	\$ 4,155,000
C-46/E-30	BONNIE BRAE	PANHANDLE	SCRIPTURE	1,070	0.20	4	SECONDARY ARTERIAL	SA	Widening	50%	750	300	175	125	\$ 3,056,000	\$ 1,528,000
C-47/E-31	BONNIE BRAE	SCRIPTURE	OAK	1,160	0.22	4	SECONDARY ARTERIAL	SA	Widening	50%	750	330	137	137	\$ 3,370,000	\$ 1,665,000
C-48/E-32	BONNIE BRAE	OAK	HICKORY	360	0.07	4	SECONDARY ARTERIAL	SA	Widening	50%	750	105	61	44	\$ 1,087,000	\$ 545,500
C-49/E-33	BONNIE BRAE	PRAIRIE	PRAIRIE	1,425	0.27	4	SECONDARY ARTERIAL	SA	Widening	50%	750	405	237	168	\$ 4,070,000	\$ 2,035,000
C-50/E-34	BONNIE BRAE	PRAIRIE	IH 35E	860	0.16	4	SECONDARY ARTERIAL	SA	Widening	50%	750	340	140	200	\$ 2,467,000	\$ 1,225,500
E-35	GEESLING	OLD DUCHESS	MCKINNEY	2,423	0.42	2	COLLECTOR	C	New	100%	550	426	866	1362	\$ 8,237,000	\$ 8,237,000
E-36	GEESLING	OLD DUCHESS	BLAGG	5,395	1.02	6	PRIMARY ARTERIAL	PA	Widening	100%	850	2306	866	5,202	\$ 18,210,000	\$ 18,210,000
E-37	GEESLING	US 380	BLAGG	5,395	1.02	6	PRIMARY ARTERIAL	PA	Widening	100%	850	5206	395	931	\$ 2,467,000	\$ 2,467,000
E-38	LAKEVIEW	POST OAK	SHADY SHORES	1,385	0.26	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1236	1265	979	\$ 2,155,000	\$ 2,155,000
E-39	MAYHILL	US 380	PROMINENCE	2,335	0.44	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	383	216	167	\$ 487,000	\$ 487,000
E-40	MAYHILL	PROMINENCE	770' N OF RUSSELL NEWMAN	2,040	0.39	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1089	1121	868	\$ 2,155,000	\$ 2,155,000
E-41	MAYHILL	RUSSELL NEWMAN	RUSSELL NEWMAN	775	0.15	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	383	216	167	\$ 487,000	\$ 487,000
E-42	MAYHILL	460' S OF RUSSELL NEWMAN	460' S OF RUSSELL NEWMAN	460	0.09	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	383	216	167	\$ 487,000	\$ 487,000
E-43	MAYHILL	MILLS	MCKINNEY	1,080	0.20	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1020	613	407	\$ 1,142,000	\$ 1,142,000
E-44	MAYHILL	MCKINNEY	MORSE	1,955	0.37	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1887	1190	697	\$ 2,666,000	\$ 2,666,000
E-45	MAYHILL	MORSE	SPENCER	2,045	0.39	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1989	1455	534	\$ 2,161,000	\$ 2,161,000
E-46	MAYHILL	SPENCER	EDWARDS	3,520	0.67	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	3417	2012	1,405	\$ 3,717,000	\$ 3,717,000
E-47	MAYHILL	EDWARDS	COLORADO	3,185	0.60	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	3060	2445	615	\$ 3,864,000	\$ 3,864,000
E-48	MAYHILL	2725' N OF COLORADO	COLORADO	2,725	0.52	6	PRIMARY ARTERIAL	PA (1/3)	New	100%	850	2652	0	2,652	\$ 4,477,000	\$ 4,477,000
E-49	MAYHILL	COLORADO	IH 35E	2,330	0.44	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	2244	2441	-197	\$ 1,940,000	\$ 1,940,000
E-50	MAYHILL CONNECTOR	MAYHILL	QUAIL CREEK	700	0.13	2	COLLECTOR	PA	New	100%	550	143	0	143	\$ 2,071,000	\$ 2,071,000
E-51	MOCKINGBIRD	MCKINNEY	625' N OF DUCHESS	855	0.16	4	COLLECTOR	C	New	100%	550	352	0	352	\$ 1,217,000	\$ 1,217,000
E-52	MOCKINGBIRD	DUCHESS	SHADY OAKS	2,170	0.41	4	SECONDARY ARTERIAL	SA	New	100%	750	1230	0	1,230	\$ 7,039,000	\$ 7,039,000
E-53	MOCKINGBIRD	SHADY OAKS	SPENCER	2,805	0.53	4	SECONDARY ARTERIAL	SA	New	100%	750	1590	0	1,590	\$ 6,721,000	\$ 6,721,000
E-54	POST OAK	MILLS	SPENCER	6,840	1.30	6	PRIMARY ARTERIAL	PA	New	100%	850	6630	0	6,630	\$ 20,228,000	\$ 20,228,000
E-55	POST OAK	TREATMENT PLANT	EDWARDS	6,685	1.27	6	PRIMARY ARTERIAL	PA	New	100%	850	6477	0	6,477	\$ 21,525,000	\$ 21,525,000
E-56	POST OAK	EDWARDS	POCKRUS PAGE	2,710	0.51	2	PRIMARY ARTERIAL	PA	New	100%	850	867	0	867	\$ 8,015,000	\$ 8,015,000
E-57	SWISHER	EDWARDS	POCKRUS PAGE	2,635	0.50	2	COLLECTOR	C	New	100%	550	550	0	550	\$ 3,750,000	\$ 3,750,000
E-58	TEASLEY	DALLAS	IH 35E	1,870	0.35	6	PRIMARY ARTERIAL	PA (1/3)	Widening	100%	850	1785	732	1,053	\$ 2,077,000	\$ 2,077,000
E-59	N STAR	SPENCER	ROY	1,705	0.32	2	COLLECTOR	C	New	100%	550	352	0	352	\$ 2,427,000	\$ 2,427,000
E-60	ROY	MAYHILL	N STAR	1,120	0.21	2	COLLECTOR	C	New	100%	550	231	0	231	\$ 1,594,000	\$ 1,594,000
SUBTOTAL																
2022 Roadway Impact Fee Cost per Service Area																
TOTAL COST IN SERVICE AREA \$ 305,661,160																

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].

Appendix C – Existing Roadway Facilities Inventory

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area A

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
CORBIN	IH-35W	CORBIN	3,055	0.58	1	1	2U-R	SA	5	150	150	87	87	3	3	84	84		
FM 1515	IH 35W	CORBIN	5,990	1.13	1	1	2U-H	PA	381	725	725	819	819	431	431	389	389		
FM 1515	WESTERN	CORBIN	1,175	0.22	1	1	2U-H	PA	230	725	725	160	160	51	51	109	109		
FM 1515	WESTERN	WESTCOURT	1,555	0.29	1	1	2U-H	PA	560	725	725	210	210	162	162	48	48		
FM 1515	WESTCOURT	MASCH BRANCH	620	0.12	1	1	2U	PA	276	450	450	54	54	33	33	21	21		
FM 1515	TOM COLE	3435' W OF TOM COLE	3,435	0.65	1	1	2U-R	PA	332	150	150	98	98	216	216	-118	-118	118	118
FM 1515	3435' W OF TOM COLE	530' E OF C WOLFE	3,750	0.71	1	1	2U-R	PA	309	150	150	107	107	219	219	-113	-113	113	113
FM 2449	4390' E OF C WOLFE	C WOLFE	4,390	0.83	1	1	2U-H	PA	682	725	725	602	602	566	566	36	36		
FM 2449	AMXX HILL RD	3830' W OF AMXX HILL RD	3,830	0.73	1	1	2U-H	PA	189	725	725	265	265	69	69	196	196		
FM 1515	C WOLFE	2145' W OF H LIVELY	2,145	0.41	1	1	2U-R	PA	24	150	150	31	31	5	5	26	26		
H LIVELY	2145' W OF H LIVELY	2150' W OF ED ROBSON	3,915	0.74	1	1	2U-R	PA	117	150	150	111	111	87	87	24	24		
JIM CHRISTAL	IH 35	OLD SH 24	3,110	0.59	1	1	2U-H	SA	645	725	725	428	428	381	381	47	47		
JIM CHRISTAL	OLD SH 24	WESTERN	2,905	0.55	1	1	2U-H	SA	528	725	725	199	199	145	145	54	54		
JIM CHRISTAL	WESTERN	MASCH BRANCH	3,510	0.66	1	1	2U-H	SA	455	725	725	239	239	150	150	89	89		
JIM CHRISTAL	MASCH BRANCH	THOMAS J EGAN	3,975	1.13	1	1	2U-H	SA	119	725	725	410	410	67	67	342	342		
JIM CHRISTAL	THOMAS J EGAN	515' E OF C WOLFE	3,945	0.75	1	1	2U-H	SA	119	725	725	272	272	45	45	227	227		
ROBSON RANCH	IH 35W	ED ROBSON	8,720	1.65	2	2	4U	PA	404	550	550	908	908	333	333	574	574		
ROBSON RANCH	ED ROBSON	YARBROUGH	7,150	1.35	2	2	4U	PA	314	550	550	743	743	212	212	531	531		
SPRINGSIDE	CORBIN	UNDERWOOD	1,855	0.35	1	1	2U	SA	310	450	450	158	158	109	109	49	49		
SPRINGSIDE	UNDERWOOD	WESTCOURT	865	0.16	1	1	2U	SA	15	100%	100%	72	72	2	2	70	70		
C WOLFE	1140' S OF TOM COLE	FM 2449	7,270	1.38	1	1	2U-R	PA	112	150	150	207	207	155	155	52	52		
CORBIN	1335' S OF FM 1515	1335' S OF FM 1515	1,355	0.26	2	2	4U	C	310	550	550	286	286	81	81	205	205		
CORBIN	1335' S OF FM 1515	IH-35-CORBIN	675	0.13	1	1	3U	C	310	550	550	72	72	40	40	31	31		
CORBIN	IH-35-CORBIN	SPRINGSIDE	2,050	0.39	1	1	2U-R	C	310	150	150	59	59	121	121	-62	-62	62	62
H LIVELY	FM 2449	H LIVELY	3,315	0.63	1	1	2U	PA	482	450	450	142	142	152	152	-10	-10	10	10
LOOP 288	1635' N OF FM 1515	UNDERWOOD CONNECTOR	2,565	0.49	1	1	2U-H	FWY	1,483	725	725	355	355	727	727	-371	-371	371	371
PRECISION	FM 1515	FM 1515	1,635	0.31	1	1	2U	C	222	450	450	140	140	69	69	71	71		
UNDERWOOD	SPRINGSIDE	UNDERWOOD CONNECTOR	4,000	0.76	1	1	2U	PA	346	450	450	342	342	263	263	79	79		
UNDERWOOD	LOOP 288	1610' N OF H LIVELY	5,910	1.12	1	1	2U-R	PA	30	150	150	168	168	34	34	134	134		
UNDERWOOD CONNECTOR	UNDERWOOD	915' S OF UNDERWOOD	915	0.17	1	1	2U	SA	321	450	450	77	77	55	55	22	22		
WESTCOURT	FM 1515	SPRINGSIDE	4,165	0.79	1	1	2U	SA	276	450	450	356	356	218	218	137	137		
WESTERN	JIM CHRISTAL	AIRPORT	6,485	1.23	2	2	4D	PA	127	750	750	1,845	1,845	1,556	1,556	1,689	1,689		
SUBTOTAL			112,205	21.26								10,016	10,016	5,354	5,354	4,662	4,662	674	674
												20,032	20,032	10,709	10,709	9,323	9,323	1,348	1,348

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area B

12/7/2023

Roadway	From	To	Length (ft)	Length (mi)	Exist Lanes		Class	PM Peak Hour Vol		% In Service Area	Veh-Mi Capacity Per Ln		Veh-Mi Supply Total		Veh-Mi Demand Total		Excess Capacity PK-Hr		Existing Deficiencies PK-Hr		
					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	NB/EB
ALLRED	BRUSH CREEK	FORT WORTH	480	0.09	1	1	C	485	485	100%	450	450	41	41	44	44	-3	-3	3	3	
			4,285	0.81	1	1	2U-R	6	6	50%	150	150	61	61	2	2	58	58	65	65	
			1,610	0.30	1	1	2U-R	PA	PA	585	585	100%	150	150	23	23	88	88	-141	-141	
			1,480	0.28	1	1	2U-R	PA	PA	654	654	100%	150	150	42	42	183	183	-141	141	
			365	0.07	1	1	2U-R	PA	PA	719	719	100%	150	150	11	11	50	50	-40	40	
			815	0.15	1	1	2U-R	PA	PA	1,131	1,131	100%	150	150	23	23	170	170	-147	147	
			1,935	0.37	1	1	2U-R	PA	PA	150	150	100%	150	150	56	56	56	0	0	0	
			2,180	0.41	1	1	2U-R	PA	PA	150	150	100%	150	150	62	62	62	0	0	0	
			3,595	0.66	1	1	2U-R	SA	SA	5	5	100%	150	150	99	99	3	3	96	96	
			3,360	0.64	1	1	2U-R	SA	SA	1,328	1,328	100%	150	150	48	48	425	425	-377	377	
ALLRED	BRUSH CREEK	FORT WORTH	2,750	0.52	1	1	2U	C	223	223	100%	450	450	234	234	116	116	118	14		
			1,610	0.30	1	1	2U	C	C	495	495	100%	450	450	135	135	149	149	-14	-14	
			1,425	0.27	1	1	2U	C	C	349	349	100%	450	450	122	122	94	94	27	27	
			825	0.16	1	1	3U	C	C	349	349	100%	550	550	88	88	56	56	32	32	
			1,760	0.33	1	1	2U	C	C	262	262	100%	450	450	149	149	86	86	62	62	
			1,905	0.36	1	1	2U	C	C	131	131	100%	450	450	162	162	47	47	115	115	
			770	0.15	1	1	2U	PA	PA	987	987	100%	450	450	68	68	148	148	-81	81	
			1,175	0.22	1	1	2U	PA	PA	1,471	1,471	100%	450	450	99	99	324	324	-225	225	
			1,310	0.25	2	2	4D	PA	PA	1,471	1,471	100%	750	750	375	375	368	368	7	7	
			4,475	0.85	1	1	2U	PA	PA	218	218	100%	450	450	383	383	185	185	197	197	
ALLRED	BRUSH CREEK	FORT WORTH	2,230	0.42	1	1	2U	PA	1,131	1,131	100%	450	450	95	95	238	238	-143	-143	143	143
			1,840	0.35	1	1	2U	C	C	20	20	100%	450	450	158	158	7	7	151	151	
			670	0.13	1	1	2U	SA	SA	278	278	100%	450	450	59	59	36	36	22	22	
			1,495	0.28	1	1	2U	SA	SA	276	276	100%	450	450	126	126	77	77	49	49	
			3,785	0.72	1	1	2U	SA	SA	125	125	100%	450	450	324	324	90	90	234	234	
			1,755	0.33	1	1	2U	C	C	7	7	100%	450	450	149	149	2	2	146	146	
			2,105	0.40	1	1	2U	C	C	4	4	100%	450	450	180	180	2	2	178	178	
			5,875	1.11	2	2	4U	C	C	847	847	100%	550	550	1,221	1,221	940	940	281	281	
			1,580	0.30	1	1	2U	C	C	47	47	100%	450	450	135	135	14	14	121	121	
			1,685	0.13	2	2	4D	SA	SA	1,379	1,379	100%	750	750	98	98	90	90	8	8	
ALLRED	BRUSH CREEK	FORT WORTH	1,055	0.20	2	2	4D	SA	774	774	100%	750	750	300	300	155	155	145	145	145	145
			505	0.10	2	2	4D	SA	SA	774	774	100%	750	750	150	150	77	77	73	73	
			2,735	0.52	1	1	2U	SA	SA	594	594	100%	450	450	234	234	309	309	-75	-75	
			8,310	1.57	1	1	2U	SA	SA	231	231	100%	450	450	707	707	363	363	344	344	
			4,020	0.76	1	1	2U	SA	SA	378	378	100%	450	450	342	342	287	287	55	55	
			3,305	0.63	1	1	2U	SA	SA	276	276	100%	450	450	284	284	174	174	110	110	
			3,475	0.66	1	1	2U	SA	SA	23	23	100%	450	450	297	297	15	15	282	282	
			4,605	0.87	1	1	2D	PA	PA	211	211	100%	550	550	479	479	184	184	295	295	
			765	0.14	1	1	2D	PA	PA	937	937	100%	550	550	77	77	131	131	-54	-54	
			3,435	0.65	1	1	2U	PA	PA	937	937	100%	450	450	293	293	609	609	-317	317	
ALLRED	BRUSH CREEK	FORT WORTH	1,735	0.33	1	1	2U	C	58	58	100%	450	450	149	149	19	19	129	129	129	129
			2,250	0.43	1	1	2U	C	C	132	132	100%	450	450	194	194	57	57	137	137	
			775	0.15	1	1	2U	C	C	301	301	100%	450	450	68	68	45	45	22	22	
			1,285	0.24	1	1	2U-R	C	C	519	519	100%	150	150	36	36	125	125	-89	-89	
			5,995	1.14	1	1	3U	C	C	58	58	100%	550	550	627	627	66	66	561	561	
			1,875	0.36	1	1	2U	C	C	96	96	100%	450	450	162	162	35	35	127	127	
			315	0.06	1	1	2U	C	C	100	100	100%	450	450	27	27	6	6	21	21	
			505	0.10	1	1	2U	C	C	55	55	100%	450	450	45	45	6	6	40	40	
			1,520	0.29	1	1	2U	C	C	527	527	100%	450	450	131	131	153	153	-22	-22	
			725	0.14	1	1	2U	SA	SA	1,496	1,496	100%	450	450	63	63	209	209	-146	-146	
ALLRED	BRUSH CREEK	FORT WORTH	5,740	1.09	1	1	2U	SA	1,001	1,001	100%	450	450	491	491	1,091	1,091	-601	-601	601	601
			1,010	0.19	1	1	2U	SA	SA	847	847	100%	450	450	86	86	161	161	-75	-75	
			6,275	1.19	1	1	2U	C	C	1,154	1,154	100%	450	450	268	268	687	687	-419	-419	
			430	0.08	1	1	2U	SA	SA	718	718	100%	450	450	36	36	57	57	-21	-21	
			5,285	1.00	1	1	2U	SA	SA	642	642	100%	450	450	450	450	642	642	-192	-192	
			3,485	0.66	1	1	2U	SA	SA	276	276	100%	450	450	149	149	91	91	57	57	
			5,755	1.09	3	3	6D	PA	PA	2,970	2,970	100%	850	850	2,780	2,780	3,237	3,237	-458	-458	
			5,940	1.13	3	3	6D	PA	PA	2,412	2,412	100%	850	850	2,882	2,882	2,726	2,726	156	156	
			2,855	0.54	1	1	2U	C	C	108	108	100%	450	450	243	243	58	58	185	185	
			2,505	0.47	1	1	2U	C	C	23	23	100%	450	450	212	212	11	11	201	201	
ALLRED	BRUSH CREEK	FORT WORTH	7,390	1.40	1	1	6D	PA	1,603	1,603	100%	850	850	1,190	1,190	2,244	2,244	-1,054	-1,054	1,054	1,054
			6,985	1.32	1	1	2U-H	PA	PA	1,370	1,370	100%	725	725	957	957	1,808	1,808	-851	-851	
			5,655	1.07	1	1	2U-H	PA	PA	1,199	1,199	100%	725	725	776	776	1,283	1,283	-507	-507	
			1,250	0.24	1	1	2U-H	PA	PA	2,382	2,382	100%	725	725	174	174	567	567	-393	-393	
			5,845	1.11	1	1	2U-H	PA	PA	1,795	1,795	100%	725	725	805	805	1,992	1,992	-1,188	-1,188	
			0.60	1	1	2U	C	C	170	170	100%	450	450	270	270	102	102	168	168		
			3,155	0.60	1	1	2U	C	C	170	170	100%	450	450	270	270	102	102	168	168	
			675	0.13	2	2	4U	SA	SA	640	640	100%	550	550	143	143	83	83	60	60	
			3,500	0.66	2	2	4U	SA	SA	640	640	100%	550	550	726	726	422	422	304	304	
			2,070	0.39	2	2	4D	PA	PA	1,508	1,508	100%	750	750	585	585	588	588	-3	-3	

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area B

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
LILLIAN MILLER	SOUTHRIDGE	WIND RIVER	2,170	0.41	2	2	4D	PA	100%	750	750	615	615	547	547	68	68		
MCCORMICK	WILLOW WOOD	PARVIN	2,085	0.39	1	1	2U	C	4	450	450	176	176	2	2	174	174		
MONTECITO	HOBSON	EL PASEO	2,960	0.56	1	1	2U	C	153	450	450	252	252	86	86	166	166		
MONTECITO	EL PASEO	RYAN	3,060	0.58	1	1	2U	C	310	450	450	261	261	180	180	81	81		
PENNSYLVANIA	IH 35E	SOUTHRIDGE	1,560	0.30	1	1	2U	C	32	450	450	135	135	10	10	125	125		
PENNSYLVANIA	SOUTHRIDGE	TEASLEY	4,075	0.77	1	1	2U	C	1	450	450	347	347	1	1	346	346		
RIVERPASS	CREEKDALE	HICKORY CREEK	2,595	0.49	1	1	2U	C	636	450	450	221	221	312	312	-91	-91	91	91
SAM BASS	IH 35E	LONDONDERRY	1,600	0.30	1	1	2U	C	2	450	450	135	135	1	1	134	134		
SOUTHRIDGE	IH 35E	LONDONDERRY	505	0.10	1	1	2U	C	4	450	450	45	45	0	0	45	45		
SOUTHRIDGE	LONDONDERRY	PENNSYLVANIA	2,410	0.46	1	1	2U	C	3	450	450	207	207	1	1	206	206		
TEASLEY	IH 35E	LILLIAN B MILLER	2,045	0.39	1	1	2U	C	119	450	450	176	176	46	46	129	129		
TEASLEY	LONDONDERRY	HOBSON	1,315	0.25	2	2	4D	PA	1,704	750	750	375	375	426	426	-51	-51	51	51
TEASLEY	LILLIAN B MILLER	PENNSYLVANIA	5,140	0.97	2	2	4D	PA	1,568	750	750	1,455	1,455	1,521	1,521	-66	-66	66	66
TEASLEY	PENNSYLVANIA	HOBSON	1,890	0.36	2	2	4D	PA	1,608	750	750	540	540	579	579	-39	-39	39	39
TEASLEY	WIND RIVER	BENT OAKS	1,085	0.21	2	2	4D	PA	1,567	750	750	315	315	329	329	-14	-14	14	14
TEASLEY	BENT OAKS	RYAN	1,230	0.23	2	2	4D	PA	2,542	750	750	345	345	585	585	-240	-240	240	240
TEASLEY	RYAN	ROBINSON	4,455	0.84	2	2	6D	PA	2,542	850	850	1,428	1,428	2,135	2,135	-707	-707	707	707
TEASLEY	ROBINSON	HICKORY CREEK	1,245	0.24	2	2	6D	PA	2,665	850	850	408	408	640	640	-232	-232	232	232
TEASLEY	HICKORY CREEK	MONTECITO	4,145	0.79	2	2	6D	PA	2,888	850	850	1,343	1,343	2,282	2,282	-939	-939	939	939
TEASLEY	MONTECITO	OLD ALTON	1,890	0.36	2	2	6D	PA	2,096	850	850	612	612	755	755	-143	-143	143	143
TEASLEY	OLD ALTON	635' W OF FM 2499	3,760	0.71	2	2	6D	PA	2,638	850	850	1,207	1,207	1,873	1,873	-666	-666	666	666
TEASLEY	OLD ALTON		1,890	0.36	2	2	6D	PA	2,260	850	850	612	612	814	814	-202	-202	202	202
SUBTOTAL			238,125	45.13								33,907	33,907	38,149	38,149	-4,242	-4,242	11,091	11,091
												67,813	67,813	76,288	76,288	-8,485	-8,485	22,182	22,182

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area C

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
BARTHOLD	MASCH BRANCH	5200' W OF IH 35	5,195	0.98	1	1	2U-R	125	125	50%	150	150	74	74	61	61	12	12		
FM 1173	IH 35	4605' W OF IH 35	4,605	0.87	1	1	2U-H	SA 324	324	100%	725	725	631	631	282	282	349	349		
FM 1173	LOVERS	2190' W OF IH 35	2,190	0.41	1	1	2U-H	SA 324	324	50%	725	725	149	149	66	66	82	82		
FM 2164	LOCUST	ELM	490	0.09	2	2	4D	SA 760	760	100%	750	750	135	135	68	68	67	67		
GANZER	2900' E OF IH 35	IH 35	2,900	0.55	1	1	2U-R	PA 115	115	100%	150	150	83	83	63	63	19	19		
GANZER	1620' E OF BARTHOLD	BARTHOLD	1,620	0.31	1	1	2U	PA 87	87	50%	450	450	70	70	13	13	56	56		
GANZER	BARTHOLD	RECTOR	2,585	0.49	1	1	2U	PA 37	37	50%	450	450	110	110	9	9	101	101		
HERCULES	LOCUST	TRISTAN	825	0.16	1	1	2U	C 276	276	100%	450	450	72	72	44	44	28	28		
HERCULES	TRISTAN	MEADOWTRAIL LN	770	0.15	1	1	2U	C 276	276	100%	450	450	68	68	41	41	26	26		
HERCULES	MEADOWTRAIL	NICOSIA	3,275	0.62	1	1	2U	C 42	42	100%	450	450	279	279	26	26	253	253		
HICKORY	BONNIE BRAE	OAK	530	0.10	2	2	4D	SA 628	628	100%	750	750	150	150	63	63	87	87		
JIM CHRISTAL	OLD SH 24	WESTERN	2,905	0.55	1	1	2U-H	SA 528	528	50%	725	725	199	199	145	145	54	54		
JIM CHRISTAL	MASCH BRANCH	THOMAS J EGAN	3,510	0.66	1	1	2U-H	SA 455	455	50%	725	725	239	239	150	150	89	89		
JIM CHRISTAL	MASCH BRANCH	THOMAS J EGAN	5,975	1.13	1	1	2U-H	SA 119	119	50%	725	725	410	410	67	67	342	342		
JIM CHRISTAL	THOMAS J EGAN	515' E OF C WOLFE	3,945	0.75	1	1	2U-H	SA 119	119	50%	725	725	272	272	45	45	227	227		
JIM CHRISTAL	945' W OF C WOLFE	NAIL	3,115	0.59	1	1	2U-H	SA 71	71	50%	725	725	214	214	21	21	193	193		
JIM CHRISTAL	NAIL	2045' W of Nail	2,045	0.39	1	1	2U-H	SA 60	60	50%	725	725	141	141	12	12	130	130		
LONG	N BONNIE BRAE	MILANUS 77	1,255	0.24	1	1	2U-R	C 54	54	50%	150	150	18	18	6	6	12	12		
MASCH BRANCH	MASCH BRANCH	DARBY SMITH	3,450	0.65	1	1	2U	SA 202	202	100%	450	450	293	293	131	131	161	161		
MILAM	FM 2164	IH 35	14,085	2.67	1	1	2U-R	FWY 312	312	50%	150	150	200	200	417	417	-216	-216	216	216
OAK	BONNIE BRAE	HICKORY	405	0.08	2	2	4D	SA 419	419	100%	750	750	120	120	34	34	86	86		
OAK	HICKORY	BONNIE BRAE	2,090	0.40	2	2	4D	SA 1,151	1,151	100%	750	750	600	600	460	460	140	140		
PANHANDLE	BONNIE BRAE	IH 35	3,000	0.57	1	1	2U	C 131	131	100%	450	450	257	257	75	75	182	182		
RINEY	US 77	2460' W OF US 77	2,460	0.47	1	1	2U	SA 12	12	100%	450	450	212	212	6	6	206	206		
RINEY	2460' W OF US 77	BONNIE BRAE	980	0.19	1	1	2U-R	SA 12	12	100%	150	150	29	29	2	2	26	26		
SCRIPTURE	BONNIE BRAE	IH 35	2,455	0.46	1	1	2U	C 110	110	100%	450	450	207	207	51	51	156	156		
SHERMAN	LOCUST	ELM	405	0.08	2	2	4U	SA 854	854	100%	550	550	88	88	68	68	20	20		
SHERMAN	ELM	CARROLL	1,060	0.20	2	2	4U	SA 838	838	100%	550	550	220	220	168	168	52	52		
THUNDERBIRD	IH 35	NORTHWAY	3,775	0.71	1	1	2U	C 140	140	100%	450	450	320	320	99	99	220	220		
US 380	LOCUST	ELM	410	0.08	3	3	6D	PA 1,251	1,251	50%	850	850	102	102	50	50	52	52		
US 380	ELM	BOLIVAR	380	0.07	3	3	6D	PA 1,077	1,077	50%	850	850	89	89	38	38	52	52		
US 380	BOLIVAR	CARROLL	680	0.13	3	3	6D	PA 1,076	1,076	50%	850	850	166	166	70	70	96	96		
US 380	CARROLL	FULTON	1,955	0.37	3	3	6D	PA 1,017	1,017	50%	850	850	472	472	188	188	284	284		
US 380	FULTON	HINKLE	475	0.09	3	3	6D	PA 856	856	50%	850	850	115	115	39	39	76	76		
US 380	HINKLE	MALONE	1,545	0.29	3	3	6D	PA 856	856	50%	850	850	370	370	124	124	246	246		
US 380	MALONE	ECTOR	1,595	0.30	3	3	6D	PA 856	856	50%	850	850	383	383	128	128	254	254		
US 380	ECTOR	BONNIE BRAE	1,865	0.35	3	3	6D	PA 890	890	50%	850	850	446	446	156	156	291	291		
US 380	BONNIE BRAE	IH 35	3,985	0.75	3	3	6D	PA 1,330	1,330	100%	850	850	1,913	1,913	998	998	915	915		
US 380	WESTERN	IH 35	4,180	0.79	3	3	6D	PA 495	495	100%	850	850	2,015	2,015	391	391	1,623	1,623		
US 380	WESTERN	MASCH BRANCH	2,925	0.56	3	3	6D	PA 467	467	100%	850	850	1,403	1,403	257	257	1,146	1,146		
US 380	MASCH BRANCH	THOMAS J EGAN	2,665	0.50	3	3	6D	PA 487	487	100%	850	850	1,275	1,275	244	244	1,032	1,032		
US 380	LOOP 288	THOMAS J EGAN	4,585	0.87	3	3	6D	FWY 378	378	100%	850	850	2,219	2,219	329	329	1,890	1,890		
US 380	THOMAS J EGAN	C WOLFE	3,930	0.74	3	3	6D	FWY 378	378	100%	850	850	1,887	1,887	280	280	1,607	1,607		
US 380	C WOLFE	NAIL	3,115	0.59	3	3	6D	FWY 378	378	100%	850	850	752	752	112	112	641	641		
US 77	WINDSOR	FM 2164	1,180	0.22	2	2	4D	PA 353	353	100%	750	750	330	330	78	78	252	252		
US 77	RINEY	WINDSOR	2,430	0.46	2	2	4D	PA 187	187	100%	750	750	690	690	86	86	604	604		
US 77	RINEY	RINEY	2,120	0.40	2	2	4D	PA 187	187	100%	750	750	600	600	75	75	525	525		
US 77	BONNIE BRAE	RINEY	3,960	0.75	2	2	4D	PA 149	149	100%	750	750	1,125	1,125	112	112	1,013	1,013		
US 77	LOOP 288	BONNIE BRAE	1,720	0.33	2	2	4D	PA 245	245	100%	750	750	495	495	81	81	414	414		
US 77	IH 35	LOOP 288	4,610	0.87	2	2	4D	PA 231	231	100%	750	750	1,305	1,305	201	201	1,104	1,104		
WESTGATE	1460' E OF IH-35	IH-35	1,460	0.28	2	2	4D	SA 57	57	100%	750	750	420	420	16	16	404	404		
WINDSOR	LOCUST	US 77	2,010	0.38	1	1	3U	C 148	148	100%	550	550	209	209	56	56	153	153		
WINDSOR	US 77	HINKLE	2,420	0.46	1	1	3U	SA 192	192	100%	550	550	253	253	88	88	165	165		
WINDSOR	HINKLE	BONNIE BRAE	5,240	0.99	1	1	2U	SA 239	239	100%	450	450	446	446	237	237	209	209		
WINDSOR	BONNIE BRAE	WESTGATE	2,700	0.51	2	2	4D	SA 62	62	100%	750	750	765	765	32	32	733	733		
WINDSOR	145' W OF CLARENDON	WESTGATE	505	0.10	1	1	2U	SA 62	62	100%	450	450	45	45	6	6	39	39		
WINDSOR	220' W OF CLARENDON	220' W OF WINDSOR FARMS	610	0.12	2	2	4D	SA 62	62	100%	750	750	180	180	7	7	173	173		
WINDSOR	220' W OF WINDSOR FARMS	IH 35	905	0.17	1	1	2U	SA 62	62	100%	450	450	77	77	11	11	66	66		
BARTHOLD	GANZER	2600' S OF GANZER	2,600	0.49	1	1	2U	SA 52	52	100%	450	450	221	221	25	25	195	195		
BONNIE BRAE	RINEY	RINEY	1,985	0.38	1	1	2U	SA 170	170	100%	450	450	171	171	65	65	106	106		
BONNIE BRAE	WINDSOR	WINDSOR	3,510	0.66	2	2	4U	SA 110	110	100%	550	550	726	726	73	73	653	653		
BONNIE BRAE	BONNIE BRAE	WINDSOR	3,595	0.68	2	2	4U	SA 479	479	100%	550	550	748	748	326	326	422	422		
BONNIE BRAE	US 380	PANHANDLE	2,910	0.55	2	2	4U	SA 877	877	50%	550	550	303	303	241	241	61	61		
BONNIE BRAE	PANHANDLE	SCRIPTURE	1,070	0.20	2	2	4U	SA 877	877	50%	550	550	110	110	88	88	22	22		
BONNIE BRAE	SCRIPTURE	OAK	1,180	0.22	2	2	4U	SA 877	877	50%	550	550	121	121	96	96	25	25		
BONNIE BRAE	OAK	HICKORY	380	0.07	2	2	4U	SA 877	877	50%	550	550	39	39	31	31	8	8		
BONNIE BRAE	HICKORY	PRAIRIE	1,425	0.27	2	2	4U	SA 877	877	50%	550	550	149	149	118	118	30	30		
BONNIE BRAE	PRAIRIE	IH 35E	860	0.16	2	2	4U	SA 877	877	50%	550	550	86	86	70	70	18	18		
CARROLL	SHERMAN	US 380	525	0.10	3	3	6D	PA 1,087	1,087	100%	850	850	255	255	109	109	146	146		

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area C

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
ELM	FM 2164	SHERMAN	3,090	0.59	0	2	SA	0	100%	850	850	0	752	0	653	0	100		
ELM	SHERMAN	US 380	455	0.09	0	2	6D	0	100%	850	850	0	115	0	96	0	18		
ELM	HERCULES	MEADOWEDGE LN	1,095	0.21	1	1	2U	276	100%	450	450	95	95	58	58	37	37		
FALLMEADOW	GARDENVIEW	US 77	1,530	0.29	1	1	2U	276	100%	450	450	131	131	80	80	50	50		
FM 2164	KLEIN	MILAM	635	0.12	1	1	2U	169	50%	450	450	27	27	10	10	17	17		
FM 2164	MILAM	LOOP 288	13,865	2.62	1	1	2U	1,049	100%	450	450	590	590	1,374	1,374	-785	-785	785	785
HERITAGE TRAIL	US 380	SCRIPTURE	4,050	0.77	2	2	4D	132	100%	750	750	1,155	1,155	102	102	1,053	1,053		
HINKLE	WINDSOR	US 380	4,555	0.86	1	1	2U	276	100%	450	450	97	97	207	207	-110	-110	110	110
LOCUST	LOOP 288	HERCULES	2,390	0.43	1	1	2U	962	50%	450	450	101	101	161	161	-60	-60	60	60
LOCUST	HERCULES	BELL	2,375	0.45	1	1	2U	715	50%	450	450	54	54	60	60	-6	-6	6	6
LOCUST	BELL	WINDSOR	1,270	0.24	1	1	2U	499	50%	450	450	96	96	59	59	-3	-3	3	3
LOCUST	FM 2164	FM 2164	1,345	0.25	1	1	2U	471	50%	450	450	180	180	0	104	0	76	0	
LOCUST	CORNADO	CORNADO	630	0.12	2	0	SA	870	0	750	750	690	690	0	400	0	290	0	
LOCUST	SHERMAN	SHERMAN	2,420	0.46	2	0	4D	870	100%	750	750	135	135	0	92	46	43	-46	46
LOCUST	US 380	US 380	475	0.09	2	0	4D	1,025	513	750	750	351	351	51	51	300	300		
LOCUST	FM 1173	MASCH BRANCH	4,120	0.78	1	1	2U	80	100%	450	450	95	95	17	17	78	78		
LOVERS	1085' N OF MASCH BRANCH	MASCH BRANCH	1,085	0.21	1	1	2U	80	100%	450	450	216	216	132	132	84	84		
LOVERS	US 380	US 380	2,545	0.48	1	1	2U	276	100%	450	450	178	178	88	88	90	90		
MALONE	AUBURN	JACKSON	4,170	0.79	1	1	2U	222	50%	450	450	324	324	36	36	288	288		
MASCH BRANCH	1295' S OF FM 1173	US 380	3,800	0.72	1	1	2U	50	100%	450	450	351	351	58	58	293	293		
MASCH BRANCH	LOVERS	JIM CHRISTAL	4,110	0.78	1	1	2U	74	100%	450	450	110	110	35	35	74	74		
MILAM-US 77	US 380	LONG	3,875	0.73	1	1	2U-R	48	100%	150	150	97	97	6	6	90	90		
NAIL	2255' S OF JIM CHRISTAL	2255' S OF JIM CHRISTAL	2,255	0.43	1	1	2U	30	50%	450	450	212	212	14	14	197	197		
NAIL	2255' S OF JIM CHRISTAL	JIM CHRISTAL	2,470	0.47	1	1	2U	30	100%	450	450	239	239	33	33	206	206		
NICOSIA	BEALL	US 77	2,820	0.53	1	1	2U	62	100%	450	450	90	90	1	1	89	89		
NORTHWAY	WINDSOR	THUNDERBIRD	1,045	0.20	1	1	2U	5	100%	450	450	122	122	75	75	47	47		
RINEY	US 77	WINDSOR	1,420	0.27	1	1	2U	276	100%	450	450	23	23	14	14	9	9		
THOMAS J EGAN	550' N OF US 380	US 380	550	0.10	1	1	2U	276	50%	450	450	342	342	210	210	132	132		
THOMAS J EGAN	US 380	JIM CHRISTAL	4,010	0.76	1	1	2U	276	100%	450	450	360	360	66	66	294	294		
WESTERN	US 380	JIM CHRISTAL	4,245	0.80	1	1	2U	82	100%	450	450	369	369	1	1	368	368		
WESTGATE	WESTGATE	WINDSOR	4,310	0.82	1	1	2U	1	100%	450	450	36	36	1	1	24,298	23,961	1,180	1,226
SUBTOTAL			254,970	48.27								72,863	72,863	24,604	24,604	48,269	48,269		

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area D

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI		
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	
BOBCAT	560' W OF FM 2164	FM 2164	560	0.11	1	1	2U-R	SA	19	150	150	8	8	1	1	7	7			
CORONADO	SHERMAN	BELL	1,355	0.26	1	1	2U	C	276	450	450	117	117	72	72	45	45			
CORONADO	BELL	LOCUST	1,735	0.33	1	1	2U	C	276	450	450	149	149	91	91	57	57			
EMERSON	OLD NORTH	NOTTINGHAM	2,745	0.52	1	1	2U	C	7	100%	450	450	234	4	4	230	230			
EMERSON	NOTTINGHAM	GLENWOOD	3,010	0.57	1	1	2U	C	4	100%	450	450	257	2	2	254	254			
EMERSON	GLENWOOD	WILSONWOOD	1,140	0.22	1	1	2U	C	25	100%	450	450	99	6	6	94	94			
FISHTRAP	270' E OF GREEN LEAF	150' E OF MINGO	2,815	0.53	1	1	2U	C	203	100%	450	450	239	108	108	131	131			
FM 2153	2520' W OF CEMETERY	CEMETERY	2,525	0.48	1	1	2U-H	SA	86	725	725	174	174	21	21	153	153			
GREENWOOD	GLENWOOD	SHERMAN	2,690	0.51	1	1	2U	C	5	100%	450	450	230	3	3	227	227			
GRIBBLE SPRINGS	INDIAN WELLS	3015' W OF INDIAN WELLS	3,015	0.57	1	1	2U-R	SA	312	150	150	43	43	89	89	-46	-46	46	46	
HARTLEE FIELD	3540' E OF COOPER CREEK	COOPER CREEK	3,540	0.67	1	1	2U-R	SA	312	150	150	50	50	105	105	-54	-54	54	54	
HARTLEE FIELD	COOPER CREEK	5170' W OF COOPER CREEK	5,170	0.98	1	1	2U-R	SA	18	150	150	74	74	9	9	65	65			
HARTLEE FIELD	600' E OF SHERMAN	SHERMAN	600	0.11	1	1	2U-R	C	2	50%	150	150	8	0	0	8	8			
HERCULES	SHERMAN	STUART	2,980	0.56	1	1	2U	C	276	450	450	252	252	155	155	97	97			
HERCULES	STUART	REDSTONE	1,385	0.26	2	2	4D	C	104	100%	750	750	380	27	27	363	363			
HERCULES	REDSTONE	MEADOW LANE	810	0.15	1	1	2U	C	104	100%	450	450	68	16	16	52	52			
HERCULES	MEADOW LANE	LOCUST	725	0.14	1	1	3U	C	104	100%	550	550	50	77	77	15	15	62	62	
KINGS	COOPER BRANCH	DUNES	3,035	0.57	1	1	2U	C	276	450	450	257	257	157	157	99	99			
KINGS	DUNES	NOTTINGHAM	1,525	0.29	1	1	3U	C	148	100%	550	550	160	43	43	117	117			
KINGS	NOTTINGHAM	SHERMAN	1,970	0.37	1	1	3U	C	148	100%	550	550	204	55	55	149	149			
KINGS	SHERMAN	STUART	2,045	0.39	1	1	2U	C	276	450	450	176	176	108	108	68	68			
LONG	SHERMAN	BOBCAT	2,965	0.56	1	1	3U	C	148	100%	550	550	308	83	83	225	225			
LONG	BOBCAT	1360' W OF BOBCAT	1,360	0.26	1	1	2U	C	276	450	450	59	59	36	36	23	23			
LONG	STUART	1600' W OF STUART	1,600	0.30	1	1	2U	C	276	450	450	135	135	83	83	52	52			
LONG	E CITY LIMITS	COOPER CREEK	460	0.09	1	1	2U	SA	130	100%	450	450	41	12	12	29	29			
MINGO	COOPER CREEK	LOOP 288	2,305	0.44	1	1	2U	SA	276	450	450	198	198	121	121	77	77			
MINGO	COOPER CREEK	US 380	2,275	0.43	1	1	2U	SA	276	450	450	194	194	119	119	75	75			
MINGO	US 380	1490' W OF FM 2153	1,490	0.28	1	1	2U	SA	24	100%	450	450	126	7	7	119	119			
SHEPARD	FM 2153	4785' W OF FM 2153	3,295	0.62	1	1	2U	SA	24	50%	450	450	140	7	7	132	132			
SHEPARD	ZACKERY	FM 2153	1,715	0.32	1	1	2U-H	FWY	560	725	725	116	116	90	90	26	26			
SHERMAN	FM 2153	GREEN VALLEY	9,105	1.72	1	1	2U-H	FWY	1,142	1,247	1,247	1,964	1,964	1,964	1,964	-717	-717	717	717	
SHERMAN	LAKEVIEW	GEESLING	6,895	1.31	3	3	7U	FWY	2,268	850	850	3,341	3,341	2,971	2,971	369	369			
US 380	GEESLING	MAYHILL	2,920	0.55	3	3	7U	PA	1,542	1,542	1,542	1,403	1,403	848	848	554	554			
US 380	MAYHILL	LOOP 288	2,310	0.44	3	3	7U	PA	1,228	1,228	1,228	850	850	540	540	582	582			
US 380	LOOP 288	MINGO	2,145	0.41	3	3	6D	PA	1,200	1,200	1,200	523	523	246	246	277	277			
US 380	MINGO	OLD NORTH	790	0.15	3	3	6D	PA	1,317	1,317	1,317	191	191	99	99	92	92			
US 380	OLD NORTH	NOTTINGHAM	2,465	0.47	3	3	6D	PA	1,187	1,187	1,187	599	599	279	279	320	320			
US 380	NOTTINGHAM	GLENWOOD	3,090	0.59	3	3	6D	PA	1,089	1,089	1,089	752	752	321	321	431	431			
US 380	GLENWOOD	RUDDELL	390	0.07	3	3	6D	PA	984	984	984	89	89	34	34	55	55			
US 380	RUDDELL	BELL	3,065	0.58	3	3	6D	PA	1,042	1,042	1,042	850	850	740	740	302	302			
US 380	BELL	SHERMAN	1,495	0.28	3	3	6D	PA	1,138	1,138	1,138	357	357	159	159	198	198			
WILSONWOOD	EMERSON	LOCUST	530	0.10	1	1	2U	C	24	100%	450	450	45	2	2	43	43			
WINDSOR	EMERSON	DOMINION	1,390	0.26	1	1	2U	C	336	336	336	117	117	87	87	30	30			
WINDSOR	DOMINION	OLD NORTH	1,990	0.38	1	1	2U	C	358	358	358	171	171	136	136	35	35			
WINDSOR	OLD NORTH	DUNES	700	0.13	1	1	2U	C	110	100%	450	450	59	14	14	44	44			
WINDSOR	DUNES	NOTTINGHAM	3,375	0.64	1	1	2U	C	25	100%	450	450	288	16	16	272	272			
WINDSOR	NOTTINGHAM	GLENWOOD	1,160	0.22	1	1	2U	C	276	450	450	99	99	61	61	38	38			
WINDSOR	GLENWOOD	SHERMAN	1,150	0.22	1	1	3U	C	137	100%	550	550	121	121	30	30	91	91		
WINDSOR	SHERMAN	STUART	1,270	0.24	1	1	3U	C	137	100%	550	550	132	33	33	99	99			
WINDSOR	STUART	BELL	1,605	0.30	2	2	3U	C	146	100%	550	550	330	44	44	286	286			
BELL	LOCUST	WINDSOR	2,325	0.44	1	1	2U	C	276	450	450	198	198	121	121	77	77			
BELL	WINDSOR	CORONADO	1,740	0.33	1	1	2U	C	276	450	450	149	149	91	91	57	57			
BELL	CORONADO	SHERMAN	1,960	0.37	1	1	2U	C	276	450	450	167	167	102	102	64	64			
BELL	SHERMAN	US 380	1,230	0.23	1	1	2U	C	67	100%	450	450	104	15	15	88	88			
COLLINS	635' S OF HARTLEE FIELD	MINGO	1,375	0.26	1	1	2U-R	SA	109	109	150	20	20	14	14	5	5			
COOPER CREEK	SILVER DOME	2000' S OF HARTLEE FIELD	4,360	0.83	1	1	2U-R	PA	911	911	150	62	62	378	378	-316	-316	316	316	
COOPER CREEK	MINGO	US 380	1,680	0.32	1	1	2U-R	PA	1,125	1,125	450	144	144	360	360	-216	-216	216	216	
DUNES	KINGS	WINDSOR	1,150	0.22	1	1	2U	C	276	450	450	99	99	61	61	38	38			
FM 2153	COSNER	SHEPARD	2,780	0.53	1	1	2U-H	SA	86	86	725	384	384	46	46	339	339			
FM 2153	COSNER	SHEPARD	8,905	1.69	1	1	2U-H	SA	86	86	725	613	613	73	73	540	540			
FM 2153	SHEPARD	SHERMAN	2,635	0.50	1	1	2U-H	SA	86	86	725	181	181	22	22	160	160			
FM 2164	320' S OF DOC HOLLIDAY	JOHN GEORGE	6,430	1.22	1	1	2U-H	PA	169	169	725	442	442	103	103	339	339			
FM 2164	KLEIN	MILAM	635	0.12	1	1	2U	PA	169	169	450	27	27	10	10	17	17			
FM 2164	MILAM	LOOP 288	13,855	2.62	1	1	2U	PA	1,049	1,049	450	590	590	1,374	1,374	-785	-785	785	785	
GLENWOOD	WINDSOR	EMERSON	960	0.11	1	1	2U	C	29	29	100%	450	450	50	3	46	46			
GLENWOOD	EMERSON	GLENWOOD	2,325	0.44	1	1	2U	C	7	7	100%	450	450	198	3	3	195	195		
GLENWOOD	GLENWOOD	US 380	830	0.16	1	1	2U	C	12	12	100%	450	450	72	2	2	70	70		
GREEN VALLEY	WARSCHUN	SHERMAN	2,305	0.44	1	1	2U-R	PA	928	928	150	66	66	408	408	-342	-342	342	342	
INDIAN WELLS	2905' N OF GRIBBLE SPRINGS	GRIBBLE SPRINGS	2,905	0.55	1	1	2U-R	SA	34	34	150	41	41	9	9	32	32			

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area D

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
LOCUST	LOOP 288	HERCULES	2,260	0.43	1	1	2U	SA	962	962	450	97	97	207	207	-110	-110	110	110
LOCUST	HERCULES	BELL	2,375	0.45	1	1	2U	SA	715	715	450	101	101	161	161	-60	-60	60	60
LOCUST	BELL	WINDSOR	1,270	0.24	1	1	2U	SA	499	499	450	54	54	60	60	-6	-6	6	6
LOCUST	FM 2164	LOCUST	1,345	0.25	1	1	2U	SA	471	471	450	56	56	59	59	-3	-3	3	3
LOCUST	FM 2164	CORONADO	630	0.12	2	0	4D	SA	870	0	750	180	0	104	0	76	0	0	0
LOCUST	CORONADO	SHERMAN	2,420	0.46	2	0	4D	SA	870	0	750	690	0	400	0	290	0	0	0
LOCUST	SHERMAN	US 380	475	0.09	2	0	4D	SA	1,025	0	750	135	0	92	0	43	0	0	0
LOCUST	KINGS	WINDSOR	1,490	0.28	1	1	2U	C	2	2	450	126	1	1	1	125	125	0	0
NOTTINGHAM	WINDSOR	EMERSON	1,395	0.26	1	1	2U	C	276	276	450	117	117	72	72	45	45	0	0
NOTTINGHAM	EMERSON	US 380	2,445	0.46	1	1	2U	C	276	276	450	207	207	127	127	80	80	0	0
OLD NORTH	EMERSON	WINDSOR	1,565	0.30	1	1	2U	C	22	22	450	135	135	7	7	128	128	0	0
SHERMAN	GREEN VALLEY	HARTLEE FIELD	1,725	0.33	1	1	2U	C	8	8	450	149	149	3	3	146	146	0	0
SHERMAN	LOOP 288	HERCULES	12,485	2.36	1	1	2U-H	FWY	1,305	1,305	725	1,711	1,711	3,080	3,080	-1,369	-1,369	1,369	1,369
SHERMAN	HERCULES	KINGS	1,650	0.31	2	2	4U	SA	1,107	1,107	550	341	341	343	343	-2	-2	183	183
SHERMAN	KINGS	WINDSOR	1,910	0.36	2	2	4U	SA	962	962	550	396	396	346	346	50	50	2	2
SHERMAN	WINDSOR	WILSONWOOD	2,025	0.38	2	2	4U	SA	890	890	550	418	418	338	338	80	80	0	0
SHERMAN	WILSONWOOD	CORONADO	1,000	0.19	2	2	4U	SA	826	826	550	209	209	157	157	52	52	0	0
SHERMAN	CORONADO	BELL	1,165	0.22	2	2	4U	SA	823	823	550	242	242	181	181	61	61	0	0
SHERMAN	GREENWOOD	LOCUST	1,640	0.31	2	2	4U	SA	830	830	550	341	341	257	257	84	84	0	0
SHERMAN	BELL	LOCUST	825	0.16	2	2	4U	SA	1,038	1,038	550	176	176	166	166	10	10	0	0
SHERMAN	LAKEVIEW	LOOP 288	1,715	0.32	2	2	4U	SA	967	967	550	352	352	309	309	43	43	0	0
STUART	LOOP 288	HERCULES	3,105	0.59	1	1	2U	C	276	276	450	133	133	81	81	51	51	0	0
STUART	HERCULES	KINGS	2,250	0.43	1	1	2U	C	276	276	450	194	194	119	119	75	75	0	0
STUART	KINGS	WINDSOR	1,555	0.29	1	1	2U	C	276	276	450	131	131	80	80	50	50	0	0
STUART	WINDSOR	CORONADO	1,875	0.36	1	1	2U	C	276	276	450	162	162	99	99	63	63	0	0
STUART	WINDSOR	CORONADO	1,840	0.35	1	1	2U	C	45	45	450	158	158	16	16	142	142	0	0
SUBTOTAL			226,580	42.91								27,118	26,113	20,275	19,678	6,843	6,435	4,209	4,209
												53,231	39,954			13,278		8,418	

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area E

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEHMI CAPACITY PK-HR PER LN		VEHMI SUPPLY TOTAL		VEHMI DEMAND TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
AUDRA	1185' W OF LOOP 288	MOCKINGBIRD	1,445	0.27	1	1	C	276	100%	450	450	122	122	75	75	47	47		
AUDRA	MOCKINGBIRD	MOCKINGBIRD	340	0.06	1	1	2U	276	100%	450	450	27	27	17	17	10	10		
AUDRA	NOTTINGHAM	NOTTINGHAM	1,995	0.38	1	1	2U	276	100%	450	450	171	171	105	105	66	66		
AVE A	WELCH	HICKORY	955	0.18	1	1	2U	38	100%	450	450	81	81	7	7	74	74		
BLAGG	LAKEVIEW	GEESLING	3,740	0.71	1	1	2U	276	100%	450	450	320	320	196	196	124	124		
BLAGG	GEESLING	2175' W OF GEESLING	2,175	0.41	1	1	2U	SA	100%	450	450	185	185	0	0	184	184		
BRINKER	MEDPARK	COLORADO	1,015	0.19	2	2	4D	SA	100%	750	750	285	285	144	144	141	141		
COLLINS	FORT WORTH	BERNARD	1,760	0.33	1	1	2U	SA	100%	450	450	149	149	35	35	114	114		
CONGRESS	OAKLAND	LOCUST	735	0.14	1	1	2U	C	100%	450	450	63	63	2	2	61	61		
CONGRESS	LOCUST	ELM	390	0.07	1	1	2U	C	100%	450	450	32	32	8	8	24	24		
CONGRESS	ELM	BOLIVAR	445	0.08	1	1	2U	C	100%	450	450	36	36	2	2	34	34		
CONGRESS	BOLIVAR	CARROLL	615	0.12	1	1	2U	C	100%	450	450	54	54	2	2	52	52		
CONGRESS	CARROLL	FULTON	1,960	0.37	1	1	2U	C	100%	450	450	167	167	1	1	166	166		
CRESCENT	FULTON	FULTON	1,950	0.37	1	1	2U	C	100%	450	450	167	167	16	16	151	151		
DALLAS	FULTON	MALONE	2,095	0.40	1	1	2U	C	100%	450	450	180	180	18	18	162	162		
DALLAS	TEASLEY	ALLEGRE VISTA	4,590	0.87	2	2	4D	PA	100%	750	750	1,305	1,305	1,041	1,041	264	264		
DALLAS	ALLEGRE VISTA	TEASLEY	945	0.18	2	2	5U	PA	100%	725	725	261	261	371	371	-110	-110	110	110
DALLAS	EAGLE	ALLEGRE VISTA	3,060	0.58	2	2	5U	PA	100%	725	725	841	841	1,088	1,088	-247	-247	247	247
DUCHESS	LOOP 288	LOCUST	2,895	0.55	1	1	2U	C	100%	450	450	248	248	152	152	96	96		
DUCHESS	BELL	LOCUST	235	0.04	2	2	4U	SA	100%	550	550	44	44	70	70	-26	-26	26	26
EAGLE	LOCUST	ELM	530	0.10	2	2	4U	SA	100%	550	550	110	110	137	137	-27	-27	27	27
EAGLE	ELM	CARROLL	695	0.13	2	2	4U	SA	100%	550	550	143	143	58	58	85	85		
EAGLE	BERNARD	WELCH	1,525	0.29	1	1	3U	SA	100%	550	550	160	160	43	43	117	117		
EAGLE	BERNARD	WELCH	885	0.17	1	1	3U	SA	100%	550	550	94	94	1	1	92	92		
EAGLE	WELCH	AVE A	485	0.09	1	1	3U	SA	100%	550	550	50	50	1	1	48	48		
EAGLE	AVE A	AVE C	1,460	0.28	1	1	3U	SA	100%	550	550	154	154	104	104	50	50		
EAGLE	AVE C	NORTH TEXAS	915	0.17	1	1	3U	SA	100%	550	550	94	94	25	25	68	68		
EDWARDS	LAKEVIEW	SWISHER	2,940	0.56	1	1	2U	C	100%	450	450	252	252	155	155	97	97		
EDWARDS	SWISHER	MAYHILL	5,945	1.13	1	1	2U	C	100%	450	450	509	509	25	25	484	484		
EDWARDS	TRINITY	MAYHILL	9,365	1.77	1	1	2U	SA	100%	450	450	797	797	405	405	391	391		
HICKORY	RUDDELL	BELL	3,280	0.62	2	0	2U	C	100%	450	450	558	0	342	0	216	0		
HICKORY	BELL	LOCUST	1,295	0.25	2	0	4D	C	100%	750	750	375	0	380	0	-5	0	5	
HICKORY	LOCUST	ELM	370	0.07	2	0	4D	SA	100%	750	750	105	0	137	0	163	0		
HICKORY	ELM	CARROLL	1,050	0.20	2	0	4D	SA	100%	750	750	300	0	137	0	163	0		
HICKORY	CARROLL	BERNARD	1,270	0.24	2	0	4D	SA	100%	750	750	360	0	193	0	167	0		
HICKORY	BERNARD	WELCH	865	0.16	2	0	4D	SA	100%	750	750	240	0	130	0	110	0		
HICKORY	WELCH	AVE C	665	0.13	2	0	4D	SA	100%	750	750	195	0	108	0	87	0		
HICKORY	AVE C	AVE A	1,300	0.25	2	0	4D	SA	100%	750	750	375	0	81	0	294	0		
HICKORY	AVE A	NORTH TEXAS	1,340	0.25	2	0	4D	SA	100%	750	750	375	0	241	0	135	0		
HICKORY	NORTH TEXAS	BONNIE BRAE	1,940	0.37	2	0	4D	SA	100%	750	750	955	0	465	0	90	0		
HIGHLAND	BERNARD	WELCH	875	0.17	1	1	2U	C	100%	450	450	77	77	25	25	52	52		
HIGHLAND	WELCH	AVE A	575	0.11	1	1	2U	C	100%	450	450	50	50	7	7	43	43		
HIGHLAND	AVE A	AVE D	660	0.13	1	1	2U	C	100%	450	450	59	59	36	36	23	23		
HIGHLAND	AVE D	NORTH TEXAS	660	0.13	1	1	2U	C	100%	450	450	59	59	36	36	23	23		
LATTIMORE	AUDRA	PERTAIN	2,980	0.56	1	1	2U	C	100%	450	450	252	252	6	6	246	246		
LOOP 288	SPENCER	BRINKER	1,335	0.25	3	3	6D	PA	100%	850	850	638	638	394	394	243	243		
LOOP 288	BRINKER	COLORADO	2,830	0.54	3	3	6D	PA	100%	850	850	1,377	1,377	960	960	417	417		
LOOP 288	COLORADO	LOP 35E	1,570	0.30	3	3	6D	PA	100%	850	850	765	765	548	548	217	217		
MAPLE	BERNARD	WELCH	885	0.17	1	1	2U	C	100%	450	450	77	77	20	20	56	56		
MAPLE	WELCH	AVE A	555	0.11	1	1	2U	C	100%	450	450	50	50	43	43	6	6		
MAPLE	AVE A	AVE C	1,405	0.27	1	1	2U	C	100%	450	450	122	122	113	113	9	9		
MAPLE	AVE C	AVE D	660	0.13	1	1	2U	C	100%	450	450	59	59	36	36	23	23		
MCKINNEY	MAYHILL	LOOP 288	2,365	0.45	1	1	2U	SA	100%	450	450	203	203	124	124	78	78		
MCKINNEY	LOOP 288	CARDINAL	670	0.13	1	1	2U	SA	100%	450	450	59	59	113	113	-54	-54	54	54
MCKINNEY	CARDINAL	MOCKINGBIRD	1,145	0.22	1	1	2U	SA	100%	450	450	99	99	190	190	-91	-91	91	91
MCKINNEY	MOCKINGBIRD	MACK	3,245	0.61	1	1	2U	SA	100%	450	450	275	275	168	168	106	106		
MCKINNEY	MACK	AUDRA	1,540	0.29	1	1	2U	SA	100%	450	450	131	131	198	198	-68	-68	68	68
MCKINNEY	AUDRA	RUDDELL	1,710	0.32	2	2	4U	SA	100%	550	550	352	352	252	252	100	100		
MCKINNEY	RUDDELL	BELL	120	0.02	2	2	4U	SA	100%	550	550	22	22	16	16	6	6		
MCKINNEY	RUDDELL	BELL	2,910	0.55	2	2	4U	SA	100%	550	550	605	605	450	450	155	155		
MCKINNEY	BELL	LOCUST	260	0.05	2	2	4U	SA	100%	550	550	55	55	52	52	3	3		
MCKINNEY	BELL	LOCUST	1,295	0.24	2	2	4U	SA	100%	550	550	264	264	154	154	110	110		
MCKINNEY	LOCUST	ELM	380	0.07	2	2	4U	SA	100%	550	550	77	77	45	45	32	32		
MCKINNEY	ELM	CARROLL	1,090	0.21	2	2	4U	SA	100%	550	550	231	231	134	134	97	97		
MCKINNEY	ELM	MAYHILL	7415	1.40	1	1	2U	SA	100%	450	450	630	630	0	0	630	630		
MINGO	US 380	OLD NORTH	760	0.14	1	1	2U	SA	100%	450	450	63	63	39	39	24	24		
MINGO	OLD NORTH	NOTTINGHAM	2,545	0.48	1	1	2U	SA	100%	450	450	216	216	126	126	90	90		
MINGO	NOTTINGHAM	PERTAIN	2,935	0.56	1	1	2U	SA	100%	450	450	252	252	26	26	226	226		
MINGO	PERTAIN	RUDDELL	945	0.18	1	1	2U	SA	100%	450	450	81	81	18	18	63	63		

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area E

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
MINGO	RUDDELL	WILLIS	600	0.11	1	1	2U	SA	164	100%	450	50	50	18	18	31	31		
MINGO	WILLIS	WITHERS	2,305	0.44	1	1	2U	SA	261	100%	450	198	198	115	115	83	83		
MINGO	WITHERS	PAISLEY	235	0.04	1	1	2U	SA	267	100%	450	450	450	11	11	7	7		
MINGO	PAISLEY	BELL	985	0.19	1	1	2U	SA	299	100%	450	450	450	86	86	57	29		
MORSE	MAYHILL	KIMBERLY	1,145	0.22	1	1	2U	SA	721	100%	450	450	450	99	159	-60	-60	60	60
MORSE	WOODROW	LOOP 288	920	0.17	2	2	4D	SA	721	100%	750	P	255	123	123	132			
MORSE	NEWTON	LAKEY	1,460	0.28	1	1	2U	C	7	100%	450	450	126	2	2	124	124		
MORSE	NEWTON	CARROLL	2,305	0.44	1	1	2U	C	276	100%	450	198	198	121	121	77	77		
MULBERRY	ELM	CARROLL	1,045	0.20	1	1	2U	C	1	100%	450	450	90	0	0	90	90		
MULBERRY	BERNARD	WELCH	1,315	0.25	1	1	2U	C	15	100%	450	450	113	4	4	109	109		
MULBERRY	BERNARD	LOCUST	870	0.16	1	1	2U	C	3	100%	450	450	72	0	0	72	72		
OAK	BELL	LOCUST	1,290	0.24	0	2	4D	C	0	1,520	750	750	0	365	0	-5	-5	5	5
OAK	LOCUST	ELM	380	0.07	0	2	4D	SA	0	100%	750	750	0	105	0	29	0	76	76
OAK	ELM	BOLIVAR	460	0.09	0	2	4D	SA	0	100%	750	750	0	135	0	47	0	88	88
OAK	BOLIVAR	CARROLL	595	0.11	0	2	4D	SA	0	100%	750	750	0	165	0	58	0	107	107
OAK	CARROLL	FULTON	1,900	0.36	0	2	4D	SA	0	100%	750	750	0	540	0	172	0	368	368
OAK	FULTON	WELCH	225	0.04	0	2	4D	SA	0	100%	750	750	0	60	0	22	0	38	38
OAK	WELCH	FRY	675	0.13	0	2	4D	SA	0	100%	750	750	0	195	0	73	0	122	122
OAK	FRY	AVE C	1,280	0.24	0	2	4D	SA	0	100%	750	750	0	360	0	227	227		
OAK	JAGOE	NORTH TEXAS	1,355	0.26	0	2	4D	SA	0	100%	750	750	0	390	0	245	245		
OAK	NORTH TEXAS	BONNIE BRAE	1,935	0.37	0	2	4D	SA	0	100%	750	750	0	555	0	314	0	241	241
PAISLEY	MOCKINGBIRD	MACK	2,895	0.55	1	1	2U	C	276	100%	450	248	248	152	152	96	96		
PAISLEY	MACK	AUDRA	835	0.16	1	1	2U	C	205	100%	450	450	72	72	33	39	39		
PAISLEY	AUDRA	RUDDELL	2,840	0.54	1	1	2U	C	15	100%	450	243	243	8	8	235	235		
PAISLEY	RUDDELL	FRAME	2,135	0.40	1	1	2U	C	276	100%	450	180	180	110	110	70	70		
PARKWAY	LOCUST	ELM	390	0.07	2	2	4U	C	0	100%	550	550	77	0	0	77	77		
PARKWAY	ELM	BOLIVAR	450	0.09	2	2	4U	C	3	100%	550	550	99	0	0	99	99		
PARKWAY	BOLIVAR	CARROLL	615	0.12	2	2	4U	C	3	100%	550	550	132	0	0	132	132		
PARKWAY	CARROLL	POST OAK	5,535	1.05	1	1	2U	C	355	100%	450	473	473	373	373	100	100		
POCKRUS PAGE	IH 35E	LAKEY	1,850	0.35	1	1	2U	C	0	100%	450	158	158	0	0	158	158		
PRAIRIE	BELL	BONNIE BRAE	1,945	0.37	1	1	2U	C	276	100%	450	167	167	102	102	64	64		
PRAIRIE	NORTH TEXAS	1095 E OF LOOP 288	1,260	0.24	1	1	2U	C	1	100%	450	108	108	0	0	108	108		
PROMINENCE	MAYHILL	LOOP 288	1,095	0.21	1	1	3U	C	1	100%	550	550	116	0	0	115	115		
PROMINENCE	1095 E OF LOOP 288	DUNCAN	2,215	0.42	1	1	3U	C	36	100%	450	189	189	15	15	174	174		
ROBERTSON	BELL	RUSSELL NEWMAN	2,230	0.42	1	1	3U	C	148	100%	550	231	231	62	62	169	169		
SAN JACINTO	COLORADO	DALLAS	2,275	0.43	2	2	4D	SA	188	100%	750	645	645	72	72	573	573		
SCRIPTURE	FULTON	MAHONE	2,415	0.46	1	1	2U	C	51	100%	450	207	207	23	23	184	184		
SCRIPTURE	MAHONE	ECTOR	1,405	0.27	1	1	2U	C	8	100%	450	122	122	2	2	119	119		
SCRIPTURE	ECTOR	BONNIE BRAE	2,095	0.40	1	1	2U	C	84	100%	450	180	180	34	34	146	146		
SHADY OAKS	LOOP 288	WOODROW	7,230	1.37	2	2	4D	SA	200	100%	750	2,055	2,055	274	274	1,761	1,761		
SHADY OAKS	WOODROW	TEASLEY	3,070	0.58	1	1	3U	SA	80	100%	550	319	319	46	46	273	273		
SPENCER	MAYHILL	LOOP 288	2,315	0.44	1	1	2U	SA	620	100%	450	198	198	273	273	-75	-75	75	75
SPENCER	BRINKER	WOODROW	1,205	0.23	2	2	4U	SA	185	100%	550	253	253	43	43	210	210		
SPENCER	WOODROW	BRINKER	5,320	1.01	2	2	4U	SA	171	100%	550	1,111	1,111	173	173	938	938		
TREATMENT PLANT	1325 W OF POST OAK	MAYHILL	3,960	0.75	1	1	2U	SA	0	100%	450	338	338	0	0	338	338		
US 380	US 377	LAKEVIEW	8,120	1.54	3	3	7U	FWY	2,269	100%	850	3,927	3,927	3,494	3,494	433	433		
US 380	LOOP 288	MINGO	2,145	0.41	3	3	6D	PA	1,200	50%	850	523	523	246	246	277	277		
US 380	MINGO	OLD NORTH	790	0.15	3	3	6D	PA	1,317	50%	850	850	191	99	99	92	92		
US 380	OLD NORTH	NOTTINGHAM	2,465	0.47	3	3	6D	PA	1,187	50%	850	599	599	279	279	320	320		
US 380	NOTTINGHAM	GLENWOOD	3,090	0.59	3	3	6D	PA	1,089	50%	850	850	752	321	321	431	431		
US 380	GLENWOOD	RUDDELL	390	0.07	3	3	6D	PA	984	50%	850	89	89	34	34	55	55		
US 380	RUDDELL	BELL	3,065	0.58	3	3	6D	PA	1,042	50%	850	740	740	302	302	437	437		
US 380	BELL	LOCUST	1,495	0.28	3	3	6D	PA	1,138	50%	850	357	357	159	159	198	198		
US 380	LOCUST	ELM	410	0.08	3	3	6D	PA	1,251	50%	850	102	102	50	50	52	52		
US 380	ELM	BOLIVAR	380	0.07	3	3	6D	PA	1,077	50%	850	89	89	38	38	52	52		
US 380	BOLIVAR	CARROLL	680	0.13	3	3	6D	PA	1,076	50%	850	166	166	70	70	96	96		
US 380	CARROLL	FULTON	1,955	0.37	3	3	6D	PA	1,017	50%	850	472	472	188	188	284	284		
US 380	FULTON	HINKLE	475	0.09	3	3	6D	PA	856	50%	850	115	115	39	39	76	76		
US 380	HINKLE	MAHONE	1,545	0.29	3	3	6D	PA	856	50%	850	370	370	124	124	246	246		
US 380	MAHONE	ECTOR	1,595	0.30	3	3	6D	PA	856	50%	850	383	383	128	128	254	254		
US 380	ECTOR	BONNIE BRAE	1,865	0.35	3	3	6D	PA	890	50%	850	446	446	156	156	291	291		
US 380	WELCH	BERNARD	1,390	0.26	1	1	2U	C	211	100%	450	117	117	55	55	62	62		
WILLIS	RUDDELL	MINGO	545	0.10	1	1	2U	C	276	100%	450	450	45	45	28	17	17		
WITHERS	MINGO	BELL	655	0.12	1	1	2U	C	27	100%	450	54	54	3	3	51	51		
WITHERS	BELL	OAKLAND	810	0.15	1	1	2U	C	43	100%	450	68	68	6	6	61	61		
BERNARD	COLLINS	IH 35E	2,275	0.43	1	1	2U	C	70	100%	450	194	194	30	30	163	163		
DUNCAN	MORSE	TEASLEY	2,865	0.54	1	1	2U	C	72	100%	450	243	243	39	39	204	204		

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Service Area E

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ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL	EXCESS CAPACITY PK-HR VEH-MI	EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB					NB/EB	SB/WB			NB/EB	SB/WB
AUDRA	NOTTINGHAM	LATTIMORE	1,260	0.24	2	2	4U	SA	263	550	264	264	63	63	201	201
AUDRA	LATTIMORE	PAISLEY	1,755	0.33	2	2	4U	SA	347	550	363	363	115	115	248	248
AUDRA	PAISLEY	1385' N OF MCKINNEY	805	0.15	2	2	4U	SA	640	550	550	550	96	96	69	69
AUDRA	1385' N OF MCKINNEY	MCKINNEY	1,385	0.26	2	2	4D	SA	760	550	390	390	198	198	192	192
AVE A	HIGHLAND	MAPLE	405	0.08	1	1	2U	C	61	450	450	36	5	5	31	31
AVE A	MAPLE	EAGLE	575	0.11	2	2	4U	C	70	550	121	121	8	8	113	113
AVE A	EAGLE	IH 35E	1,875	0.36	2	2	4U	SA	9	550	396	396	3	3	393	393
AVE C	OAK	HICKORY	395	0.07	2	2	4U	C	640	550	77	77	45	45	32	32
AVE C	HIGHLAND	MAPLE	400	0.08	1	1	2D	C	600	550	44	44	48	48	4	4
AVE C	MAPLE	EAGLE	540	0.10	1	1	2D	C	600	550	55	55	60	60	5	5
AVE D	HIGHLAND	MAPLE	395	0.07	1	1	2U	C	276	450	450	32	19	19	12	12
BELL	US 380	COLLEGE	2,255	0.43	1	1	2D	SA	600	550	237	237	258	258	-22	-22
BELL	COLLEGE	WITHERS	1,250	0.24	1	1	3U	SA	148	550	132	132	36	36	96	96
BELL	WITHERS	PAISLEY	245	0.05	2	2	4U	SA	640	550	55	55	32	32	23	23
BELL	PAISLEY	MINGO	820	0.16	2	2	4U	SA	640	550	176	176	102	102	74	74
BELL	MINGO	MCKINNEY	705	0.13	2	2	4U	SA	640	550	143	143	83	83	60	60
BELL	MINGO	MCKINNEY	650	0.12	1	1	2U	C	299	450	450	54	36	36	18	18
BELL	MCKINNEY	OAK	340	0.06	2	2	4U	SA	1,042	550	66	66	63	63	3	3
BELL	OAK	HICKORY	380	0.07	2	2	4U	SA	1,042	550	77	77	73	73	4	4
BELL	HICKORY	PRAIRIE	1,635	0.31	2	2	4U	SA	1,113	550	341	341	345	345	4	4
BELL	PRAIRIE	ROBERTSON	655	0.12	2	2	4U	SA	1,337	550	132	132	160	160	-28	-28
BELL	ROBERTSON	EAGLE	960	0.19	2	2	4U	SA	1,273	550	209	209	242	242	-33	-33
BELL	HICKORY	MULBERRY	390	0.07	1	1	2U	C	5	450	450	32	0	0	31	31
BERNARD	MULBERRY	HIGHLAND	1,555	0.29	1	1	2U	C	5	450	450	131	1	1	129	129
BERNARD	HIGHLAND	MAPLE	420	0.08	1	1	2U	C	156	450	36	36	12	12	24	24
BERNARD	MAPLE	EAGLE	580	0.11	1	1	2U	C	51	450	50	50	6	6	44	44
BERNARD	EAGLE	COLLINS	885	0.17	1	1	2U	C	0	450	450	77	0	0	77	77
BOLIVAR	US 380	PANHANDLE	3,475	0.66	1	1	2U	C	0	450	297	297	0	0	297	297
BOLIVAR	PANHANDLE	CONGRESS	740	0.14	1	1	2U	C	3	450	63	63	0	0	63	63
BOLIVAR	CONGRESS	PARKWAY	450	0.09	1	1	2U	C	1	450	450	41	0	0	40	40
BOLIVAR	PARKWAY	OAK	895	0.17	1	1	2U	C	1	450	450	77	0	0	76	76
BONNIE BRAE	US 380	PANHANDLE	2,910	0.55	2	2	4U	SA	877	550	303	303	241	241	61	61
BONNIE BRAE	PANHANDLE	SCRIPTURE	1,070	0.20	2	2	4U	SA	877	550	110	110	88	88	22	22
BONNIE BRAE	SCRIPTURE	OAK	1,180	0.22	2	2	4U	SA	877	550	121	121	96	96	25	25
BONNIE BRAE	OAK	HICKORY	380	0.07	2	2	4U	SA	877	550	39	39	31	31	8	8
BONNIE BRAE	HICKORY	PRAIRIE	1,425	0.27	2	2	4U	SA	877	550	149	149	118	118	30	30
BONNIE BRAE	PRAIRIE	IH 35E	860	0.16	2	2	4U	SA	877	550	88	88	70	70	18	18
BONNIE BRAE	SPENCER	LOOP 288	1,080	0.20	2	2	4D	SA	821	550	300	300	164	164	136	136
BRINKER	LOOP 288	MEDPARK	3,070	0.58	2	2	4D	SA	788	750	870	870	457	457	413	413
BRINKER	COLORADO	IH 35E	740	0.14	2	2	4D	SA	756	750	210	210	106	106	104	104
CARDINAL	995' N OF ORIOLE	ORIOLE	995	0.19	1	1	2U	C	260	450	86	86	49	49	36	36
CARDINAL	ORIOLE	MCKINNEY	1,815	0.34	1	1	2U	C	1	450	450	153	0	0	153	153
CARROLL	US 380	CRESCENT	2,015	0.38	3	3	6D	PA	1,439	850	969	969	547	547	422	422
CARROLL	CRESCENT	PANHANDLE	1,465	0.28	3	3	6D	PA	1,480	850	850	850	714	714	414	414
CARROLL	PANHANDLE	CONGRESS	760	0.14	3	3	6D	PA	1,480	850	357	357	207	207	150	150
CARROLL	CONGRESS	PARKWAY	390	0.07	3	3	6D	PA	1,701	850	179	179	119	119	59	59
CARROLL	PARKWAY	OAK	955	0.18	3	3	6D	PA	1,734	850	459	459	312	312	147	147
CARROLL	OAK	HICKORY	380	0.07	3	3	6D	PA	1,649	850	179	179	115	115	63	63
CARROLL	HICKORY	MULBERRY	380	0.07	3	3	6D	PA	1,508	850	179	179	106	106	73	73
CARROLL	MULBERRY	EAGLE	2,575	0.49	3	3	6D	PA	1,565	850	1,250	1,250	767	767	483	483
CARROLL	EAGLE	COLLINS	880	0.17	3	3	6D	PA	1,646	850	434	434	280	280	154	154
CENTRE PLACE	DALLAS	IH 35E	2,760	0.52	1	1	2U	C	3	450	234	234	2	2	232	232
COLORADO	SPENCER	SAN JACINTO	3,215	0.61	2	2	4U	SA	132	550	671	671	81	81	590	590
COLORADO	SAN JACINTO	LOOP 288	1,920	0.36	2	2	4D	SA	760	750	540	540	274	274	266	266
COLORADO	BRINKER	LOOP 288	2,840	0.54	2	2	4D	SA	760	750	810	810	410	410	400	400
COLORADO	MEDPARK	BRINKER	2,155	0.41	2	2	4D	SA	760	750	615	615	312	312	303	303
COLORADO	MAYHILL	MEDPARK	1,495	0.28	2	2	4D	SA	760	750	420	420	213	213	207	207
ECTOR	US 380	PANHANDLE	2,835	0.54	1	1	2U	C	35	450	243	243	19	19	224	224
ECTOR	PANHANDLE	SCRIPTURE	1,030	0.20	1	1	2U	C	276	450	90	90	55	55	35	35
ELM	US 380	CONGRESS	4,200	0.80	0	2	4D	SA	513	850	0	1,200	410	410	-410	790
ELM	CONGRESS	PARKWAY	445	0.08	0	2	6D	SA	532	850	0	102	43	43	-43	59

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					NB/EB	SB/WB					NB/EB	SB/WB		NB/EB	SB/WB	
ELM	PARKWAY	MCKINNEY	535	0.10	0	2	6D	SA	534	850	0	128	53	-53	74	53
ELM	MCKINNEY	OAK	375	0.07	0	2	4D	SA	534	750	0	105	37	-37	68	37
ELM	HICKORY	HICKORY	380	0.07	0	2	4D	SA	477	750	0	105	33	-33	72	33
ELM	MULBERRY	MULBERRY	375	0.07	0	2	4D	SA	737	750	0	105	52	-52	53	52
ELM	EAGLE	EAGLE	2,570	0.49	0	2	4D	SA	542	750	0	735	266	-266	469	266
FORT WORTH	CARROLL	CARROLL	965	0.18	2	2	4U	SA	393	550	198	71	71	127	127	
FORT WORTH	IH 35E	IH 35E	3,035	0.57	3	3	6D	PA	1,661	850	1,454	947	147	507	507	
FRY	OAK	HICKORY	380	0.07	1	1	2U	C	247	450	32	17	17	14	14	
FULTON	US 380	CRESCENT	1,520	0.29	1	1	2U	C	265	450	131	131	77	54	54	
FULTON	CRESCENT	PANHANDLE	1,500	0.28	1	1	2U	C	276	450	126	126	77	49	49	
FULTON	PANHANDLE	CONGRESS	720	0.14	1	1	2U	C	143	450	63	20	20	43	43	
FULTON	CONGRESS	OAK	1,370	0.26	1	1	2U	C	22	450	117	6	6	111	111	
GEESLING	US 380	BLAGG	2,445	0.46	1	1	2U	PA	974	450	207	117	117	448	-241	241
JAGOE	SCRIPTURE	OAK	1,115	0.21	1	1	2U	C	276	450	95	58	58	37	37	
LAKEVIEW	POST OAK	SHADY SHORES	1,385	0.26	2	2	4D	PA	760	750	390	198	198	192	192	
LAKEY	LAKEY	MORSE	1,535	0.29	1	1	2U	C	12	450	131	131	3	127	127	
LOCUST	US 380	OAKLAND	1,285	0.24	2	0	4D	SA	668	750	360	0	160	200	-160	160
LOCUST	OAKLAND	CONGRESS	2,905	0.55	2	0	4D	SA	488	750	825	0	268	268	-268	268
LOCUST	CONGRESS	PARKWAY	415	0.08	2	0	4D	SA	503	750	120	0	40	80	-40	40
LOCUST	PARKWAY	MCKINNEY	565	0.11	2	0	4D	SA	503	750	165	0	55	110	-55	55
LOCUST	MCKINNEY	OAK	390	0.07	2	0	4D	SA	503	750	105	0	35	70	-35	35
LOCUST	OAK	HICKORY	375	0.07	2	0	4D	SA	708	750	105	0	50	55	-50	50
LOCUST	HICKORY	EAGLE	2,920	0.55	2	0	4D	SA	479	750	825	0	263	562	-263	263
LOCUST	US 380	AUDRA	1,765	0.33	3	3	6D	PA	1,200	850	842	190	190	91	91	
LOOP 288	US 380	PROMINENCE	600	0.11	3	3	6D	PA	1,726	850	850	281	281	446	446	
LOOP 288	AUDRA	RUSSELL NEWMAN	2,560	0.48	3	3	6D	PA	1,679	850	1,224	806	806	418	418	
LOOP 288	PROMINENCE	OROLE	565	0.11	3	3	6D	PA	1,689	850	281	186	186	95	95	
LOOP 288	RUSSELL NEWMAN	MCKINNEY	1,845	0.35	3	3	6D	PA	1,724	850	893	603	603	289	289	
LOOP 288	OROLE	MORSE	2,970	0.56	3	3	6D	PA	1,736	850	1,428	972	972	456	456	
LOOP 288	MCKINNEY	SPENCER	3,510	0.66	3	3	6D	PA	1,437	850	1,683	940	940	743	743	
LOOP 288	SPENCER	MCKINNEY	1,970	0.37	1	1	2U	C	198	450	167	73	73	93	93	
MACK	PAISLEY	CRESCENT	960	0.18	1	1	3U	C	148	550	99	27	27	72	72	
MALONE	US 380	MALONE	1,875	0.36	1	1	3U	C	148	550	198	53	53	145	145	
MALONE	CRESCENT	PANHANDLE	1,120	0.21	1	1	3U	C	148	550	116	31	31	84	84	
MALONE	PANHANDLE	SCRIPTURE	2,335	0.44	2	2	4D	PA	1,437	750	660	632	632	28	28	
MAYHILL	US 380	PROMINENCE	2,040	0.39	2	2	4D	PA	1,437	750	585	560	560	25	25	
MAYHILL	PROMINENCE	770' N OF RUSSELL NEWMAN	775	0.15	2	2	4D	PA	1,437	750	113	108	108	5	5	
MAYHILL	770' N OF RUSSELL NEWMAN	RUSSELL NEWMAN	460	0.09	2	2	4D	PA	1,533	750	68	69	69	-1	-1	1
MAYHILL	RUSSELL NEWMAN	460' S OF RUSSELL NEWMAN	1,080	0.20	2	2	4D	PA	1,533	750	300	307	307	-7	-7	7
MAYHILL	460' S OF RUSSELL NEWMAN	MILLS	1,955	0.37	2	2	4D	PA	1,608	750	555	595	595	-40	-40	40
MAYHILL	MILLS	MCKINNEY	2,045	0.39	2	2	4D	PA	1,865	750	595	585	585	-1	-1	1
MAYHILL	MCKINNEY	MORSE	3,520	0.67	2	2	4D	PA	1,501	750	1,005	1,006	1,006	-1	-1	1
MAYHILL	MORSE	SPENCER	3,185	0.60	2	2	4D	PA	2,037	750	900	1,222	1,222	-322	-322	322
MAYHILL	SPENCER	EDWARDS	1,560	0.30	1	1	2U	C	1,116	450	135	335	335	-200	-200	200
MAYHILL	QUAILCREEK	EDWARDS	515	0.10	2	2	4U	C	1,138	550	110	114	114	-4	-4	4
MAYHILL	EDWARDS	COLORADO	2,330	0.44	2	2	4D	PA	2,774	750	660	1,221	1,221	-561	-561	561
MAYHILL	COLORADO	BRINKER	2,140	0.41	1	1	3U	C	148	550	226	61	61	165	165	
MAYHILL	BRINKER	COLORADO	1,360	0.26	1	1	3U	C	148	550	143	38	38	105	105	
MAYHILL	COLORADO	MINGO	2,895	0.55	1	1	2U	C	276	450	162	99	99	63	63	
MAYHILL	MINGO	AUDRA	940	0.18	1	1	2U	C	15	450	248	8	8	239	239	
MAYHILL	AUDRA	PAISLEY	1,670	0.32	1	1	2U	C	91	450	81	16	16	65	65	
MAYHILL	PAISLEY	OROLE	625	0.12	1	1	2U	C	91	450	144	29	29	115	115	
MAYHILL	OROLE	MCKINNEY	360	0.07	1	1	2U	SA	137	450	54	16	16	36	36	
MAYHILL	MCKINNEY	DUCHESS	1,425	0.27	2	2	4U	SA	640	550	32	15	15	16	16	
MAYHILL	DUCHESS	HICKORY	520	0.10	2	2	4U	SA	640	550	297	173	173	124	124	
MAYHILL	HICKORY	PAIRIE	1,265	0.24	2	2	4U	SA	640	550	110	64	64	46	46	
MAYHILL	PAIRIE	NORTH TEXAS	750	0.14	2	2	4U	SA	640	550	264	154	154	110	110	
MAYHILL	NORTH TEXAS	EAGLE	1,820	0.34	2	2	4U	SA	640	550	154	90	90	64	64	
MAYHILL	EAGLE	IH 35E	1,060	0.20	2	2	4U	SA	640	550	374	218	218	156	156	
MAYHILL	IH 35E	MINGO	2,775	0.53	1	1	2U	C	1	450	239	1	1	238	238	
MAYHILL	MINGO	AUDRA			2	2	4U	SA	263	550	220	53	53	167	167	
MAYHILL	AUDRA	WITHERS			1	1	2U	C	1	450	239	1	1	238	238	

City of Denton - 2022 Roadway Impact Fee Study
Existing Roadway Facilities Inventory

Service Area E

12/7/2023

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		CLASS	PM PEAK HOUR VOL	% IN SERVICE AREA	VEH-MI CAPACITY PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
OAKLAND	WITHERS	CONGRESS	680	0.13	1	1		15	100%	450	450	59	59	2	2	57	57		
OLD NORTH	US 380	MINGO	600	0.11	1	1		263	100%	450	450	50	50	29	29	21	21		
PERTAIN	MINGO	LATTIMORE	805	0.15	1	1		2	100%	450	450	66	66	0	0	67	67		
POST OAK	POCKRUS PAGE	LAKEVIEW	1,240	0.23	1	1		276	100%	450	450	104	104	63	63	40	40		
RUDDELL	US 380	MINGO	2,460	0.47	1	1		62	100%	450	450	212	212	29	29	182	182		
RUDDELL	WILLIS	PAISLEY	1,455	0.28	1	1		17	100%	450	450	126	126	5	5	121	121		
RUDDELL	PAISLEY	MCKINNEY	1,580	0.30	1	1		48	100%	450	450	135	135	14	14	121	121		
RUDDELL	MCKINNEY	HICKORY	590	0.11	1	1		0	100%	450	450	50	50	0	0	50	50		
RUDDELL	HICKORY	MORSE	3,255	0.62	1	1		8	100%	450	450	279	279	5	5	274	274		
TEASLEY	SHADY OAKS	DALLAS	860	0.16	2	2		760	100%	750	750	240	240	122	122	118	118		
TEASLEY	DALLAS	IH 35E	1,870	0.35	2	2		1,045	100%	750	750	525	525	366	366	159	159		
WELCH	OAK	HICKORY	380	0.07	2	2		640	100%	550	550	77	77	45	45	32	32		
WELCH	HICKORY	MULBERRY	350	0.07	2	2		277	100%	550	550	77	77	19	19	58	58		
WELCH	MULBERRY	HIGHLAND	1,570	0.30	2	2		187	100%	550	550	330	330	56	56	274	274		
WELCH	HIGHLAND	MAPLE	400	0.08	2	2		182	100%	550	550	88	88	15	15	73	73		
WELCH	MAPLE	EAGLE	575	0.11	2	2		640	100%	550	550	121	121	70	70	51	51		
WELCH	EAGLE	COLLINS	925	0.18	2	2		640	100%	550	550	198	198	115	115	83	83		
WOODROW	MCKINNEY	MORSE	3,910	0.74	2	2		1,960	100%	725	725	1,073	1,073	1,450	1,450	-377	-377	377	
WOODROW	WOODROW	SHADY OAKS	1,305	0.25	2	2		640	100%	550	550	275	275	160	160	115	115		
WOODROW	SHADY OAKS	SPENCER	475	0.09	2	2		1,960	100%	725	725	131	131	176	176	-46	-46	46	
SUBTOTAL			158,685	30.09								20,658	19,830	11,737	11,004	8,921	8,948	3,695	3,672
												40,468		22,741		17,870		7,367	

Appendix D – Plan for Awarding the Transportation Impact Fee Credit Summary

(as prepared by NewGen Strategies.)

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area A

Recoverable Impact Fee CIP Costs	\$ 88,707,667	Kimley-Horn Impact Fee Study
Financing Cost	43,092,001	See Detail Below
Existing Fund Balance	(4,394,807)	Roadway Appendices - page 1
Interest Earnings	(21,126,791)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 106,278,070	Sum of Above
Credit for Ad Valorem Revenues	(6,535,564)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 99,742,506	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through Impact fees. Reference is the Kimley-Horn Impact Fee Study.

Financing Costs:

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

New Annual Debt Service	\$ 114,028,007	Roadway Appendices - page 2
Existing Annual Debt Service	-	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(70,936,006)	Roadway Appendices - page 1
Financing Costs	<u>\$ 43,092,001</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs.

Reference is page 1 of Roadway Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.00% annual interest rate.

The Impact Fee Statute states that interest earnings are funds of the Impact fee account and are held to the same restrictions as Impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.

Reference is the sum of Accumulated Interest on page 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee:

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

Credit for Ad Valorem Revenues:

In 2001, the LGC Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund Impact fee eligible projects for which the new service units were charged an Impact fee. The intent of this amendment is to avoid double-charging the new service units for Impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed Impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 7 of Roadway Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through Impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area B

Recoverable Impact Fee CIP Costs	\$ 52,791,687	Kimley-Horn Impact Fee Study
Financing Cost	24,683,794	See Detail Below
Existing Fund Balance	(2,004,188)	Roadway Appendices - page 1
Interest Earnings	(12,622,463)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 62,848,830	Sum of Above
Credit for Ad Valorem Revenues	(1,580,744)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 61,268,086	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through Impact fees. Reference is the Kimley-Horn Impact Fee Study.

Financing Costs:

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

New Annual Debt Service	\$ 64,669,539	Roadway Appendices - page 2
Existing Annual Debt Service	1,170,764	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(41,156,509)	Roadway Appendices - page 1
Financing Costs	<u>\$ 24,683,794</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs.

Reference is page 1 of Roadway Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.00% annual interest rate.

The Impact Fee Statute states that interest earnings are funds of the Impact fee account and are held to the same restrictions as Impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.

Reference is the sum of Accumulated Interest on page 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee:

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

Credit for Ad Valorem Revenues:

In 2001, the LGC Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund Impact fee eligible projects for which the new service units were charged an Impact fee. The intent of this amendment is to avoid double-charging the new service units for Impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed Impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 7 of Roadway Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through Impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area C

Recoverable Impact Fee CIP Costs	\$ 126,409,861	Kimley-Horn Impact Fee Study
Financing Cost	61,414,578	See Detail Below
Existing Fund Balance	(3,170,473)	Roadway Appendices - page 1
Interest Earnings	(30,142,851)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 154,511,114	Sum of Above
Credit for Ad Valorem Revenues	(7,396,751)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 147,114,363	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through Impact fees. Reference is the Kimley-Horn Impact Fee Study.

Financing Costs:

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

New Annual Debt Service	\$ 162,512,338	Roadway Appendices - page 2
Existing Annual Debt Service	-	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(101,097,761)	Roadway Appendices - page 1
Financing Costs	<u>\$ 61,414,578</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Roadway Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.00% annual interest rate.

The Impact Fee Statute states that interest earnings are funds of the Impact fee account and are held to the same restrictions as Impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.

Reference is the sum of Accumulated Interest on page 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee:

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

Credit for Ad Valorem Revenues:

In 2001, the LGC Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund Impact fee eligible projects for which the new service units were charged an Impact fee. The intent of this amendment is to avoid double-charging the new service units for Impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed Impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 7 of Roadway Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through Impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area D

Recoverable Impact Fee CIP Costs	\$ 51,696,805	Kimley-Horn Impact Fee Study
Financing Cost	25,105,399	See Detail Below
Existing Fund Balance	(1,685,562)	Roadway Appendices - page 1
Interest Earnings	(12,702,369)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 62,414,273	Sum of Above
Credit for Ad Valorem Revenues	(1,157,132)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 61,257,141	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through Impact fees. Reference is the Kimley-Horn Impact Fee Study.

Financing Costs:

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

New Annual Debt Service	\$ 66,432,715	Roadway Appendices - page 2
Existing Annual Debt Service	-	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(41,327,316)	Roadway Appendices - page 1
Financing Costs	<u>\$ 25,105,399</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Roadway Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.00% annual interest rate.

The Impact Fee Statute states that interest earnings are funds of the Impact fee account and are held to the same restrictions as Impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.

Reference is the sum of Accumulated Interest on page 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee:

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

Credit for Ad Valorem Revenues:

In 2001, the LGC Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund Impact fee eligible projects for which the new service units were charged an Impact fee. The intent of this amendment is to avoid double-charging the new service units for Impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed Impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 7 of Roadway Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through Impact fees.

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area E

Recoverable Impact Fee CIP Costs	\$ 79,169,421	Kimley-Horn Impact Fee Study
Financing Cost	38,714,769	See Detail Below
Existing Fund Balance	(4,840,794)	Roadway Appendices - page 1
Interest Earnings	(19,534,195)	Roadway Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 93,509,200	Sum of Above
Credit for Ad Valorem Revenues	(3,628,065)	Roadway Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 89,881,135	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through Impact fees. Reference is the Kimley-Horn Impact Fee Study.

Financing Costs:

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

New Annual Debt Service	\$ 102,210,271	Roadway Appendices - page 2
Existing Annual Debt Service	388,356	Roadway Appendices - page 3
Principal Component (New and Existing Debt)	(63,883,858)	Roadway Appendices - page 1
Financing Costs	<u>\$ 38,714,769</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. To avoid charging twice for the same project, the impact fee revenues collected but yet to be expended (i.e. fund balance) are credited against the recoverable costs. Reference is page 1 of Roadway Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.00% annual interest rate.

The Impact Fee Statute states that interest earnings are funds of the Impact fee account and are held to the same restrictions as Impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs.

Reference is the sum of Accumulated Interest on page 4 of Roadway Appendices.

Pre Credit Recoverable Cost for Impact Fee:

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

Credit for Ad Valorem Revenues:

In 2001, the LGC Chapter 395 was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund Impact fee eligible projects for which the new service units were charged an Impact fee. The intent of this amendment is to avoid double-charging the new service units for Impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed Impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 7 of Roadway Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Ad Valorem Revenues.

This is the maximum cost that can be recovered through Impact fees.

**Appendix E – Plan for Awarding the
Transportation Impact Fee Credit Supporting Exhibits**

(as prepared by NewGen Strategies.)

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Calculation Assumptions
Appendix E - Impact Fee Calculation Assumptions
Service Area A

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.00%
Annual Vehicle Mile Growth ⁽²⁾	3,997
Existing Fund Balance ⁽³⁾	4,394,807
Portion of Projects Funded by Existing Debt ⁽³⁾	\$ -
Non-debt Funded Project Cost ⁽⁴⁾	17,771,661
New Project Cost Funded Through New Debt ⁽⁵⁾	70,936,006
Total Recoverable Project Cost ⁽⁶⁾	\$ 88,707,667

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁷⁾</u>	<u>Interest ⁽⁸⁾</u>	<u>Term</u>
1	\$ 7,093,601	4.05%	20
2	7,093,601	4.30%	20
3	7,093,601	5.00%	20
4	7,093,601	5.00%	20
5	7,093,601	5.15%	20
6	7,093,601	5.15%	20
7	7,093,601	5.25%	20
8	7,093,601	5.25%	20
9	7,093,601	5.50%	20
10	7,093,601	5.50%	20
Total	\$ 70,936,006		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽⁹⁾</u>
1	\$ 1,777,166
2	4,141,700
3	6,506,233
4	8,870,767
5	8,870,767
6	8,870,767
7	8,870,767
8	8,870,767
9	8,870,767
10	8,870,767
11	7,093,601
12	4,729,067
13	2,364,534
Total	88,707,667

- (1) Per discussions with City Staff and City files
(2) Per Kimley-Horn Impact Fee Study
(3) Per discussions with City Staff and City files
(4) Per discussions with City Staff and City files
(5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Kimley-Horn Impact Fee Study
(8) Assumes new debt issued in equal amounts every year
(9) Estimated interest on future debt from City's Financial Advisor October 2022
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area A

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	\$ 524,273	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 524,273
2	524,273	535,919	-	-	-	-	-	-	-	-	1,060,192
3	524,273	535,919	569,209	-	-	-	-	-	-	-	1,629,401
4	524,273	535,919	569,209	569,209	-	-	-	-	-	-	2,198,610
5	524,273	535,919	569,209	569,209	576,471	-	-	-	-	-	2,775,081
6	524,273	535,919	569,209	569,209	576,471	576,471	-	-	-	-	3,351,551
7	524,273	535,919	569,209	569,209	576,471	576,471	581,337	-	-	-	3,932,888
8	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	-	-	4,514,225
9	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	-	5,107,813
10	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
11	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
12	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
13	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
14	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
15	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
16	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
17	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
18	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
19	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
20	524,273	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,701,400
21	-	535,919	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	5,177,127
22	-	-	569,209	569,209	576,471	576,471	581,337	581,337	593,588	593,588	4,641,208
23	-	-	-	569,209	576,471	576,471	581,337	581,337	593,588	593,588	4,071,999
24	-	-	-	-	576,471	576,471	581,337	581,337	593,588	593,588	3,502,790
25	-	-	-	-	-	576,471	581,337	581,337	593,588	593,588	2,926,320
26	-	-	-	-	-	-	581,337	581,337	593,588	593,588	2,349,849
27	-	-	-	-	-	-	581,337	581,337	593,588	593,588	1,768,512
28	-	-	-	-	-	-	-	581,337	593,588	593,588	1,187,175
29	-	-	-	-	-	-	-	-	-	593,588	593,588
	\$ 10,485,462	\$ 10,718,380	\$ 11,384,177	\$ 11,384,177	\$ 11,529,415	\$ 11,529,415	\$ 11,626,735	\$ 11,626,735	\$ 11,871,755	\$ 11,871,755	\$ 114,028,007

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area A

II. Summary of Annual Expenses

Year	New		Existing		Annual Credit ⁽⁴⁾	Total Expense
	Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Annual Debt Service ⁽³⁾		
1	\$ 524,273	\$ 1,777,166	\$ (7,093,601)	\$ -	\$ (3,449)	\$ (4,795,611)
2	1,060,192	4,141,700	(7,093,601)	-	(13,859)	(1,905,568)
3	1,629,401	6,506,233	(7,093,601)	-	(31,743)	1,010,291
4	2,198,610	8,870,767	(7,093,601)	-	(56,740)	3,919,036
5	2,775,081	8,870,767	(7,093,601)	-	(88,948)	4,463,299
6	3,351,551	8,870,767	(7,093,601)	-	(128,089)	5,000,628
7	3,932,888	8,870,767	(7,093,601)	-	(174,248)	5,535,807
8	4,514,225	8,870,767	(7,093,601)	-	(227,138)	6,064,253
9	5,107,813	8,870,767	(7,093,601)	-	(287,324)	6,597,655
10	5,701,400	8,870,767	(7,093,601)	-	(354,136)	7,124,431
11	5,701,400	7,093,601	-	-	(354,136)	12,440,865
12	5,701,400	4,729,067	-	-	(354,136)	10,076,332
13	5,701,400	2,364,534	-	-	(354,136)	7,711,798
14	5,701,400	-	-	-	(354,136)	5,347,265
15	5,701,400	-	-	-	(354,136)	5,347,265
16	5,701,400	-	-	-	(354,136)	5,347,265
17	5,701,400	-	-	-	(354,136)	5,347,265
18	5,701,400	-	-	-	(354,136)	5,347,265
19	5,701,400	-	-	-	(354,136)	5,347,265
20	5,701,400	-	-	-	(354,136)	5,347,265
21	5,177,127	-	-	-	(321,571)	4,855,556
22	4,641,208	-	-	-	(288,283)	4,352,925
23	4,071,999	-	-	-	(252,927)	3,819,072
24	3,502,790	-	-	-	(217,572)	3,285,219
25	2,926,320	-	-	-	(181,765)	2,744,555
26	2,349,849	-	-	-	(145,958)	2,203,891
27	1,768,512	-	-	-	(109,849)	1,658,663
28	1,187,175	-	-	-	(73,740)	1,113,436
29	593,588	-	-	-	(36,870)	556,718
PTD	-	-	-	-	-	-
	\$ 114,028,007	\$ 88,707,667	\$ (70,936,006)	\$ -	\$ (6,535,564)	\$ 125,264,104

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

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

(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Appendix D - Service Area A, Page 7

City of Denton - 2022 Roadway Impact Fee Study

Revenue Test

Appendix E - Impact Fee Calculation Assumptions

Service Area A

<u>Year</u>	<u>Impact Fee</u>	<u>Vehicle Miles</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 4,394,807
1	\$ 2,496	3,997	\$ 9,974,251	\$ (4,795,611)	\$ 14,769,861	\$ 235,595	19,400,263
2	2,496	3,997	9,974,251	(1,905,568)	11,879,819	506,803	31,786,885
3	2,496	3,997	9,974,251	1,010,291	8,963,960	725,377	41,476,222
4	2,496	3,997	9,974,251	3,919,036	6,055,215	890,077	48,421,514
5	2,496	3,997	9,974,251	4,463,299	5,510,952	1,023,540	54,956,005
6	2,496	3,997	9,974,251	5,000,628	4,973,622	1,148,856	61,078,484
7	2,496	3,997	9,974,251	5,535,807	4,438,444	1,265,954	66,782,882
8	2,496	3,997	9,974,251	6,064,253	3,909,998	1,374,758	72,067,637
9	2,496	3,997	9,974,251	6,597,655	3,376,596	1,475,119	76,919,351
10	2,496	3,997	9,974,251	7,124,431	2,849,820	1,566,885	81,336,056
11	-	-	-	12,440,865	(12,440,865)	1,502,312	70,397,503
12	-	-	-	10,076,332	(10,076,332)	1,307,187	61,628,358
13	-	-	-	7,711,798	(7,711,798)	1,155,449	55,072,009
14	-	-	-	5,347,265	(5,347,265)	1,047,968	50,772,712
15	-	-	-	5,347,265	(5,347,265)	961,982	46,387,429
16	-	-	-	5,347,265	(5,347,265)	874,276	41,914,440
17	-	-	-	5,347,265	(5,347,265)	784,816	37,351,992
18	-	-	-	5,347,265	(5,347,265)	693,567	32,698,294
19	-	-	-	5,347,265	(5,347,265)	600,493	27,951,523
20	-	-	-	5,347,265	(5,347,265)	505,558	23,109,816
21	-	-	-	4,855,556	(4,855,556)	413,641	18,667,900
22	-	-	-	4,352,925	(4,352,925)	329,829	14,644,804
23	-	-	-	3,819,072	(3,819,072)	254,705	11,080,437
24	-	-	-	3,285,219	(3,285,219)	188,757	7,983,975
25	-	-	-	2,744,555	(2,744,555)	132,234	5,371,654
26	-	-	-	2,203,891	(2,203,891)	85,394	3,253,157
27	-	-	-	1,658,663	(1,658,663)	48,477	1,642,970
28	-	-	-	1,113,436	(1,113,436)	21,725	551,260
29	-	-	-	556,718	(556,718)	5,458	-
PTD	-	-	-	-	-	-	-
			\$ 99,742,506	\$ 125,264,104		\$ 21,126,791	

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Calculation

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 Vehicle Miles</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	1.7584	1.0000	3,997	7,028	\$ (4,795,611)	\$ (8,432,767)
2	28	1.7240	1.0000	3,997	6,890	(1,905,568)	(3,285,114)
3	27	1.6902	1.0000	3,997	6,755	1,010,291	1,707,546
4	26	1.6570	1.0000	3,997	6,623	3,919,036	6,493,890
5	25	1.6245	1.0000	3,997	6,493	4,463,299	7,250,726
6	24	1.5927	1.0000	3,997	6,366	5,000,628	7,964,342
7	23	1.5614	1.0000	3,997	6,241	5,535,807	8,643,827
8	22	1.5308	1.0000	3,997	6,118	6,064,253	9,283,298
9	21	1.5008	1.0000	3,997	5,998	6,597,655	9,901,806
10	20	1.4714	1.0000	3,997	5,881	7,124,431	10,482,740
11	19	1.4425	1.0000	-	-	12,440,865	17,946,305
12	18	1.4142	1.0000	-	-	10,076,332	14,250,390
13	17	1.3865	1.0000	-	-	7,711,798	10,692,513
14	16	1.3593	1.0000	-	-	5,347,265	7,268,681
15	15	1.3327	1.0000	-	-	5,347,265	7,126,158
16	14	1.3065	1.0000	-	-	5,347,265	6,986,430
17	13	1.2809	1.0000	-	-	5,347,265	6,849,441
18	12	1.2558	1.0000	-	-	5,347,265	6,715,138
19	11	1.2312	1.0000	-	-	5,347,265	6,583,469
20	10	1.2070	1.0000	-	-	5,347,265	6,454,381
21	9	1.1834	1.0000	-	-	4,855,556	5,745,949
22	8	1.1602	1.0000	-	-	4,352,925	5,050,144
23	7	1.1374	1.0000	-	-	3,819,072	4,343,904
24	6	1.1151	1.0000	-	-	3,285,219	3,663,419
25	5	1.0933	1.0000	-	-	2,744,555	3,000,502
26	4	1.0718	1.0000	-	-	2,203,891	2,362,175
27	3	1.0508	1.0000	-	-	1,658,663	1,742,930
28	2	1.0302	1.0000	-	-	1,113,436	1,147,061
29	1	1.0100	1.0000	-	-	556,718	562,285
PTD		1.0000	1.0000	-	-	-	-
					64,394		\$ 168,501,568

Annual Interest Rate: 2.00%

Total Escalated Expense for Entire Period	\$ 168,501,568
Less Future Value of Initial Impact Fee Fund Balance	7,804,495
Sub-Total	\$ 160,697,073

Total Escalated Vehicle Miles	64,394
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Maximum Assessable Impact Fee for Roadway Service Area A \$ 2,496

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Project Funding
Appendix E - Impact Fee Calculation Assumptions
Service Area A

<u>Street Name</u>	<u>Cost In</u>		<u>Impact Fee</u>		<u>Debt Funded⁽²⁾</u>		<u>Non-Debt</u>		<u>Impact Fee</u>	
	<u>Service Area ⁽¹⁾</u>		<u>Recoverable Cost⁽¹⁾</u>		<u>Existing</u>	<u>Proposed</u>	<u>Funded⁽²⁾</u>		<u>Recoverable Cost</u>	
CORBIN	\$ 10,164,000	\$	3,360,317	\$	-	\$ 2,688,253	\$ 672,063	\$	3,360,317	
CORBIN	3,378,000		1,116,799		-	893,440	223,360		1,116,799	
FM 1515	23,533,000		7,780,237		-	6,224,190	1,556,047		7,780,237	
FM 1515	3,959,000		1,308,884		-	1,047,107	261,777		1,308,884	
FM 1515	7,495,000		2,477,919		-	1,982,336	495,584		2,477,919	
FM 1515	2,089,000		690,644		-	552,515	138,129		690,644	
FM 1515	13,827,000		4,571,340		-	3,657,072	914,268		4,571,340	
FM 1515	13,132,000		4,341,566		-	3,473,253	868,313		4,341,566	
H LIVELY	3,613,000		1,194,493		-	955,594	238,899		1,194,493	
H LIVELY	13,188,000		4,360,080		-	3,488,064	872,016		4,360,080	
IH-35-CORBIN	7,040,000		2,327,492		-	1,861,994	465,498		2,327,492	
JIM CRISTAL	10,332,000		3,415,859		-	2,732,687	683,172		3,415,859	
JIM CRISTAL	4,873,000		1,611,061		-	1,288,849	322,212		1,611,061	
JIM CRISTAL	5,982,000		1,977,707		-	1,582,166	395,541		1,977,707	
JIM CRISTAL	9,251,000		3,058,470		-	2,446,776	611,694		3,058,470	
JIM CRISTAL	6,353,500		2,100,528		-	1,680,423	420,106		2,100,528	
PRECISION-WESTERN	6,566,000		2,170,783		-	1,736,626	434,157		2,170,783	
ROBSON RANCH	15,487,000		5,120,152		-	4,096,121	1,024,030		5,120,152	
ROBSON RANCH	12,667,500		4,187,998		-	3,350,398	837,600		4,187,998	
SPRINGSIDE	6,141,000		2,030,274		-	1,624,219	406,055		2,030,274	
SPRINGSIDE	2,971,000		982,241		-	785,793	196,448		982,241	
TJ EGAN-LOOP 288	3,722,000		1,230,529		-	984,423	246,106		1,230,529	
C WOLFE	13,120,000		4,337,599		-	3,470,079	867,520		4,337,599	
C WOLFE	6,009,000		1,986,633		-	1,589,307	397,327		1,986,633	
CORBIN	3,667,000		1,212,346		-	969,877	242,469		1,212,346	
J CRISTAL-H LIVELY	5,353,000		1,769,754		-	1,415,803	353,951		1,769,754	
PRECISION	3,694,000		1,221,272		-	977,018	244,254		1,221,272	
THOMAS J EGAN	6,984,000		2,308,978		-	1,847,182	461,796		2,308,978	
THOMAS J EGAN	2,317,500		766,188		-	612,950	153,238		766,188	
UNDERWOOD	15,229,000		5,034,855		-	4,027,884	1,006,971		5,034,855	
WESTCOURT	5,343,000		1,766,447		-	1,413,158	353,289		1,766,447	
WESTERN	6,619,000		2,188,305		-	1,750,644	437,661		2,188,305	
WESTERN	14,102,000		4,662,257		-	3,729,806	932,451		4,662,257	
	37,660		37,660		-	-	37,660		37,660	
	\$ 268,239,160	\$	88,707,667	\$	-	\$ 70,936,006	\$ 17,771,661	\$	88,707,667	

(1) Per Kimley-Horn Impact Fee Study

(2) Per discussions with City staff and City files

City of Denton - 2022 Roadway Impact Fee Study

Credit Determination

Appendix E - Impact Fee Calculation Assumptions

Service Area A

<u>Year</u>	<u>Eligible Debt Service⁽¹⁾</u>	<u>Annual Vehicle Miles</u>	<u>Eligible Debt Service per Vehicle Mile</u>	<u>Annual Growth in Vehicle Miles (Cumulative)</u>	<u>Credit for Annual Ad Valorem Rate Revenues</u>
1	\$ 524,273	607,498	\$ 0.86	3,997	\$ 3,449
2	1,060,192	611,495	1.73	7,994	13,859
3	1,629,401	615,491	2.65	11,990	31,743
4	2,198,610	619,488	3.55	15,987	56,740
5	2,775,081	623,485	4.45	19,984	88,948
6	3,351,551	627,482	5.34	23,981	128,089
7	3,932,888	631,479	6.23	27,978	174,248
8	4,514,225	635,476	7.10	31,975	227,138
9	5,107,813	639,472	7.99	35,971	287,324
10	5,701,400	643,469	8.86	39,968	354,136
11	5,701,400	643,469	8.86	39,968	354,136
12	5,701,400	643,469	8.86	39,968	354,136
13	5,701,400	643,469	8.86	39,968	354,136
14	5,701,400	643,469	8.86	39,968	354,136
15	5,701,400	643,469	8.86	39,968	354,136
16	5,701,400	643,469	8.86	39,968	354,136
17	5,701,400	643,469	8.86	39,968	354,136
18	5,701,400	643,469	8.86	39,968	354,136
19	5,701,400	643,469	8.86	39,968	354,136
20	5,701,400	643,469	8.86	39,968	354,136
21	5,177,127	643,469	8.05	39,968	321,571
22	4,641,208	643,469	7.21	39,968	288,283
23	4,071,999	643,469	6.33	39,968	252,927
24	3,502,790	643,469	5.44	39,968	217,572
25	2,926,320	643,469	4.55	39,968	181,765
26	2,349,849	643,469	3.65	39,968	145,958
27	1,768,512	643,469	2.75	39,968	109,849
28	1,187,175	643,469	1.84	39,968	73,740
29	593,588	643,469	0.92	39,968	36,870
Total	\$ 114,028,007				\$ 6,535,564

2022 Vehicle Miles (All Service Areas) ⁽²⁾ 603,501

Ten Year Growth in Vehicle Miles (Service Area A) ⁽²⁾ 39,968

Annual Growth in Vehicle Miles $\frac{39,968}{10 \text{ years}} = 3,997$

Credit Amount \$ **6,535,564**

(1) Appendix D - Service Area A, Page 3

(2) Per Kimley-Horn Impact Fee Study

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Calculation Assumptions
Appendix E - Impact Fee Calculation Assumptions
Service Area B

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.00%
Annual Vehicle Mile Growth ⁽²⁾	1,637
Existing Fund Balance ⁽³⁾	2,004,188
Portion of Projects Funded by Existing Debt ⁽³⁾	\$ 926,052
Non-debt Funded Project Cost ⁽⁴⁾	11,635,178
New Project Cost Funded Through New Debt ⁽⁵⁾	40,230,457
Total Recoverable Project Cost ⁽⁶⁾	\$ 52,791,687

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁷⁾</u>	<u>Interest ⁽⁸⁾</u>	<u>Term</u>
1	\$ 4,023,046	4.05%	20
2	4,023,046	4.30%	20
3	4,023,046	5.00%	20
4	4,023,046	5.00%	20
5	4,023,046	5.15%	20
6	4,023,046	5.15%	20
7	4,023,046	5.25%	20
8	4,023,046	5.25%	20
9	4,023,046	5.50%	20
10	4,023,046	5.50%	20
Total	\$ 40,230,457		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽⁹⁾</u>
1	\$ 1,163,518
2	2,504,533
3	3,845,548
4	5,186,563
5	5,186,563
6	5,186,563
7	5,186,563
8	5,186,563
9	5,186,563
10	5,186,563
11	4,023,046
12	2,682,030
13	1,341,015
Total	51,865,635

- (1) Per discussions with City Staff and City files
(2) Per Kimley-Horn Impact Fee Study
(3) Per discussions with City Staff and City files
(4) Per discussions with City Staff and City files
(5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Kimley-Horn Impact Fee Study
(8) Assumes new debt issued in equal amounts every year
(9) Estimated interest on future debt from City's Financial Advisor October 2022
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

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	\$ 297,335	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 297,335
2	297,335	303,940	-	-	-	-	-	-	-	-	601,275
3	297,335	303,940	322,820	-	-	-	-	-	-	-	924,094
4	297,335	303,940	322,820	322,820	-	-	-	-	-	-	1,246,914
5	297,335	303,940	322,820	322,820	326,938	-	-	-	-	-	1,573,852
6	297,335	303,940	322,820	322,820	326,938	326,938	-	-	-	-	1,900,790
7	297,335	303,940	322,820	322,820	326,938	326,938	329,698	-	-	-	2,230,488
8	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	-	-	2,560,185
9	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	-	2,896,831
10	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
11	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
12	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
13	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
14	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
15	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
16	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
17	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
18	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
19	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
20	297,335	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	3,233,477
21	-	303,940	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	2,936,142
22	-	-	322,820	322,820	326,938	326,938	329,698	329,698	336,646	336,646	2,632,202
23	-	-	-	322,820	326,938	326,938	329,698	329,698	336,646	336,646	2,309,383
24	-	-	-	-	326,938	326,938	329,698	329,698	336,646	336,646	1,986,563
25	-	-	-	-	-	326,938	329,698	329,698	336,646	336,646	1,659,625
26	-	-	-	-	-	-	329,698	329,698	336,646	336,646	1,332,687
27	-	-	-	-	-	-	329,698	329,698	336,646	336,646	1,002,989
28	-	-	-	-	-	-	-	329,698	336,646	336,646	673,292
29	-	-	-	-	-	-	-	-	-	336,646	336,646
	\$ 5,946,697	\$ 6,078,794	\$ 6,456,392	\$ 6,456,392	\$ 6,538,762	\$ 6,538,762	\$ 6,593,956	\$ 6,593,956	\$ 6,732,915	\$ 6,732,915	\$ 64,669,539

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area B

II. Summary of Annual Expenses

Year	New		Existing		Annual Credit ⁽⁴⁾	Total Expense
	Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Annual Debt Service ⁽³⁾		
1	\$ 297,335	\$ 1,163,518	\$ (4,023,046)	\$ 33,574	\$ (895)	\$ (2,529,515)
2	601,275	2,504,533	(4,023,046)	30,403	(3,409)	(890,244)
3	924,094	3,845,548	(4,023,046)	30,332	(7,706)	769,223
4	1,246,914	5,186,563	(4,023,046)	30,245	(13,712)	2,426,964
5	1,573,852	5,186,563	(4,023,046)	30,697	(21,476)	2,746,591
6	1,900,790	5,186,563	(4,023,046)	30,559	(30,937)	3,063,929
7	2,230,488	5,186,563	(4,023,046)	30,960	(42,149)	3,382,816
8	2,560,185	5,186,563	(4,023,046)	30,755	(55,043)	3,699,416
9	2,896,831	5,186,563	(4,023,046)	31,057	(69,790)	4,021,615
10	3,233,477	5,186,563	(4,023,046)	31,288	(86,239)	4,342,044
11	3,233,477	4,023,046	-	30,909	(86,229)	7,201,203
12	3,233,477	2,682,030	-	31,604	(86,247)	5,860,864
13	3,233,477	1,341,015	-	31,666	(86,249)	4,519,910
14	3,233,477	-	-	-	(85,412)	3,148,065
15	3,233,477	-	-	-	(85,412)	3,148,065
16	3,233,477	-	-	-	(85,412)	3,148,065
17	3,233,477	-	-	-	(85,412)	3,148,065
18	3,233,477	-	-	-	(85,412)	3,148,065
19	3,233,477	-	-	-	(85,412)	3,148,065
20	3,233,477	-	-	-	(85,412)	3,148,065
21	2,936,142	-	-	-	(77,558)	2,858,584
22	2,632,202	-	-	-	(69,530)	2,562,673
23	2,309,383	-	-	-	(61,002)	2,248,381
24	1,986,563	-	-	-	(52,475)	1,934,088
25	1,659,625	-	-	-	(43,839)	1,615,786
26	1,332,687	-	-	-	(35,203)	1,297,484
27	1,002,989	-	-	-	(26,494)	976,495
28	673,292	-	-	-	(17,785)	655,507
29	336,646	-	-	-	(8,892)	327,753
PTD	-	-	-	766,716	-	766,716
	\$ 64,669,539	\$ 51,865,635	\$ (40,230,457)	\$ 1,170,764	\$ (1,580,744)	\$ 75,894,737

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

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

(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Appendix D - Service Area B, Page 7

City of Denton - 2022 Roadway Impact Fee Study

Revenue Test

Appendix E - Impact Fee Calculation Assumptions

Service Area B

<u>Year</u>	<u>Impact Fee</u>	<u>Vehicle Miles</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 2,004,188
1	\$ 3,742	1,637	\$ 6,126,809	\$ (2,529,515)	\$ 8,656,323	\$ 126,647	10,787,158
2	3,742	1,637	6,126,809	(890,244)	7,017,053	285,914	18,090,125
3	3,742	1,637	6,126,809	769,223	5,357,585	415,378	23,863,089
4	3,742	1,637	6,126,809	2,426,964	3,699,844	514,260	28,077,193
5	3,742	1,637	6,126,809	2,746,591	3,380,217	595,346	32,052,757
6	3,742	1,637	6,126,809	3,063,929	3,062,879	671,684	35,787,320
7	3,742	1,637	6,126,809	3,382,816	2,743,992	743,186	39,274,498
8	3,742	1,637	6,126,809	3,699,416	2,427,393	809,764	42,511,655
9	3,742	1,637	6,126,809	4,021,615	2,105,194	871,285	45,488,134
10	3,742	1,637	6,126,809	4,342,044	1,784,764	927,610	48,200,509
11	-	-	-	7,201,203	(7,201,203)	891,998	41,891,304
12	-	-	-	5,860,864	(5,860,864)	779,217	36,809,657
13	-	-	-	4,519,910	(4,519,910)	690,994	32,980,741
14	-	-	-	3,148,065	(3,148,065)	628,134	30,460,811
15	-	-	-	3,148,065	(3,148,065)	577,736	27,890,482
16	-	-	-	3,148,065	(3,148,065)	526,329	25,268,746
17	-	-	-	3,148,065	(3,148,065)	473,894	22,594,575
18	-	-	-	3,148,065	(3,148,065)	420,411	19,866,922
19	-	-	-	3,148,065	(3,148,065)	365,858	17,084,715
20	-	-	-	3,148,065	(3,148,065)	310,214	14,246,864
21	-	-	-	2,858,584	(2,858,584)	256,351	11,644,631
22	-	-	-	2,562,673	(2,562,673)	207,266	9,289,224
23	-	-	-	2,248,381	(2,248,381)	163,301	7,204,144
24	-	-	-	1,934,088	(1,934,088)	124,742	5,394,798
25	-	-	-	1,615,786	(1,615,786)	91,738	3,870,750
26	-	-	-	1,297,484	(1,297,484)	64,440	2,637,706
27	-	-	-	976,495	(976,495)	42,989	1,704,200
28	-	-	-	655,507	(655,507)	27,529	1,076,222
29	-	-	-	327,753	(327,753)	18,247	766,716
PTD	-	-	-	766,716	(766,716)	-	-
			\$ 61,268,086	\$ 75,894,737		\$ 12,622,463	

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Calculation

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 Vehicle Miles</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	1.7584	1.0000	1,637	2,879	\$ (2,529,515)	\$ (4,447,986)
2	28	1.7240	1.0000	1,637	2,823	(890,244)	(1,534,742)
3	27	1.6902	1.0000	1,637	2,767	769,223	1,300,104
4	26	1.6570	1.0000	1,637	2,713	2,426,964	4,021,509
5	25	1.6245	1.0000	1,637	2,660	2,746,591	4,461,897
6	24	1.5927	1.0000	1,637	2,608	3,063,929	4,879,823
7	23	1.5614	1.0000	1,637	2,557	3,382,816	5,282,063
8	22	1.5308	1.0000	1,637	2,507	3,699,416	5,663,150
9	21	1.5008	1.0000	1,637	2,457	4,021,615	6,035,668
10	20	1.4714	1.0000	1,637	2,409	4,342,044	6,388,794
11	19	1.4425	1.0000	-	-	7,201,203	10,387,942
12	18	1.4142	1.0000	-	-	5,860,864	8,288,691
13	17	1.3865	1.0000	-	-	4,519,910	6,266,916
14	16	1.3593	1.0000	-	-	3,148,065	4,279,249
15	15	1.3327	1.0000	-	-	3,148,065	4,195,343
16	14	1.3065	1.0000	-	-	3,148,065	4,113,081
17	13	1.2809	1.0000	-	-	3,148,065	4,032,432
18	12	1.2558	1.0000	-	-	3,148,065	3,953,365
19	11	1.2312	1.0000	-	-	3,148,065	3,875,848
20	10	1.2070	1.0000	-	-	3,148,065	3,799,851
21	9	1.1834	1.0000	-	-	2,858,584	3,382,780
22	8	1.1602	1.0000	-	-	2,562,673	2,973,143
23	7	1.1374	1.0000	-	-	2,248,381	2,557,362
24	6	1.1151	1.0000	-	-	1,934,088	2,156,744
25	5	1.0933	1.0000	-	-	1,615,786	1,766,469
26	4	1.0718	1.0000	-	-	1,297,484	1,390,670
27	3	1.0508	1.0000	-	-	976,495	1,026,105
28	2	1.0302	1.0000	-	-	655,507	675,303
29	1	1.0100	1.0000	-	-	327,753	331,031
PTD		1.0000	1.0000	-	-	766,716	766,716
					26,380		\$ 102,269,320

Annual Interest Rate: 2.00%

Total Escalated Expense for Entire Period	\$ 102,269,320
Less Future Value of Initial Impact Fee Fund Balance	3,559,127
Sub-Total	\$ 98,710,193

Total Escalated Vehicle Miles	26,380
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Maximum Assessable Impact Fee for Roadway Service Area B \$ 3,742

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Project Funding
Appendix E - Impact Fee Calculation Assumptions
Service Area B

<u>Street Name</u>	<u>Cost In</u>		<u>Impact Fee</u>		<u>Debt Funded⁽²⁾</u>		<u>Non-Debt</u>	<u>Impact Fee</u>	
	<u>Service Area ⁽¹⁾</u>		<u>Recoverable Cost⁽¹⁾</u>		<u>Existing</u>	<u>Proposed</u>	<u>Funded⁽²⁾</u>	<u>Recoverable Cost</u>	
ALLRED	\$ 3,048,500	\$	554,141	\$	-	\$ 443,313	\$ 110,828	\$	554,141
ALLRED	2,712,000		492,974		-	394,379	98,595		492,974
BRUSH CREEK	2,747,000		499,336		-	399,469	99,867		499,336
BRUSH CREEK	6,769,000		1,230,435		-	984,348	246,087		1,230,435
BRUSH CREEK	7,344,000		1,334,956		-	1,067,965	266,991		1,334,956
BRUSH CREEK	10,698,000		1,944,629		-	1,555,704	388,926		1,944,629
CORBIN	10,760,000		1,955,900		-	1,564,720	391,180		1,955,900
CREEKDALE	5,346,000		971,769		-	777,416	194,354		971,769
CREEKDALE	3,461,000		629,123		-	503,299	125,825		629,123
EL PASEO	3,369,000		612,400		-	489,920	122,480		612,400
FM 1515	2,595,000		471,706		-	377,365	94,341		471,706
HICKORY CREEK	1,605,000		291,749	88,729	168,830	34,190	291,749		291,749
HICKORY CREEK	1,789,000		325,196	98,957	188,120	38,119	325,196		325,196
HICKORY CREEK	8,638,000		1,570,173	591,089	751,270	227,814	1,570,173		1,570,173
HICKORY CREEK	2,003,000		364,095	147,277	160,056	56,763	364,095		364,095
HICKORY CREEK	7,612,000		1,383,672	-	1,349,481	34,190	1,383,672		1,383,672
HOBSON LANE	1,914,000		347,917	-	278,334	69,583	347,917		347,917
HOBSON LANE	5,710,000		1,037,936	-	830,348	207,587	1,037,936		1,037,936
HOBSON LANE	11,559,000		2,101,138	-	1,680,910	420,228	2,101,138		2,101,138
PARVIN	2,150,000		390,816	-	312,653	78,163	390,816		390,816
ROBINSON	8,061,000		1,465,289	-	1,172,231	293,058	1,465,289		1,465,289
RYAN	11,980,000		2,177,665	-	1,742,132	435,533	2,177,665		2,177,665
RYAN	10,878,000		1,977,349	-	1,581,879	395,470	1,977,349		1,977,349
RYAN	10,824,000		1,967,533	-	1,574,026	393,507	1,967,533		1,967,533
VINTAGE	11,721,000		2,130,585	-	969,951	1,160,634	2,130,585		2,130,585
VINTAGE	1,665,000		302,655	-	109,847	192,809	302,655		302,655
VINTAGE	7,975,000		1,449,656	-	583,906	865,750	1,449,656		1,449,656
WILLOWWOOD	2,079,000		377,910	-	302,328	75,582	377,910		377,910
BONNIE BRAE	1,285,000		233,581	-	186,865	46,716	233,581		233,581
BONNIE BRAE	11,351,000		2,063,329	-	1,650,663	412,666	2,063,329		2,063,329
BONNIE BRAE	2,260,500		410,902	-	328,722	82,180	410,902		410,902
COUNTRY CLUB	1,229,000		223,402	-	178,721	44,680	223,402		223,402
COUNTRY CLUB	15,093,000		2,743,531	-	2,194,825	548,706	2,743,531		2,743,531
COUNTRY CLUB	5,951,000		1,081,743	-	865,395	216,349	1,081,743		1,081,743
FORT WORTH	26,417,000		4,801,951	-	3,841,561	960,390	4,801,951		4,801,951
FORT WORTH	19,299,000		3,508,077	-	2,806,461	701,615	3,508,077		3,508,077
FORT WORTH	4,811,000		874,520	-	699,616	174,904	874,520		874,520
FORT WORTH	20,190,000		3,670,038	-	2,936,031	734,008	3,670,038		3,670,038
JOHN PAINE	238,000		43,262	-	34,610	8,652	43,262		43,262
JOHN PAINE	3,254,000		591,496	-	473,197	118,299	591,496		591,496
PARVIN-ROSELAWN	3,878,000		704,924	-	563,939	140,985	704,924		704,924
TEASLEY	1,039,000		188,864	-	151,091	37,773	188,864		188,864
TEASLEY	4,558,000		828,531	-	662,825	165,706	828,531		828,531
TEASLEY	1,493,000		271,390	-	217,112	54,278	271,390		271,390
TEASLEY	857,000		155,781	-	124,625	31,156	155,781		155,781
	37,660		37,660	-	-	37,660	37,660		37,660
	\$ 290,253,660	\$	52,791,687	\$	926,052	\$ 40,230,457	\$ 11,635,178	\$	52,791,687

(1) Per Kimley-Horn Impact Fee Study

(2) Per discussions with City staff and City files

City of Denton - 2022 Roadway Impact Fee Study

Credit Determination

Appendix E - Impact Fee Calculation Assumptions

Service Area B

<u>Year</u>	<u>Eligible Debt Service⁽¹⁾</u>	<u>Annual Vehicle Miles</u>	<u>Eligible Debt Service per Vehicle Mile</u>	<u>Annual Growth in Vehicle Miles (Cumulative)</u>	<u>Credit for Annual Ad Valorem Rate Revenues</u>
1	\$ 330,909	605,138	\$ 0.55	1,637	\$ 895
2	631,678	606,776	1.04	3,275	3,409
3	954,426	608,413	1.57	4,912	7,706
4	1,277,158	610,051	2.09	6,550	13,712
5	1,604,549	611,688	2.62	8,187	21,476
6	1,931,348	613,325	3.15	9,824	30,937
7	2,261,448	614,963	3.68	11,462	42,149
8	2,590,940	616,600	4.20	13,099	55,043
9	2,927,888	618,238	4.74	14,737	69,790
10	3,264,765	619,875	5.27	16,374	86,239
11	3,264,386	619,875	5.27	16,374	86,229
12	3,265,081	619,875	5.27	16,374	86,247
13	3,265,143	619,875	5.27	16,374	86,249
14	3,233,477	619,875	5.22	16,374	85,412
15	3,233,477	619,875	5.22	16,374	85,412
16	3,233,477	619,875	5.22	16,374	85,412
17	3,233,477	619,875	5.22	16,374	85,412
18	3,233,477	619,875	5.22	16,374	85,412
19	3,233,477	619,875	5.22	16,374	85,412
20	3,233,477	619,875	5.22	16,374	85,412
21	2,936,142	619,875	4.74	16,374	77,558
22	2,632,202	619,875	4.25	16,374	69,530
23	2,309,383	619,875	3.73	16,374	61,002
24	1,986,563	619,875	3.20	16,374	52,475
25	1,659,625	619,875	2.68	16,374	43,839
26	1,332,687	619,875	2.15	16,374	35,203
27	1,002,989	619,875	1.62	16,374	26,494
28	673,292	619,875	1.09	16,374	17,785
29	336,646	619,875	0.54	16,374	8,892
Total	\$ 65,073,588				\$ 1,580,744

2022 Vehicle Miles (All Service Areas) ⁽²⁾ 603,501

Ten Year Growth in Vehicle Miles (Service Area B) ⁽²⁾ 16,374

Annual Growth in Vehicle Miles $\frac{16,374}{10 \text{ years}} = 1,637$

Credit Amount \$ 1,580,744

(1) Appendix D - Service Area B, Page 3

(2) Per Kimley-Horn Impact Fee Study

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Calculation Assumptions
Appendix E - Impact Fee Calculation Assumptions
Service Area C

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.00%
Annual Vehicle Mile Growth ⁽²⁾	3,133
Existing Fund Balance ⁽³⁾	3,170,473
Portion of Projects Funded by Existing Debt ⁽³⁾	\$ -
Non-debt Funded Project Cost ⁽⁴⁾	25,312,100
New Project Cost Funded Through New Debt ⁽⁵⁾	101,097,761
Total Recoverable Project Cost ⁽⁶⁾	\$ 126,409,861

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁷⁾</u>	<u>Interest ⁽⁸⁾</u>	<u>Term</u>
1	\$ 10,109,776	4.05%	20
2	10,109,776	4.30%	20
3	10,109,776	5.00%	20
4	10,109,776	5.00%	20
5	10,109,776	5.15%	20
6	10,109,776	5.15%	20
7	10,109,776	5.25%	20
8	10,109,776	5.25%	20
9	10,109,776	5.50%	20
10	10,109,776	5.50%	20
Total	\$ 101,097,761		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽⁹⁾</u>
1	\$ 2,531,210
2	5,901,135
3	9,271,061
4	12,640,986
5	12,640,986
6	12,640,986
7	12,640,986
8	12,640,986
9	12,640,986
10	12,640,986
11	10,109,776
12	6,739,851
13	3,369,925
Total	126,409,861

- (1) Per discussions with City Staff and City files
(2) Per Kimley-Horn Impact Fee Study
(3) Per discussions with City Staff and City files
(4) Per discussions with City Staff and City files
(5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Kimley-Horn Impact Fee Study
(8) Assumes new debt issued in equal amounts every year
(9) Estimated interest on future debt from City's Financial Advisor October 2022
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area C

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 747,192	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 747,192
2	747,192	763,790	-	-	-	-	-	-	-	-	1,510,982
3	747,192	763,790	811,235	-	-	-	-	-	-	-	2,322,217
4	747,192	763,790	811,235	811,235	-	-	-	-	-	-	3,133,451
5	747,192	763,790	811,235	811,235	821,584	-	-	-	-	-	3,955,036
6	747,192	763,790	811,235	811,235	821,584	821,584	-	-	-	-	4,776,620
7	747,192	763,790	811,235	811,235	821,584	821,584	828,519	-	-	-	5,605,139
8	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	-	-	6,433,658
9	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	-	7,279,638
10	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
11	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
12	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
13	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
14	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
15	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
16	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
17	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
18	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
19	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
20	747,192	763,790	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	8,125,617
21	-	-	811,235	811,235	821,584	821,584	828,519	828,519	845,979	845,979	7,378,425
22	-	-	-	811,235	821,584	821,584	828,519	828,519	845,979	845,979	6,614,635
23	-	-	-	-	821,584	821,584	828,519	828,519	845,979	845,979	5,803,400
24	-	-	-	-	-	821,584	828,519	828,519	845,979	845,979	4,992,165
25	-	-	-	-	-	-	828,519	828,519	845,979	845,979	4,170,581
26	-	-	-	-	-	-	828,519	828,519	845,979	845,979	3,348,997
27	-	-	-	-	-	-	-	828,519	845,979	845,979	2,520,478
28	-	-	-	-	-	-	-	-	845,979	845,979	1,691,959
29	-	-	-	-	-	-	-	-	-	845,979	845,979
	\$ 14,943,846	\$ 15,275,800	\$ 16,224,692	\$ 16,224,692	\$ 16,431,684	\$ 16,431,684	\$ 16,570,385	\$ 16,570,385	\$ 16,919,586	\$ 16,919,586	\$ 162,512,338

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area C

II. Summary of Annual Expenses

Year	New		Existing		Annual Debt Service ⁽³⁾	Annual Bond Proceeds ⁽²⁾	Annual Capital Expenditures ⁽²⁾	Annual Debt Service ⁽³⁾	Annual Credit ⁽⁴⁾	Total Expense
	Annual Debt Service ⁽¹⁾	Annual Debt Service ⁽¹⁾								
1	\$	747,192	\$	2,531,210	\$	(10,109,776)	\$	-	(3,859)	\$ (6,835,233)
2		1,510,982		5,901,135		(10,109,776)		-	(15,528)	(2,713,186)
3		2,322,217		9,271,061		(10,109,776)		-	(35,614)	1,447,888
4		3,133,451		12,640,986		(10,109,776)		-	(63,747)	5,600,914
5		3,955,036		12,640,986		(10,109,776)		-	(100,068)	6,386,177
6		4,776,620		12,640,986		(10,109,776)		-	(144,297)	7,163,533
7		5,605,139		12,640,986		(10,109,776)		-	(196,556)	7,939,793
8		6,433,658		12,640,986		(10,109,776)		-	(256,555)	8,708,313
9		7,279,638		12,640,986		(10,109,776)		-	(324,957)	9,485,891
10		8,125,617		12,640,986		(10,109,776)		-	(401,034)	10,255,793
11		8,125,617		10,109,776		-		-	(401,034)	17,834,359
12		8,125,617		6,739,851		-		-	(401,034)	14,464,434
13		8,125,617		3,369,925		-		-	(401,034)	11,094,509
14		8,125,617		-		-		-	(401,034)	7,724,583
15		8,125,617		-		-		-	(401,034)	7,724,583
16		8,125,617		-		-		-	(401,034)	7,724,583
17		8,125,617		-		-		-	(401,034)	7,724,583
18		8,125,617		-		-		-	(401,034)	7,724,583
19		8,125,617		-		-		-	(401,034)	7,724,583
20		8,125,617		-		-		-	(401,034)	7,724,583
21		7,378,425		-		-		-	(364,156)	7,014,268
22		6,614,635		-		-		-	(326,460)	6,288,174
23		5,803,400		-		-		-	(286,422)	5,516,978
24		4,992,165		-		-		-	(246,384)	4,745,781
25		4,170,581		-		-		-	(205,836)	3,964,745
26		3,348,997		-		-		-	(165,287)	3,183,710
27		2,520,478		-		-		-	(124,396)	2,396,082
28		1,691,959		-		-		-	(83,505)	1,608,453
29		845,979		-		-		-	(41,753)	804,227
PTD		-		-		-		-	-	-
		\$ 162,512,338		\$ 126,409,861		#####		\$ -	\$ (7,396,751)	\$ 180,427,687

(1) Appendix D - Service Area C, Page 2

(2) Appendix D - Service Area C, Page 1

(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Appendix D - Service Area C, Page 7

City of Denton - 2022 Roadway Impact Fee Study

Revenue Test

Appendix E - Impact Fee Calculation Assumptions

Service Area C

<u>Year</u>	<u>Impact Fee</u>	<u>Vehicle Miles</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 3,170,473
1	\$ 4,695	3,133	\$ 14,711,436	\$ (6,835,233)	\$ 21,546,669	\$ 278,876	24,996,019
2	4,695	3,133	14,711,436	(2,713,186)	17,424,622	674,167	43,094,808
3	4,695	3,133	14,711,436	1,447,888	13,263,548	994,532	57,352,888
4	4,695	3,133	14,711,436	5,600,914	9,110,522	1,238,163	67,701,573
5	4,695	3,133	14,711,436	6,386,177	8,325,259	1,437,284	77,464,116
6	4,695	3,133	14,711,436	7,163,533	7,547,903	1,624,761	86,636,780
7	4,695	3,133	14,711,436	7,939,793	6,771,644	1,800,452	95,208,876
8	4,695	3,133	14,711,436	8,708,313	6,003,123	1,964,209	103,176,208
9	4,695	3,133	14,711,436	9,485,891	5,225,545	2,115,780	110,517,533
10	4,695	3,133	14,711,436	10,255,793	4,455,643	2,254,907	117,228,083
11	-	-	-	17,834,359	(17,834,359)	2,166,218	101,559,941
12	-	-	-	14,464,434	(14,464,434)	1,886,554	88,982,062
13	-	-	-	11,094,509	(11,094,509)	1,668,696	79,556,249
14	-	-	-	7,724,583	(7,724,583)	1,513,879	73,345,545
15	-	-	-	7,724,583	(7,724,583)	1,389,665	67,010,627
16	-	-	-	7,724,583	(7,724,583)	1,262,967	60,549,010
17	-	-	-	7,724,583	(7,724,583)	1,133,734	53,958,161
18	-	-	-	7,724,583	(7,724,583)	1,001,917	47,235,495
19	-	-	-	7,724,583	(7,724,583)	867,464	40,378,376
20	-	-	-	7,724,583	(7,724,583)	730,322	33,384,114
21	-	-	-	7,014,268	(7,014,268)	597,540	26,967,386
22	-	-	-	6,288,174	(6,288,174)	476,466	21,155,677
23	-	-	-	5,516,978	(5,516,978)	367,944	16,006,643
24	-	-	-	4,745,781	(4,745,781)	272,675	11,533,537
25	-	-	-	3,964,745	(3,964,745)	191,023	7,759,815
26	-	-	-	3,183,710	(3,183,710)	123,359	4,699,465
27	-	-	-	2,396,082	(2,396,082)	70,028	2,373,412
28	-	-	-	1,608,453	(1,608,453)	31,384	796,342
29	-	-	-	804,227	(804,227)	7,885	-
PTD	-	-	-	-	-	-	-
			\$ 147,114,363	\$ 180,427,687		\$ 30,142,851	

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Calculation

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 Vehicle Miles</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	1.7584	1.0000	3,133	5,509	\$ (6,835,233)	\$ (12,019,309)
2	28	1.7240	1.0000	3,133	5,401	(2,713,186)	(4,677,412)
3	27	1.6902	1.0000	3,133	5,296	1,447,888	2,447,151
4	26	1.6570	1.0000	3,133	5,192	5,600,914	9,280,782
5	25	1.6245	1.0000	3,133	5,090	6,386,177	10,374,483
6	24	1.5927	1.0000	3,133	4,990	7,163,533	11,409,132
7	23	1.5614	1.0000	3,133	4,892	7,939,793	12,397,506
8	22	1.5308	1.0000	3,133	4,796	8,708,313	13,330,886
9	21	1.5008	1.0000	3,133	4,702	9,485,891	14,236,490
10	20	1.4714	1.0000	3,133	4,610	10,255,793	15,090,162
11	19	1.4425	1.0000	-	-	17,834,359	25,726,575
12	18	1.4142	1.0000	-	-	14,464,434	20,456,237
13	17	1.3865	1.0000	-	-	11,094,509	15,382,687
14	16	1.3593	1.0000	-	-	7,724,583	10,500,235
15	15	1.3327	1.0000	-	-	7,724,583	10,294,348
16	14	1.3065	1.0000	-	-	7,724,583	10,092,498
17	13	1.2809	1.0000	-	-	7,724,583	9,894,606
18	12	1.2558	1.0000	-	-	7,724,583	9,700,594
19	11	1.2312	1.0000	-	-	7,724,583	9,510,386
20	10	1.2070	1.0000	-	-	7,724,583	9,323,908
21	9	1.1834	1.0000	-	-	7,014,268	8,300,516
22	8	1.1602	1.0000	-	-	6,288,174	7,295,367
23	7	1.1374	1.0000	-	-	5,516,978	6,275,143
24	6	1.1151	1.0000	-	-	4,745,781	5,292,123
25	5	1.0933	1.0000	-	-	3,964,745	4,334,484
26	4	1.0718	1.0000	-	-	3,183,710	3,412,364
27	3	1.0508	1.0000	-	-	2,396,082	2,517,812
28	2	1.0302	1.0000	-	-	1,608,453	1,657,029
29	1	1.0100	1.0000	-	-	804,227	812,269
PTD		1.0000	1.0000	-	-	-	-
				<u>50,479</u>		<u>\$ 242,649,053</u>	

Annual Interest Rate: 2.00%

Total Escalated Expense for Entire Period	\$ 242,649,053
Less Future Value of Initial Impact Fee Fund Balance	<u>5,630,268</u>
Sub-Total	\$ 237,018,784

Total Escalated Vehicle Miles	<u>50,479</u>
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Maximum Assessable Impact Fee for Roadway Service Area C \$ 4,695

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Project Funding

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Street Name	Cost In Service Area ⁽¹⁾	Impact Fee Recoverable Cost ⁽¹⁾	Debt Funded ⁽²⁾		Non-Debt Funded ⁽²⁾	Impact Fee Recoverable Cost
			Existing	Proposed		
BARTHOLD	\$ 8,875,000	\$ 1,908,981	\$ -	\$ 1,527,185	\$ 381,796	\$ 1,908,981
BOBCAT	37,762,000	8,122,474	-	6,497,979	1,624,495	8,122,474
FM 1173	13,401,000	2,882,508	-	2,306,006	576,502	2,882,508
FM 1173	3,852,000	828,552	-	662,841	165,710	828,552
FM 2164-IH 35	37,057,000	7,970,831	-	6,376,665	1,594,166	7,970,831
GANZER	39,748,000	8,549,655	-	6,839,724	1,709,931	8,549,655
GANZER	11,525,000	2,478,987	-	1,983,190	495,797	2,478,987
GANZER	2,854,000	613,885	-	491,108	122,777	613,885
GANZER	4,604,000	990,304	-	792,243	198,061	990,304
JIM CRISTAL	4,873,000	1,048,165	-	838,532	209,633	1,048,165
JIM CRISTAL	5,982,000	1,286,707	-	1,029,366	257,341	1,286,707
JIM CRISTAL	9,251,000	1,989,858	-	1,591,886	397,972	1,989,858
JIM CRISTAL	6,353,500	1,366,616	-	1,093,292	273,323	1,366,616
JIM CRISTAL	4,773,500	1,026,763	-	821,410	205,353	1,026,763
JIM CRISTAL	2,920,500	628,189	-	502,551	125,638	628,189
MARSHALL	5,249,000	1,129,041	-	903,233	225,808	1,129,041
MARSHALL	4,397,000	945,779	-	756,623	189,156	945,779
MASCH BRANCH	10,602,000	2,280,453	-	1,824,362	456,091	2,280,453
WESTWARD	1,672,000	359,641	-	287,713	71,928	359,641
RINEY	3,156,000	678,845	-	543,076	135,769	678,845
RINEY	1,258,000	270,591	-	216,473	54,118	270,591
US 77	1,432,000	308,018	-	246,415	61,604	308,018
US 77	2,819,000	606,357	-	485,086	121,271	606,357
US 77	2,075,000	446,325	-	357,060	89,265	446,325
US 77	3,126,000	672,392	-	537,913	134,478	672,392
US 77	1,859,000	399,864	-	319,892	79,973	399,864
US 77	4,739,000	1,019,342	-	815,474	203,868	1,019,342
MASCH BRANCH-NAIL	2,094,000	450,412	-	360,330	90,082	450,412
MASCH BRANCH-NAIL	4,450,000	957,179	-	765,744	191,436	957,179
MASCH BRANCH-NAIL	4,379,000	941,908	-	753,526	188,382	941,908
MASCH BRANCH-NAIL	1,046,000	224,991	-	179,993	44,998	224,991
MASCH BRANCH-NAIL	4,376,000	941,262	-	753,010	188,252	941,262
WESTGATE	2,336,000	502,465	-	401,972	100,493	502,465
WINDSOR	6,912,000	1,486,747	-	1,189,398	297,349	1,486,747
WINDSOR	6,972,000	1,499,653	-	1,199,722	299,931	1,499,653
WINDSOR	649,000	139,598	-	111,678	27,920	139,598
WINDSOR	1,162,000	249,942	-	199,954	49,988	249,942
WINDSOR	17,606,000	3,786,989	-	3,029,591	757,398	3,786,989
BARTHOLD	7,425,000	1,597,091	-	1,277,673	319,418	1,597,091
BONNIE BRAE	52,065,000	11,198,999	-	8,959,199	2,239,800	11,198,999
BONNIE BRAE	3,008,000	647,010	-	517,608	129,402	647,010
BONNIE BRAE	6,587,000	1,416,841	-	1,133,472	283,368	1,416,841
BONNIE BRAE	10,320,000	2,219,796	-	1,775,837	443,959	2,219,796
BONNIE BRAE	11,981,000	2,577,071	-	2,061,657	515,414	2,577,071
BONNIE BRAE	4,155,000	893,726	-	714,981	178,745	893,726
BONNIE BRAE	1,528,000	328,667	-	262,934	65,733	328,667
BONNIE BRAE	1,685,000	362,438	-	289,950	72,488	362,438
BONNIE BRAE	543,500	116,905	-	93,524	23,381	116,905
BONNIE BRAE	2,035,000	437,721	-	350,177	87,544	437,721
BONNIE BRAE	1,228,500	264,246	-	211,397	52,849	264,246
C WOLFE	8,901,000	1,914,574	-	1,531,659	382,915	1,914,574
FALLMEADOW	1,303,000	280,271	-	224,217	56,054	280,271
FM 2164	24,962,500	5,369,346	-	4,295,477	1,073,869	5,369,346
LOCUST	3,477,000	747,891	-	598,312	149,578	747,891
LOCUST	3,716,500	799,406	-	639,525	159,881	799,406
LOCUST	1,814,000	390,185	-	312,148	78,037	390,185
LOCUST	1,920,500	413,093	-	330,474	82,619	413,093
LOVERS	12,266,000	2,638,374	-	2,110,699	527,675	2,638,374
LOVERS	3,349,000	720,358	-	576,287	144,072	720,358
LOVERS LN CONNECTOR	756,000	162,613	-	130,090	32,523	162,613
LOVERS LN CONNECTOR	972,000	209,074	-	167,259	41,815	209,074
MASCH BRANCH	5,954,000	1,280,685	-	1,024,548	256,137	1,280,685
MASCH BRANCH	11,352,000	2,441,775	-	1,953,420	488,355	2,441,775
MASCH BRANCH	12,137,000	2,610,626	-	2,088,501	522,125	2,610,626
MILAM-LOOP 288	36,182,000	7,782,621	-	6,226,097	1,556,524	7,782,621
MILAM-US 77	20,546,000	4,419,373	-	3,535,498	883,875	4,419,373
MILAM-US 77	11,567,000	2,488,021	-	1,990,417	497,604	2,488,021
MILAM-US 77	7,359,000	1,582,895	-	1,266,316	316,579	1,582,895
NICOSIA	1,169,000	251,448	-	201,158	50,290	251,448
THOMAS J EGAN	12,353,000	2,657,087	-	2,125,670	531,417	2,657,087
WESTERN	14,699,000	3,161,703	-	2,529,363	632,341	3,161,703
	37,660	37,660	-	-	37,660	37,660
	\$ 587,551,660	\$ 126,409,861	\$ -	\$ 101,097,761	\$ 25,312,100	\$ 126,409,861

City of Denton - 2022 Roadway Impact Fee Study

Credit Determination

Appendix E - Impact Fee Calculation Assumptions

Service Area C

<u>Year</u>	<u>Eligible Debt Service⁽¹⁾</u>	<u>Annual Vehicle Miles</u>	<u>Eligible Debt Service per Vehicle Mile</u>	<u>Annual Growth in Vehicle Miles (Cumulative)</u>	<u>Credit for Annual Ad Valorem Rate Revenues</u>
1	\$ 747,192	606,634	\$ 1.23	3,133	\$ 3,859
2	1,510,982	609,767	2.48	6,266	15,528
3	2,322,217	612,901	3.79	9,400	35,614
4	3,133,451	616,034	5.09	12,533	63,747
5	3,955,036	619,167	6.39	15,666	100,068
6	4,776,620	622,300	7.68	18,799	144,297
7	5,605,139	625,433	8.96	21,932	196,556
8	6,433,658	628,566	10.24	25,065	256,555
9	7,279,638	631,700	11.52	28,199	324,957
10	8,125,617	634,833	12.80	31,332	401,034
11	8,125,617	634,833	12.80	31,332	401,034
12	8,125,617	634,833	12.80	31,332	401,034
13	8,125,617	634,833	12.80	31,332	401,034
14	8,125,617	634,833	12.80	31,332	401,034
15	8,125,617	634,833	12.80	31,332	401,034
16	8,125,617	634,833	12.80	31,332	401,034
17	8,125,617	634,833	12.80	31,332	401,034
18	8,125,617	634,833	12.80	31,332	401,034
19	8,125,617	634,833	12.80	31,332	401,034
20	8,125,617	634,833	12.80	31,332	401,034
21	7,378,425	634,833	11.62	31,332	364,156
22	6,614,635	634,833	10.42	31,332	326,460
23	5,803,400	634,833	9.14	31,332	286,422
24	4,992,165	634,833	7.86	31,332	246,384
25	4,170,581	634,833	6.57	31,332	205,836
26	3,348,997	634,833	5.28	31,332	165,287
27	2,520,478	634,833	3.97	31,332	124,396
28	1,691,959	634,833	2.67	31,332	83,505
29	845,979	634,833	1.33	31,332	41,753
Total	\$ 162,512,338				\$ 7,396,751

2022 Vehicle Miles (All Service Areas) ⁽²⁾ 603,501

Ten Year Growth in Vehicle Miles (Service Area C) ⁽²⁾ 31,332

Annual Growth in Vehicle Miles 10 years
3,133

Credit Amount \$ **7,396,751**

(1) Appendix D - Service Area C, Page 3

(2) Per Kimley-Horn Impact Fee Study

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Calculation Assumptions
Appendix E - Impact Fee Calculation Assumptions
Service Area D

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.00%
Annual Vehicle Mile Growth ⁽²⁾	1,163
Existing Fund Balance ⁽³⁾	1,685,562
Portion of Projects Funded by Existing Debt ⁽³⁾	\$ -
Non-debt Funded Project Cost ⁽⁴⁾	10,369,489
New Project Cost Funded Through New Debt ⁽⁵⁾	41,327,316
Total Recoverable Project Cost ⁽⁶⁾	\$ 51,696,805

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁷⁾</u>	<u>Interest ⁽⁸⁾</u>	<u>Term</u>
1	\$ 4,132,732	4.05%	20
2	4,132,732	4.30%	20
3	4,132,732	5.00%	20
4	4,132,732	5.00%	20
5	4,132,732	5.15%	20
6	4,132,732	5.15%	20
7	4,132,732	5.25%	20
8	4,132,732	5.25%	20
9	4,132,732	5.50%	20
10	4,132,732	5.50%	20
Total	\$ 41,327,316		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽⁹⁾</u>
1	\$ 1,036,949
2	2,414,526
3	3,792,103
4	5,169,681
5	5,169,681
6	5,169,681
7	5,169,681
8	5,169,681
9	5,169,681
10	5,169,681
11	4,132,732
12	2,755,154
13	1,377,577
Total	51,696,805

- (1) Per discussions with City Staff and City files
(2) Per Kimley-Horn Impact Fee Study
(3) Per discussions with City Staff and City files
(4) Per discussions with City Staff and City files
(5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Kimley-Horn Impact Fee Study
(8) Assumes new debt issued in equal amounts every year
(9) Estimated interest on future debt from City's Financial Advisor October 2022
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area D

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 305,442	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 305,442
2	305,442	312,226	-	-	-	-	-	-	-	-	617,668
3	305,442	312,226	331,621	-	-	-	-	-	-	-	949,289
4	305,442	312,226	331,621	331,621	-	-	-	-	-	-	1,280,910
5	305,442	312,226	331,621	331,621	335,852	-	-	-	-	-	1,616,762
6	305,442	312,226	331,621	331,621	335,852	335,852	-	-	-	-	1,952,614
7	305,442	312,226	331,621	331,621	335,852	335,852	338,687	-	-	-	2,291,301
8	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	-	-	2,629,987
9	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	-	2,975,812
10	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
11	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
12	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
13	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
14	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
15	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
16	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
17	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
18	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
19	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
20	305,442	312,226	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,321,636
21	-	-	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	3,016,194
22	-	-	331,621	331,621	335,852	335,852	338,687	338,687	345,824	345,824	2,703,968
23	-	-	-	-	335,852	335,852	338,687	338,687	345,824	345,824	2,372,347
24	-	-	-	-	-	335,852	338,687	338,687	345,824	345,824	2,040,726
25	-	-	-	-	-	-	338,687	338,687	345,824	345,824	1,704,874
26	-	-	-	-	-	-	338,687	338,687	345,824	345,824	1,369,022
27	-	-	-	-	-	-	338,687	338,687	345,824	345,824	1,030,335
28	-	-	-	-	-	-	338,687	-	345,824	345,824	691,648
29	-	-	-	-	-	-	-	-	-	345,824	345,824
	\$ 6,108,830	\$ 6,244,528	\$ 6,632,422	\$ 6,632,422	\$ 6,717,037	\$ 6,717,037	\$ 6,773,736	\$ 6,773,736	\$ 6,916,484	\$ 6,916,484	\$ 66,432,715

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area D

II. Summary of Annual Expenses

Year	New		Existing				Annual Credit ⁽⁴⁾	Total Expense
	Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Annual Debt Service ⁽³⁾				
1	\$ 305,442	\$ 1,036,949	\$ (4,132,732)	\$ -	\$ (588)	\$ (2,790,929)		
2	617,668	2,414,526	(4,132,732)	-	(2,372)	(1,102,910)		
3	949,289	3,792,103	(4,132,732)	-	(5,458)	603,202		
4	1,280,910	5,169,681	(4,132,732)	-	(9,802)	2,308,057		
5	1,616,762	5,169,681	(4,132,732)	-	(15,435)	2,638,276		
6	1,952,614	5,169,681	(4,132,732)	-	(22,327)	2,967,236		
7	2,291,301	5,169,681	(4,132,732)	-	(30,508)	3,297,741		
8	2,629,987	5,169,681	(4,132,732)	-	(39,944)	3,626,992		
9	2,975,812	5,169,681	(4,132,732)	-	(50,750)	3,962,011		
10	3,321,636	5,169,681	(4,132,732)	-	(62,823)	4,295,762		
11	3,321,636	4,132,732	-	-	(62,823)	7,391,545		
12	3,321,636	2,755,154	-	-	(62,823)	6,013,967		
13	3,321,636	1,377,577	-	-	(62,823)	4,636,390		
14	3,321,636	-	-	-	(62,823)	3,258,813		
15	3,321,636	-	-	-	(62,823)	3,258,813		
16	3,321,636	-	-	-	(62,823)	3,258,813		
17	3,321,636	-	-	-	(62,823)	3,258,813		
18	3,321,636	-	-	-	(62,823)	3,258,813		
19	3,321,636	-	-	-	(62,823)	3,258,813		
20	3,321,636	-	-	-	(62,823)	3,258,813		
21	3,016,194	-	-	-	(57,046)	2,959,148		
22	2,703,968	-	-	-	(51,141)	2,652,827		
23	2,372,347	-	-	-	(44,869)	2,327,478		
24	2,040,726	-	-	-	(38,597)	2,002,129		
25	1,704,874	-	-	-	(32,245)	1,672,629		
26	1,369,022	-	-	-	(25,893)	1,343,129		
27	1,030,335	-	-	-	(19,487)	1,010,848		
28	691,648	-	-	-	(13,081)	678,567		
29	345,824	-	-	-	(6,541)	339,284		
PTD	-	-	-	-	-	-		
	\$ 66,432,715	\$ 51,696,805	\$ (41,327,316)	\$ -	\$ (1,157,132)	\$ 75,645,072		

(1) Appendix D - Service Area D, Page 2

(2) Appendix D - Service Area D, Page 1

(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Appendix D - Service Area D, Page 7

City of Denton - 2022 Roadway Impact Fee Study

Revenue Test

Appendix E - Impact Fee Calculation Assumptions

Service Area D

<u>Year</u>	<u>Impact Fee</u>	<u>Vehicle Miles</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 1,685,562
1	\$ 5,265	1,163	\$ 6,125,714	\$ (2,790,929)	\$ 8,916,643	\$ 122,878	10,725,083
2	5,265	1,163	6,125,714	(1,102,910)	7,228,624	286,788	18,240,495
3	5,265	1,163	6,125,714	603,202	5,522,512	420,035	24,183,041
4	5,265	1,163	6,125,714	2,308,057	3,817,657	521,837	28,522,536
5	5,265	1,163	6,125,714	2,638,276	3,487,438	605,325	32,615,299
6	5,265	1,163	6,125,714	2,967,236	3,158,478	683,891	36,457,668
7	5,265	1,163	6,125,714	3,297,741	2,827,973	757,433	40,043,074
8	5,265	1,163	6,125,714	3,626,992	2,498,722	825,849	43,367,645
9	5,265	1,163	6,125,714	3,962,011	2,163,703	888,990	46,420,338
10	5,265	1,163	6,125,714	4,295,762	1,829,952	946,706	49,196,997
11	-	-	-	7,391,545	(7,391,545)	910,024	42,715,476
12	-	-	-	6,013,967	(6,013,967)	794,170	37,495,679
13	-	-	-	4,636,390	(4,636,390)	703,550	33,562,838
14	-	-	-	3,258,813	(3,258,813)	638,669	30,942,694
15	-	-	-	3,258,813	(3,258,813)	586,266	28,270,147
16	-	-	-	3,258,813	(3,258,813)	532,815	25,544,148
17	-	-	-	3,258,813	(3,258,813)	478,295	22,763,630
18	-	-	-	3,258,813	(3,258,813)	422,684	19,927,502
19	-	-	-	3,258,813	(3,258,813)	365,962	17,034,650
20	-	-	-	3,258,813	(3,258,813)	308,105	14,083,942
21	-	-	-	2,959,148	(2,959,148)	252,087	11,376,881
22	-	-	-	2,652,827	(2,652,827)	201,009	8,925,063
23	-	-	-	2,327,478	(2,327,478)	155,226	6,752,812
24	-	-	-	2,002,129	(2,002,129)	115,035	4,865,718
25	-	-	-	1,672,629	(1,672,629)	80,588	3,273,677
26	-	-	-	1,343,129	(1,343,129)	52,042	1,982,589
27	-	-	-	1,010,848	(1,010,848)	29,543	1,001,284
28	-	-	-	678,567	(678,567)	13,240	335,957
29	-	-	-	339,284	(339,284)	3,326	-
PTD	-	-	-	-	-	-	-
			\$ 61,257,141	\$ 75,645,072		\$ 12,702,369	

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Calculation

Appendix E - Impact Fee Calculation Assumptions

Service Area D

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Vehicle Miles</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>				
1	29	1.7584	1.0000	1,163	2,046	\$ (2,790,929)	\$ (4,907,665)
2	28	1.7240	1.0000	1,163	2,006	(1,102,910)	(1,901,367)
3	27	1.6902	1.0000	1,163	1,966	603,202	1,019,504
4	26	1.6570	1.0000	1,163	1,928	2,308,057	3,824,479
5	25	1.6245	1.0000	1,163	1,890	2,638,276	4,285,936
6	24	1.5927	1.0000	1,163	1,853	2,967,236	4,725,822
7	23	1.5614	1.0000	1,163	1,817	3,297,741	5,149,223
8	22	1.5308	1.0000	1,163	1,781	3,626,992	5,552,283
9	21	1.5008	1.0000	1,163	1,746	3,962,011	5,946,213
10	20	1.4714	1.0000	1,163	1,712	4,295,762	6,320,695
11	19	1.4425	1.0000	-	-	7,391,545	10,662,515
12	18	1.4142	1.0000	-	-	6,013,967	8,505,216
13	17	1.3865	1.0000	-	-	4,636,390	6,428,418
14	16	1.3593	1.0000	-	-	3,258,813	4,429,793
15	15	1.3327	1.0000	-	-	3,258,813	4,342,934
16	14	1.3065	1.0000	-	-	3,258,813	4,257,778
17	13	1.2809	1.0000	-	-	3,258,813	4,174,293
18	12	1.2558	1.0000	-	-	3,258,813	4,092,444
19	11	1.2312	1.0000	-	-	3,258,813	4,012,200
20	10	1.2070	1.0000	-	-	3,258,813	3,933,529
21	9	1.1834	1.0000	-	-	2,959,148	3,501,785
22	8	1.1602	1.0000	-	-	2,652,827	3,077,737
23	7	1.1374	1.0000	-	-	2,327,478	2,647,330
24	6	1.1151	1.0000	-	-	2,002,129	2,232,617
25	5	1.0933	1.0000	-	-	1,672,629	1,828,613
26	4	1.0718	1.0000	-	-	1,343,129	1,439,593
27	3	1.0508	1.0000	-	-	1,010,848	1,062,203
28	2	1.0302	1.0000	-	-	678,567	699,060
29	1	1.0100	1.0000	-	-	339,284	342,676
PTD		1.0000	1.0000	-	-	-	-
				<u>18,744</u>		<u>\$ 101,685,856</u>	

Annual Interest Rate: 2.00%

Total Escalated Expense for Entire Period	\$ 101,685,856
Less Future Value of Initial Impact Fee Fund Balance	<u>2,993,297</u>
Sub-Total	\$ 98,692,559

Total Escalated Vehicle Miles	<u>18,744</u>
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Maximum Assessable Impact Fee for Roadway Service Area D \$ 5,265

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Project Funding
Appendix E - Impact Fee Calculation Assumptions
Service Area D

<u>Street Name</u>	<u>Cost In</u>	<u>Impact Fee</u>	<u>Debt Funded⁽²⁾</u>		<u>Non-Debt</u>	<u>Impact Fee</u>
	<u>Service Area ⁽¹⁾</u>	<u>Recoverable Cost⁽¹⁾</u>	<u>Existing</u>	<u>Proposed</u>	<u>Funded⁽²⁾</u>	<u>Recoverable Cost</u>
BOBCAT	\$ 800,500	\$ 150,012	\$ -	\$ 120,010	\$ 30,002	\$ 150,012
FISHTRAP	1,469,500	275,381	-	220,305	55,076	275,381
GANZER	53,936,000	10,107,495	-	8,085,996	2,021,499	10,107,495
GRIBBLE SPRINGS	4,430,500	830,267	-	664,213	166,053	830,267
HARTLEE FIELD	6,025,500	1,129,166	-	903,333	225,833	1,129,166
HARTLEE FIELD	7,382,000	1,383,372	-	1,106,697	276,674	1,383,372
HARTLEE FIELD	427,500	80,113	-	64,090	16,023	80,113
HARTLEE FLD-FM 2164	5,392,000	1,010,450	-	808,360	202,090	1,010,450
HARTLEE FLD-FM 2164	8,386,000	1,571,519	-	1,257,215	314,304	1,571,519
HARTLEE FLD-FM 2164	1,904,500	356,899	-	285,519	71,380	356,899
HARTLEE FLD-FM 2164	1,139,000	213,446	-	170,757	42,689	213,446
LONG	726,000	136,051	-	108,841	27,210	136,051
MINGO	1,315,000	246,428	-	197,143	49,286	246,428
MINGO	6,583,000	1,233,641	-	986,912	246,728	1,233,641
MINGO	7,937,000	1,487,377	-	1,189,902	297,475	1,487,377
KINGS ROW	3,779,000	708,177	-	566,541	141,635	708,177
SILVER DOME	1,558,500	292,060	-	233,648	58,412	292,060
COLLINS	3,409,000	638,840	-	511,072	127,768	638,840
COOPER CREEK	25,554,000	4,788,767	-	3,831,013	957,753	4,788,767
COOPER CREEK	6,226,000	1,166,740	-	933,392	233,348	1,166,740
COOPER CREEK	7,361,000	1,379,436	-	1,103,549	275,887	1,379,436
FM 2164	24,962,500	4,677,921	-	3,742,337	935,584	4,677,921
GREEN VALLEY	24,463,000	4,584,316	-	3,667,453	916,863	4,584,316
GREEN VALLEY	6,234,000	1,168,239	-	934,591	233,648	1,168,239
INDIAN WELLS	10,021,000	1,877,915	-	1,502,332	375,583	1,877,915
INDIAN WELLS	2,426,500	454,721	-	363,777	90,944	454,721
INDIAN WELLS	4,148,000	777,327	-	621,861	155,465	777,327
LOCUST	3,477,000	651,583	-	521,266	130,317	651,583
LOCUST	3,716,500	696,464	-	557,172	139,293	696,464
LOCUST	1,814,000	339,940	-	271,952	67,988	339,940
LOCUST	1,920,500	359,898	-	287,918	71,980	359,898
SHERMAN	4,713,000	883,206	-	706,565	176,641	883,206
SHERMAN	5,455,000	1,022,256	-	817,805	204,451	1,022,256
SHERMAN	7,223,000	1,353,575	-	1,082,860	270,715	1,353,575
SHERMAN	2,856,000	535,208	-	428,167	107,042	535,208
SHERMAN	3,328,000	623,660	-	498,928	124,732	623,660
SHERMAN	4,685,000	877,959	-	702,367	175,592	877,959
SHERMAN	2,357,000	441,697	-	353,358	88,339	441,697
SHERMAN	4,899,000	918,062	-	734,450	183,612	918,062
WINDSOR	1,225,000	229,562	-	183,650	45,912	229,562
	37,660	37,660	-	-	37,660	37,660
	\$ 275,703,160	\$ 51,696,805	\$ -	\$ 41,327,316	\$ 10,369,489	\$ 51,696,805

(1) Per Kimley-Horn Impact Fee Study

(2) Per discussions with City staff and City files

City of Denton - 2022 Roadway Impact Fee Study

Credit Determination

Appendix E - Impact Fee Calculation Assumptions

Service Area D

<u>Year</u>	<u>Eligible Debt Service⁽¹⁾</u>	<u>Annual Vehicle Miles</u>	<u>Eligible Debt Service per Vehicle Mile</u>	<u>Annual Growth in Vehicle Miles (Cumulative)</u>	<u>Credit for Annual Ad Valorem Rate Revenues</u>
1	\$ 305,442	604,664	\$ 0.51	1,163	\$ 588
2	617,668	605,828	1.02	2,327	2,372
3	949,289	606,991	1.56	3,490	5,458
4	1,280,910	608,155	2.11	4,654	9,802
5	1,616,762	609,318	2.65	5,817	15,435
6	1,952,614	610,482	3.20	6,981	22,327
7	2,291,301	611,645	3.75	8,144	30,508
8	2,629,987	612,808	4.29	9,307	39,944
9	2,975,812	613,972	4.85	10,471	50,750
10	3,321,636	615,135	5.40	11,634	62,823
11	3,321,636	615,135	5.40	11,634	62,823
12	3,321,636	615,135	5.40	11,634	62,823
13	3,321,636	615,135	5.40	11,634	62,823
14	3,321,636	615,135	5.40	11,634	62,823
15	3,321,636	615,135	5.40	11,634	62,823
16	3,321,636	615,135	5.40	11,634	62,823
17	3,321,636	615,135	5.40	11,634	62,823
18	3,321,636	615,135	5.40	11,634	62,823
19	3,321,636	615,135	5.40	11,634	62,823
20	3,321,636	615,135	5.40	11,634	62,823
21	3,016,194	615,135	4.90	11,634	57,046
22	2,703,968	615,135	4.40	11,634	51,141
23	2,372,347	615,135	3.86	11,634	44,869
24	2,040,726	615,135	3.32	11,634	38,597
25	1,704,874	615,135	2.77	11,634	32,245
26	1,369,022	615,135	2.23	11,634	25,893
27	1,030,335	615,135	1.67	11,634	19,487
28	691,648	615,135	1.12	11,634	13,081
29	345,824	615,135	0.56	11,634	6,541
Total	\$ 66,432,715				\$ 1,157,132

2022 Vehicle Miles (All Service Areas) ⁽²⁾ 603,501

Ten Year Growth in Vehicle Miles (Service Area D) ⁽²⁾ 11,634

Annual Growth in Vehicle Miles 10 years
1,163

Credit Amount \$ 1,157,132

(1) Appendix D - Service Area D, Page 3

(2) Per Kimley-Horn Impact Fee Study

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Calculation Assumptions
Appendix E - Impact Fee Calculation Assumptions
Service Area E

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.00%
Annual Vehicle Mile Growth ⁽²⁾	2,415
Existing Fund Balance ⁽³⁾	4,840,794
Portion of Projects Funded by Existing Debt ⁽³⁾	\$ 299,581
Non-debt Funded Project Cost ⁽⁴⁾	15,285,563
New Project Cost Funded Through New Debt ⁽⁵⁾	63,584,277
Total Recoverable Project Cost ⁽⁶⁾	\$ 79,169,421

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁷⁾</u>	<u>Interest ⁽⁸⁾</u>	<u>Term</u>
1	\$ 6,358,428	4.05%	20
2	6,358,428	4.30%	20
3	6,358,428	5.00%	20
4	6,358,428	5.00%	20
5	6,358,428	5.15%	20
6	6,358,428	5.15%	20
7	6,358,428	5.25%	20
8	6,358,428	5.25%	20
9	6,358,428	5.50%	20
10	6,358,428	5.50%	20
Total	\$ 63,584,277		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽⁹⁾</u>
1	\$ 1,528,556
2	3,648,032
3	5,767,508
4	7,886,984
5	7,886,984
6	7,886,984
7	7,886,984
8	7,886,984
9	7,886,984
10	7,886,984
11	6,358,428
12	4,238,952
13	2,119,476
Total	78,869,840

- (1) Per discussions with City Staff and City files
(2) Per Kimley-Horn Impact Fee Study
(3) Per discussions with City Staff and City files
(4) Per discussions with City Staff and City files
(5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Kimley-Horn Impact Fee Study
(8) Assumes new debt issued in equal amounts every year
(9) Estimated interest on future debt from City's Financial Advisor October 2022
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area E

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 469,938	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 469,938
2	469,938	480,377	-	-	-	-	-	-	-	-	950,315
3	469,938	480,377	510,217	-	-	-	-	-	-	-	1,460,532
4	469,938	480,377	510,217	510,217	-	-	-	-	-	-	1,970,748
5	469,938	480,377	510,217	510,217	516,726	-	-	-	-	-	2,487,474
6	469,938	480,377	510,217	510,217	516,726	516,726	-	-	-	-	3,004,200
7	469,938	480,377	510,217	510,217	516,726	516,726	521,088	-	-	-	3,525,288
8	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	-	-	4,046,376
9	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	-	4,578,445
10	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
11	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
12	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
13	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
14	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
15	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
16	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
17	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
18	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
19	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
20	469,938	480,377	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	5,110,514
21	-	-	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	4,640,576
22	-	-	510,217	510,217	516,726	516,726	521,088	521,088	532,069	532,069	4,160,199
23	-	-	-	510,217	516,726	516,726	521,088	521,088	532,069	532,069	3,649,982
24	-	-	-	-	516,726	516,726	521,088	521,088	532,069	532,069	3,139,765
25	-	-	-	-	-	516,726	521,088	521,088	532,069	532,069	2,623,039
26	-	-	-	-	-	-	521,088	521,088	532,069	532,069	2,106,313
27	-	-	-	-	-	-	521,088	521,088	532,069	532,069	1,585,226
28	-	-	-	-	-	-	-	521,088	532,069	532,069	1,064,138
29	-	-	-	-	-	-	-	-	-	532,069	532,069
	\$ 9,398,761	\$ 9,607,539	\$ 10,204,334	\$ 10,204,334	\$ 10,334,519	\$ 10,334,519	\$ 10,421,753	\$ 10,421,753	\$ 10,641,379	\$ 10,641,379	\$ 102,210,271

City of Denton - 2022 Roadway Impact Fee Study

Appendix E - Impact Fee Calculation Assumptions

Debt Service and Expense Summary

Service Area E

II. Summary of Annual Expenses

Year	New		Existing		Annual Credit ⁽⁴⁾	Total Expense
	Annual Debt Service ⁽¹⁾	Annual Capital Expenditures ⁽²⁾	Annual Bond Proceeds ⁽²⁾	Annual Debt Service ⁽³⁾		
1	\$ 469,938	\$ 1,528,556	\$ (6,358,428)	\$ 12,533	\$ (1,923)	\$ (4,349,323)
2	950,315	3,648,032	(6,358,428)	12,532	(7,644)	(1,755,193)
3	1,460,532	5,767,508	(6,358,428)	12,212	(17,469)	864,355
4	1,970,748	7,886,984	(6,358,428)	12,165	(31,237)	3,480,232
5	2,487,474	7,886,984	(6,358,428)	9,845	(48,983)	3,976,893
6	3,004,200	7,886,984	(6,358,428)	9,792	(70,663)	4,471,885
7	3,525,288	7,886,984	(6,358,428)	9,859	(96,319)	4,967,384
8	4,046,376	7,886,984	(6,358,428)	9,806	(125,814)	5,458,924
9	4,578,445	7,886,984	(6,358,428)	9,896	(159,492)	5,957,406
10	5,110,514	7,886,984	(6,358,428)	9,965	(197,005)	6,452,030
11	5,110,514	6,358,428	-	9,839	(197,000)	11,281,780
12	5,110,514	4,238,952	-	10,053	(197,008)	9,162,510
13	5,110,514	2,119,476	-	9,093	(196,971)	7,042,111
14	5,110,514	-	-	52	(196,623)	4,913,942
15	5,110,514	-	-	-	(196,621)	4,913,892
16	5,110,514	-	-	-	(196,621)	4,913,892
17	5,110,514	-	-	-	(196,621)	4,913,892
18	5,110,514	-	-	-	(196,621)	4,913,892
19	5,110,514	-	-	-	(196,621)	4,913,892
20	5,110,514	-	-	-	(196,621)	4,913,892
21	4,640,576	-	-	-	(178,541)	4,462,035
22	4,160,199	-	-	-	(160,059)	4,000,140
23	3,649,982	-	-	-	(140,429)	3,509,553
24	3,139,765	-	-	-	(120,799)	3,018,966
25	2,623,039	-	-	-	(100,918)	2,522,121
26	2,106,313	-	-	-	(81,038)	2,025,275
27	1,585,226	-	-	-	(60,990)	1,524,236
28	1,064,138	-	-	-	(40,942)	1,023,196
29	532,069	-	-	-	(20,471)	511,598
PTD	-	-	-	250,714	-	250,714
	\$ 102,210,271	\$ 78,869,840	\$ (63,584,277)	\$ 388,356	\$ (3,628,065)	\$ 114,256,125

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

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

(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Appendix D - Service Area E, Page 7

City of Denton - 2022 Roadway Impact Fee Study

Revenue Test

Appendix E - Impact Fee Calculation Assumptions

Service Area E

<u>Year</u>	<u>Impact Fee</u>	<u>Vehicle Miles</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ 4,840,794
1	\$ 3,722	2,415	\$ 8,988,114	\$ (4,349,323)	\$ 13,337,437	\$ 230,190	18,408,421
2	3,722	2,415	8,988,114	(1,755,193)	10,743,306	475,601	29,627,329
3	3,722	2,415	8,988,114	864,355	8,123,758	673,784	38,424,871
4	3,722	2,415	8,988,114	3,480,232	5,507,881	823,576	44,756,329
5	3,722	2,415	8,988,114	3,976,893	5,011,220	945,239	50,712,788
6	3,722	2,415	8,988,114	4,471,885	4,516,228	1,059,418	56,288,434
7	3,722	2,415	8,988,114	4,967,384	4,020,730	1,165,976	61,475,140
8	3,722	2,415	8,988,114	5,458,924	3,529,189	1,264,795	66,269,124
9	3,722	2,415	8,988,114	5,957,406	3,030,708	1,355,690	70,655,522
10	3,722	2,415	8,988,114	6,452,030	2,536,084	1,438,471	74,630,076
11	-	-	-	11,281,780	(11,281,780)	1,379,784	64,728,080
12	-	-	-	9,162,510	(9,162,510)	1,202,936	56,768,506
13	-	-	-	7,042,111	(7,042,111)	1,064,949	50,791,344
14	-	-	-	4,913,942	(4,913,942)	966,687	46,844,090
15	-	-	-	4,913,892	(4,913,892)	887,743	42,817,941
16	-	-	-	4,913,892	(4,913,892)	807,220	38,711,268
17	-	-	-	4,913,892	(4,913,892)	725,086	34,522,462
18	-	-	-	4,913,892	(4,913,892)	641,310	30,249,880
19	-	-	-	4,913,892	(4,913,892)	555,859	25,891,847
20	-	-	-	4,913,892	(4,913,892)	468,698	21,446,652
21	-	-	-	4,462,035	(4,462,035)	384,313	17,368,931
22	-	-	-	4,000,140	(4,000,140)	307,377	13,676,168
23	-	-	-	3,509,553	(3,509,553)	238,428	10,405,043
24	-	-	-	3,018,966	(3,018,966)	177,911	7,563,988
25	-	-	-	2,522,121	(2,522,121)	126,059	5,167,926
26	-	-	-	2,025,275	(2,025,275)	83,106	3,225,756
27	-	-	-	1,524,236	(1,524,236)	49,273	1,750,793
28	-	-	-	1,023,196	(1,023,196)	24,784	752,381
29	-	-	-	511,598	(511,598)	9,932	250,714
PTD	-	-	-	250,714	(250,714)	-	-
			\$ 89,881,135	\$ 114,256,125		\$ 19,534,195	

City of Denton - 2022 Roadway Impact Fee Study

Impact Fee Calculation

Appendix E - Impact Fee Calculation Assumptions

Service Area E

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Vehicle Miles</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	1.7584	1.0000	2,415	4,246	\$ (4,349,323)	\$ (7,648,000)
2	28	1.7240	1.0000	2,415	4,163	(1,755,193)	(3,025,874)
3	27	1.6902	1.0000	2,415	4,081	864,355	1,460,892
4	26	1.6570	1.0000	2,415	4,001	3,480,232	5,766,787
5	25	1.6245	1.0000	2,415	3,923	3,976,893	6,460,549
6	24	1.5927	1.0000	2,415	3,846	4,471,885	7,122,230
7	23	1.5614	1.0000	2,415	3,771	4,967,384	7,756,269
8	22	1.5308	1.0000	2,415	3,697	5,458,924	8,356,647
9	21	1.5008	1.0000	2,415	3,624	5,957,406	8,940,915
10	20	1.4714	1.0000	2,415	3,553	6,452,030	9,493,383
11	19	1.4425	1.0000	-	-	11,281,780	16,274,292
12	18	1.4142	1.0000	-	-	9,162,510	12,958,023
13	17	1.3865	1.0000	-	-	7,042,111	9,763,982
14	16	1.3593	1.0000	-	-	4,913,942	6,679,654
15	15	1.3327	1.0000	-	-	4,913,892	6,548,614
16	14	1.3065	1.0000	-	-	4,913,892	6,420,210
17	13	1.2809	1.0000	-	-	4,913,892	6,294,324
18	12	1.2558	1.0000	-	-	4,913,892	6,170,906
19	11	1.2312	1.0000	-	-	4,913,892	6,049,907
20	10	1.2070	1.0000	-	-	4,913,892	5,931,282
21	9	1.1834	1.0000	-	-	4,462,035	5,280,265
22	8	1.1602	1.0000	-	-	4,000,140	4,640,852
23	7	1.1374	1.0000	-	-	3,509,553	3,991,850
24	6	1.1151	1.0000	-	-	3,018,966	3,366,515
25	5	1.0933	1.0000	-	-	2,522,121	2,757,325
26	4	1.0718	1.0000	-	-	2,025,275	2,170,731
27	3	1.0508	1.0000	-	-	1,524,236	1,601,673
28	2	1.0302	1.0000	-	-	1,023,196	1,054,097
29	1	1.0100	1.0000	-	-	511,598	516,714
PTD		1.0000	1.0000	-	-	250,714	250,714
					38,905		\$ 153,405,728

Annual Interest Rate: 2.00%

Total Escalated Expense for Entire Period	\$ 153,405,728
Less Future Value of Initial Impact Fee Fund Balance	8,596,499
Sub-Total	\$ 144,809,229

Total Escalated Vehicle Miles	38,905
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Maximum Assessable Impact Fee for Roadway Service Area E \$ 3,722

City of Denton - 2022 Roadway Impact Fee Study
Impact Fee Project Funding
Appendix E - Impact Fee Calculation Assumptions
Service Area E

Street Name	Cost In Service Area ⁽¹⁾	Impact Fee Recoverable Cost⁽¹⁾	Debt Funded⁽²⁾		Non-Debt Funded⁽²⁾	Impact Fee Recoverable Cost
			Existing	Proposed		
AUDRA	\$ 1,687,000	\$ 436,939	\$ -	\$ 349,552	\$ 87,388	\$ 436,939
BLAGG	11,181,000	2,895,922	-	2,316,738	579,184	2,895,922
BLAGG	7,651,000	1,981,638	-	1,585,311	396,328	1,981,638
BLAGG	281,500	72,910	-	58,328	14,582	72,910
DALLAS	3,624,000	938,630	-	750,904	187,726	938,630
DUCHESS	5,949,000	1,540,814	-	1,232,651	308,163	1,540,814
FM 426	9,953,000	2,577,865	-	2,062,292	515,573	2,577,865
MCKINNEY	1,551,000	401,715	-	-	401,715	401,715
MCKINNEY	1,914,000	495,733	-	396,587	99,147	495,733
MCKINNEY	3,270,000	846,943	-	677,554	169,389	846,943
MCKINNEY	9,268,000	2,400,448	-	1,920,358	480,090	2,400,448
MCKINNEY	4,399,000	1,139,358	-	911,486	227,872	1,139,358
MILLS	23,115,000	5,986,874	-	4,789,499	1,197,375	5,986,874
MILLS	5,235,000	1,355,885	-	1,084,708	271,177	1,355,885
MINGO	2,172,000	562,556	-	450,045	112,511	562,556
MINGO	7,268,000	1,882,440	-	1,505,952	376,488	1,882,440
MINGO	8,381,000	2,170,711	-	1,736,569	434,142	2,170,711
MINGO	2,700,000	699,310	-	559,448	139,862	699,310
MINGO	1,714,000	443,933	-	355,146	88,787	443,933
MINGO	6,583,000	1,705,022	-	1,364,018	341,004	1,705,022
MINGO	671,000	173,792	-	139,033	34,758	173,792
MINGO	2,813,000	728,578	-	582,862	145,716	728,578
MORSE	1,969,000	509,979	-	407,983	101,996	509,979
SHADY OAKS	9,967,000	2,581,491	-	2,065,193	516,298	2,581,491
SPENCER	6,862,000	1,777,284	-	1,421,828	355,457	1,777,284
TREATMENT PLANT	4,731,000	1,225,347	-	980,278	245,069	1,225,347
TREATMENT PLANT	5,015,000	1,298,904	-	1,039,123	259,781	1,298,904
TREATMENT PLANT	11,310,000	2,929,333	-	2,343,467	585,867	2,929,333
BONNIE BRAE	4,155,000	1,076,161	-	860,929	215,232	1,076,161
BONNIE BRAE	1,528,000	395,758	-	316,606	79,152	395,758
BONNIE BRAE	1,685,000	436,421	-	349,137	87,284	436,421
BONNIE BRAE	543,500	140,769	-	112,615	28,154	140,769
BONNIE BRAE	2,035,000	527,073	-	421,658	105,415	527,073
BONNIE BRAE	1,228,500	318,186	-	254,549	63,637	318,186
CARDINAL	3,167,000	820,265	-	656,212	164,053	820,265
GEESLING	8,237,000	2,133,415	-	1,706,732	426,683	2,133,415
GEESLING	18,210,000	4,716,460	-	3,773,168	943,292	4,716,460
LAKEVIEW	2,294,000	594,155	-	475,324	118,831	594,155
MAYHILL	2,467,000	638,962	35,868	570,030	33,064	638,962
MAYHILL	2,155,000	558,153	31,337	497,930	28,887	558,153
MAYHILL	409,500	106,062	5,952	94,623	5,487	106,062
MAYHILL	243,500	63,067	3,533	56,277	3,257	63,067
MAYHILL	1,142,000	295,782	16,590	263,899	15,293	295,782
MAYHILL	2,066,000	535,102	30,031	477,388	27,683	535,102
MAYHILL	2,161,000	559,707	31,414	499,336	28,958	559,707
MAYHILL	3,717,000	962,717	54,071	858,802	49,844	962,717
MAYHILL	3,864,000	1,000,791	48,925	906,765	45,100	1,000,791
MAYHILL	4,477,000	1,159,560	41,859	1,079,114	38,587	1,159,560
MAYHILL	1,840,000	476,567	-	381,254	95,313	476,567
MAYHILL CONNECTOR	2,071,000	536,397	-	429,118	107,279	536,397
MOCKINGBIRD	1,217,000	315,208	-	252,166	63,042	315,208
MOCKINGBIRD	7,039,000	1,823,128	-	1,458,502	364,626	1,823,128
MOCKINGBIRD	6,721,000	1,740,765	-	1,392,612	348,153	1,740,765
POST OAK	20,228,000	5,239,130	-	4,191,304	1,047,826	5,239,130
POST OAK	21,525,000	5,575,058	-	4,460,046	1,115,012	5,575,058
POST OAK	8,015,000	2,075,916	-	1,660,733	415,183	2,075,916
SWISHER	3,750,000	971,264	-	777,012	194,253	971,264
TEASLEY	2,077,000	537,951	-	430,361	107,590	537,951
N STAR	2,427,000	628,602	-	502,882	125,720	628,602
ROY	1,594,000	412,852	-	330,282	82,570	412,852
	37,660	37,660	-	-	37,660	37,660
	\$ 305,561,160	\$ 79,169,421	\$ 299,581	\$ 63,584,277	\$ 15,285,563	\$ 79,169,421

(1) Per Kimley-Horn Impact Fee Study

(2) Per discussions with City staff and City files

City of Denton - 2022 Roadway Impact Fee Study

Credit Determination

Appendix E - Impact Fee Calculation Assumptions

Service Area E

<u>Year</u>	<u>Eligible Debt Service⁽¹⁾</u>	<u>Annual Vehicle Miles</u>	<u>Eligible Debt Service per Vehicle Mile</u>	<u>Annual Growth in Vehicle Miles (Cumulative)</u>	<u>Credit for Annual Ad Valorem Rate Revenues</u>
1	\$ 482,471	605,916	\$ 0.80	2,415	\$ 1,923
2	962,847	608,331	1.58	4,830	7,644
3	1,472,744	610,745	2.41	7,244	17,469
4	1,982,913	613,160	3.23	9,659	31,237
5	2,497,320	615,575	4.06	12,074	48,983
6	3,013,992	617,990	4.88	14,489	70,663
7	3,535,147	620,405	5.70	16,904	96,319
8	4,056,182	622,819	6.51	19,318	125,814
9	4,588,341	625,234	7.34	21,733	159,492
10	5,120,478	627,649	8.16	24,148	197,005
11	5,120,353	627,649	8.16	24,148	197,000
12	5,120,566	627,649	8.16	24,148	197,008
13	5,119,606	627,649	8.16	24,148	196,971
14	5,110,565	627,649	8.14	24,148	196,623
15	5,110,514	627,649	8.14	24,148	196,621
16	5,110,514	627,649	8.14	24,148	196,621
17	5,110,514	627,649	8.14	24,148	196,621
18	5,110,514	627,649	8.14	24,148	196,621
19	5,110,514	627,649	8.14	24,148	196,621
20	5,110,514	627,649	8.14	24,148	196,621
21	4,640,576	627,649	7.39	24,148	178,541
22	4,160,199	627,649	6.63	24,148	160,059
23	3,649,982	627,649	5.82	24,148	140,429
24	3,139,765	627,649	5.00	24,148	120,799
25	2,623,039	627,649	4.18	24,148	100,918
26	2,106,313	627,649	3.36	24,148	81,038
27	1,585,226	627,649	2.53	24,148	60,990
28	1,064,138	627,649	1.70	24,148	40,942
29	532,069	627,649	0.85	24,148	20,471
Total	\$ 102,347,912				\$ 3,628,065

2022 Vehicle Miles (All Service Areas) ⁽²⁾ 603,501

Ten Year Growth in Vehicle Miles (Service Area E) ⁽²⁾ 24,148

Annual Growth in Vehicle Miles 10 years
2,415

Credit Amount \$ **3,628,065**

(1) Appendix D - Service Area E, Page 3

(2) Per Kimley-Horn Impact Fee Study

Appendix F – Consideration for the Hunter Ranch and Cole Ranch Operating Agreements

Consideration for Hunter Ranch and Cole Ranch Operating Agreement

The City of Denton has operating agreements with the Hunter Ranch District and the Cole Ranch District which stipulate certain calculations to be included in the Roadway Impact Fee Study. The purpose of this appendix is to explain what calculations are included as part of the operating agreements, how the calculations were performed, and how they will be used in the administration of both the Impact Fee Program and the operating agreements. The terms City Offsites, District Cost, District Area Revenue, and District Tax Revenue are defined in Section 4.1.1 of the operating agreements.

“City Offsites” Facilities

The operating agreements define City Offsites as specific roadways that are to be constructed by the City. The City Offsites are described on Exhibits K and K-1 of the operating agreements. City Offsites facilities are impact fee eligible roadways that are anticipated to be funded in part by impact fees collected within the service area (including within the districts) and by district financial participation in the form of a District Tax assessed and paid from properties in the districts. As part of the operating agreements, the Roadway Impact Fee study is to include a capacity analysis which shows “what portion of each City Offsite will serve the District Area and what portion will serve other areas of the City.” This preliminary non-binding analysis is provided in the tables included in this appendix, and will be updated based on a traffic study that contains a separate analysis for each City Offsite. A map identifying the City Offsite facilities and development Improvement Projects as identified within the context of the 2022 Roadway Impact Fee CIP is provided in **Exhibit F.1**. The original map of the City Off-sites from the operating agreement is included in **Exhibit F.2**.

Administration of the Impact Fee Program

Impact fees will be administered in accordance with the operating agreements, and in the event of a conflict between this Appendix F and the operating agreements, the operating agreements control.

City of Denton - 2022 Roadway Impact Fee Study

Hunter Ranch District Capacity Analysis

Hunter Ranch

Project ID #	Operating Agreement Project No. #	Roadway	LIMITS		LENGTH (FT) ¹	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN DISTRICT	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR ²	EXCESS CAPACITY PK-HR VEH-MI ³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA			
			FROM	TO																	
CITY OF OFF-SITES (INCLUDED IN IMPACT FEE CIP)																					
A-12	51039	JIM CRISTAL	IH-35	OLD SH 24	3,110	0.59	4	SECONDARY ARTERIAL	SA	Widening	1,290	100%	750	1770	781	1,009	\$	10,332,000	\$		
A-13 C-10	51039	JIM CRISTAL	OLD SH 24	WESTERN	2,905	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,056	50%	750	825	290	535	\$	9,746,000	\$		
A-14 C-11	51039	JIM CRISTAL	WESTERN	MASCH BRANCH	3,510	0.66	4	SECONDARY ARTERIAL	SA	Widening	910	50%	750	990	300	690	\$	11,964,000	\$		
A-15 C-12	51039	JIM CRISTAL	MASCH BRANCH	THOMAS J EGAN	5,975	1.13	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1695	135	1580	\$	18,322,000	\$		
A-16	52758	ROBSON RANCH	IH-35W	5,745' W of IH-35W	5,745	1.09	6	PRIMARY ARTERIAL	PA	Widening	808	50%	850	2780	441	2,339	\$	20,953,000	\$		
A-26	52697	JIM CRISTAL	IH-35W	2915' S OF JIM CRISTAL	2,915	0.55	4	SECONDARY ARTERIAL	SA	New	808	100%	750	1650	0	1,650	\$	6,984,000	\$		
A-29	52697	THOMAS J EGAN	1830' N OF FM 1515	FM 1515	1,830	0.35	4	SECONDARY ARTERIAL	PA	New	505	50%	750	525	0	525	\$	2,317,500	\$		
A-30	52608	UNDERWOOD	SPRINGSIDE	UNDERWOOD CONNECTOR	4,000	0.76	6	PRIMARY ARTERIAL	PA	Widening	692	100%	850	3876	528	3,350	\$	15,229,000	\$		
B-2	52776	ALLRED	BRUSH CREEK	JOHN PAINE	1,610	0.30	6	PRIMARY ARTERIAL	PA	Widening	1,171	50%	850	765	176	589	\$	5,424,000	\$		
B-6	52776	BRUSH CREEK	FORT WORTH	590' E OF ALLRED	3,615	0.68	6	PRIMARY ARTERIAL	PA (1/3)	New	348	100%	850	3468	0	3,468	\$	10,698,000	\$		
B-25	45891	VINTAGE	FORT WORTH	BOONIE BRAE	4,605	0.97	6	PRIMARY ARTERIAL	PA (1/3)	Widening	423	100%	850	4437	368	4069	\$	11,721,000	\$		
B-27	45891	VINTAGE	BOONIE BRAE	NAPA VALLEY	765	0.14	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	714	282	452	\$	1,665,000	\$		
B-28	45891	VINTAGE	NAPA VALLEY	IH-35W	3,435	0.65	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	3315	1218	2,087	\$	7,975,000	\$		
SUBTOTAL													26,810	4,477	22,333	\$	135,828,000	\$	100,216,000	\$	
DEVELOPMENT BUILT FACILITIES (NOT INCLUDED IN IMPACT FEE CIP)																					
A	52773	H LIVELY	I-35W	C WOLF E	14,275	2.70	6	PRIMARY ARTERIAL	PA	New	New	30%	850	4131	0	4,131	\$	-	-		
A	52828	HUNTER ARTERIAL	FM 2449	UNDERWOOD	10,451	1.98	4	SECONDARY ARTERIAL	SA	New	New	50%	750	2970	0	2,970	\$	-	-		
A	52824	HUNTER COLLECTOR	HUNTER ARTERIAL	UNDERWOOD	11,391	2.16	2	COLLECTOR	C	New	New	100%	550	2376	0	2,376	\$	-	-		
A	52756	HUNTER COLLECTOR A	HUNTER ARTERIAL	ROBSON RANCH	13,264	2.51	6	COLLECTOR	C	New	New	100%	550	8283	0	8,283	\$	-	-		
A	52767	HUNTER COLLECTOR C	HUNTER COLLECTOR A	HUNTER COLLECTOR B	2,886	0.55	2	COLLECTOR	C	New	New	100%	550	605	0	605	\$	-	-		
A	52953	UNDERWOOD	1610' N OF H LIVELY	H LIVELY	1,608	0.30	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1530	0	1,530	\$	-	-		
A	52953	UNDERWOOD	UNDERWOOD	ROBSON RANCH	12,039	2.28	6	SECONDARY ARTERIAL	SA	New	New	100%	750	10280	0	10,280	\$	-	-		
B	52771	ALLRED	JOHN PAINE	365' W OF IH-35W	1,482	0.28	6	PRIMARY ARTERIAL	PA	Widening	1,308	100%	850	1428	366	1,062	\$	-	-		
B	52771	ALLRED	365' W OF IH-35W	IH-35W	365	0.07	6	PRIMARY ARTERIAL	PA	Widening	1,438	100%	850	357	101	296	\$	-	-		
B	52853	JOHN PAINE	VINTAGE	ALLRED	6,370	1.21	4	SECONDARY ARTERIAL	SA	New	New	100%	750	3630	0	3,630	\$	-	-		
B	52777	JOHN PAINE	ALLRED	TEXOMA	2,660	0.50	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1500	0	1,500	\$	-	-		
SUBTOTAL													37,070	487	36,583	\$	-	-	\$	-	-

City of Denton - 2022 Roadway Impact Fee Study

Cole Ranch District Capacity Analysis

5/15/2024

Cole Ranch

Project ID #	Operating Agreement Project No. #	ROADWAY	LIMITS		LENGTH (FT)¹	LENGTH (MI)	LANES	MTP CLASSIFICATION	IMPACT FEE CLASSIFICATION	ROADWAY STATUS	PEAK HOUR VOLUME	% IN DISTRICT	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR²	EXCESS CAPACITY PK-HR VEH-MI³	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA			
			FROM	TO																	
CITY OFF-SITES (INCLUDED IN IMPACT FEE CIP)																					
A-12	51039	JIM CRISTAL	IH 35	OLD SH 24	3,110	0.59	4	SECONDARY ARTERIAL	SA	Widening	1,290	100%	750	1770	781	1,009	\$	10,332,000	\$		
A-13 C-10	51039	JIM CRISTAL	OLD SH 24	WESTERN	2,905	0.55	4	SECONDARY ARTERIAL	SA	Widening	1,056	50%	750	825	290	535	\$	9,746,000	\$		
A-14 C-11	51039	JIM CRISTAL	WESTERN	MASCH BRANCH	3,510	0.66	4	SECONDARY ARTERIAL	SA	Widening	910	50%	750	990	300	690	\$	11,964,000	\$		
A-15 C-12	51039	JIM CRISTAL	MASCH BRANCH	THOMAS J EGAN	5,975	1.13	4	SECONDARY ARTERIAL	SA	Widening	239	50%	750	1695	135	1,560	\$	18,502,000	\$		
A-18	52758	ROBSON RANCH	IH 35W	5,745 W OF IH 35W	5,745	1.09	6	PRIMARY ARTERIAL	PA	Widening	808	50%	850	2780	441	2,339	\$	20,953,000	\$		
A-28	52697	JIM CRISTAL	THOMAS J EGAN	2915 S OF JIM CRISTAL	2,915	0.55	4	SECONDARY ARTERIAL	SA	New	New	100%	750	1650	0	1,650	\$	6,984,000	\$		
A-29	52697	THOMAS J EGAN	1830' N OF FM 1515	FM 1515	1,830	0.35	4	SECONDARY ARTERIAL	SA	New	New	50%	750	525	0	525	\$	4,635,000	\$		
A-30	52608	UNDERWOOD	SPRINGSIDE	UNDERWOOD CONNECTOR	4,000	0.76	6	PRIMARY ARTERIAL	PA	Widening	692	100%	850	3876	526	3,350	\$	15,229,000	\$		
B-2	52776	ALLRED	BRUSH CREEK	JOHN PAINIE	1,610	0.30	6	PRIMARY ARTERIAL	PA	Widening	1,171	50%	850	765	176	589	\$	5,424,000	\$		
B-6	52776	BRUSH CREEK	FORT WORTH	590' E OF ALLRED	3,615	0.68	6	PRIMARY ARTERIAL	PA	New	New	100%	850	3468	0	3,468	\$	10,698,000	\$		
B-25	45891	VINTAGE	FORT WORTH	BONNIE BRAE	4,605	0.87	6	PRIMARY ARTERIAL	PA (1/3)	Widening	423	100%	850	4437	368	4069	\$	11,721,000	\$		
B-26	45891	VINTAGE	BONNIE BRAE	NAPA VALLEY	765	0.14	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	714	262	452	\$	1,665,000	\$		
B-27	45891	VINTAGE	NAPA VALLEY	IH 35W	3,435	0.65	6	PRIMARY ARTERIAL	PA (1/3)	Widening	1,874	100%	850	3315	1218	2,097	\$	7,975,000	\$		
SUBTOTAL													26,810	4,477	22,333	\$	135,828,000	\$	100,216,000	\$	
DEVELOPMENT BUILT FACILITIES (NOT INCLUDED IN IMPACT FEE CIP)																					
A	52666	ANYX	LOOP 288	C WOLFE	6,855	1.30	2	SECONDARY ARTERIAL	SA	New	New	100%	750	1950	0	1,950	\$	-	-		
A	52790	FM 2449	LOOP 288	780' W OF LOOP 288	778	0.15	6	PRIMARY ARTERIAL	PA	New	New	100%	850	765	0	765	\$	-	-		
A	52790	FM 2449	780' W OF LOOP 288	4380' E OF C WOLFE	1,904	0.36	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1836	0	1,836	\$	-	-		
A	52790	FM 2449	4380' E OF C WOLFE	C WOLFE	4,382	0.83	6	PRIMARY ARTERIAL	PA	Widening	1,364	100%	850	4233	1132	3,101	\$	-	-		
A	52872	FM 2499	OUTER LOOP	UNDERWOOD	5,687	1.08	2	COLLECTOR	C	New	New	100%	550	1188	0	1,188	\$	-	-		
A	52773	H LVELY	I-35W	C WOLFE	14,275	2.70	6	PRIMARY ARTERIAL	PA	New	New	70%	850	9639	0	9,639	\$	-	-		
A	52823	ANYX-H LVELY	ANYX	H LVELY	9,395	1.78	2	COLLECTOR	C	New	New	100%	550	1958	0	1,958	\$	-	-		
A	52879	FM 1515-H LVELY	FM 1515	H LVELY	12,255	2.32	4	SECONDARY ARTERIAL	SA	New	New	100%	750	6960	0	6,960	\$	-	-		
A	52828	HUNTER ARTERIAL	FM 2449	UNDERWOOD	10,451	1.98	4	SECONDARY ARTERIAL	SA	New	New	50%	750	2970	0	2,970	\$	-	-		
A	52953	UNDERWOOD	UNDERWOOD CONNECTOR	UNDERWOOD	2,026	0.38	6	PRIMARY ARTERIAL	PA	New	New	100%	850	1938	0	1,938	\$	-	-		
A	52953	UNDERWOOD	LOOP 288	1610' N OF H LVELY	5,909	1.12	6	PRIMARY ARTERIAL	PA	Widening	60	100%	850	5712	67	5,645	\$	-	-		
SUBTOTAL													38,149	1,199	37,950	\$	-	\$	-	\$	-

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]

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

4. The length of Road Branch shown in this table is less than the length of Project A-18.

The reduced length has been shown in this table to align with the operating agreement.

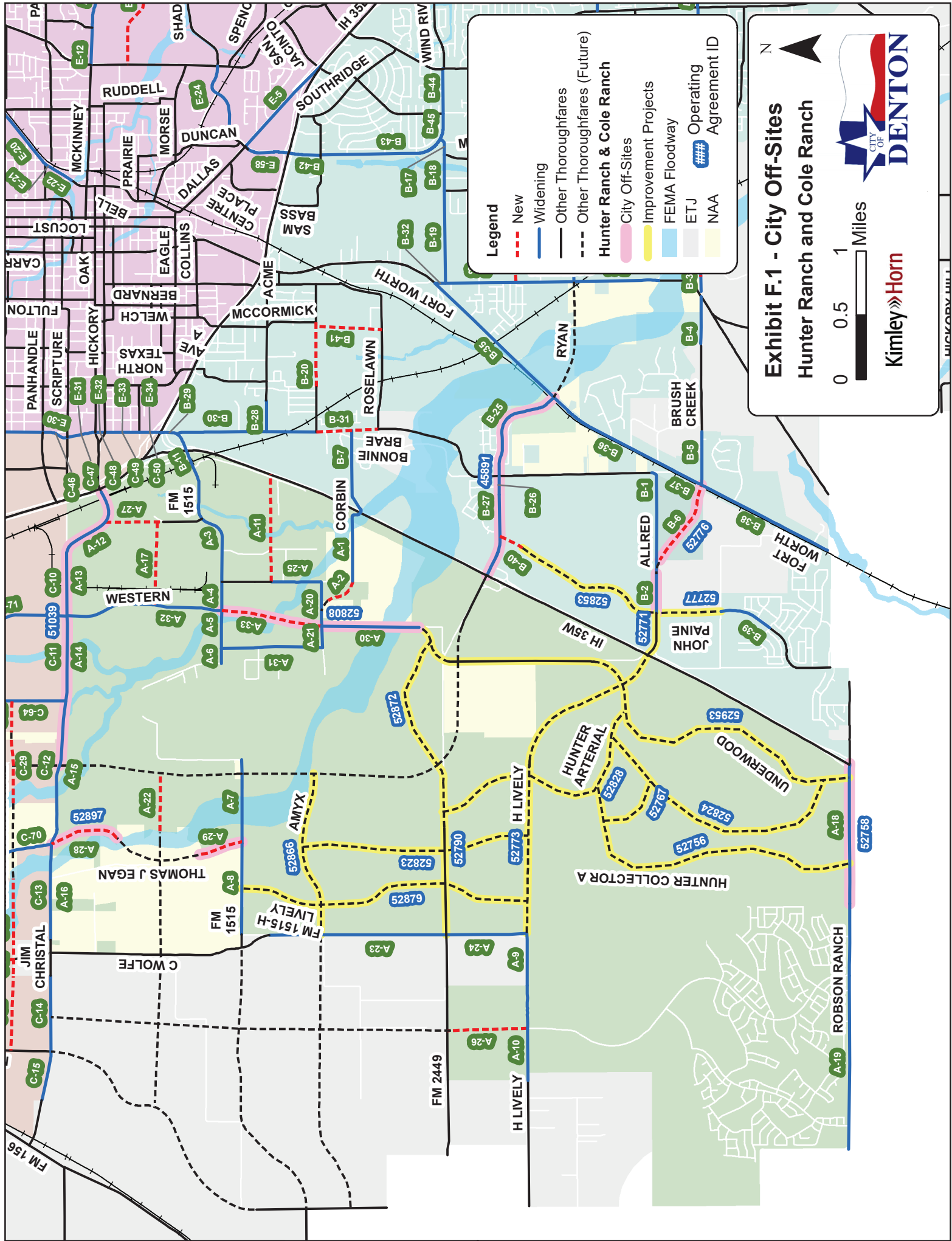


EXHIBIT K1-C - MAPS OF CITY OFFSITES

Planning Level Infrastructure Development Phasing Map – Off-site Roadways with Phase Boundaries

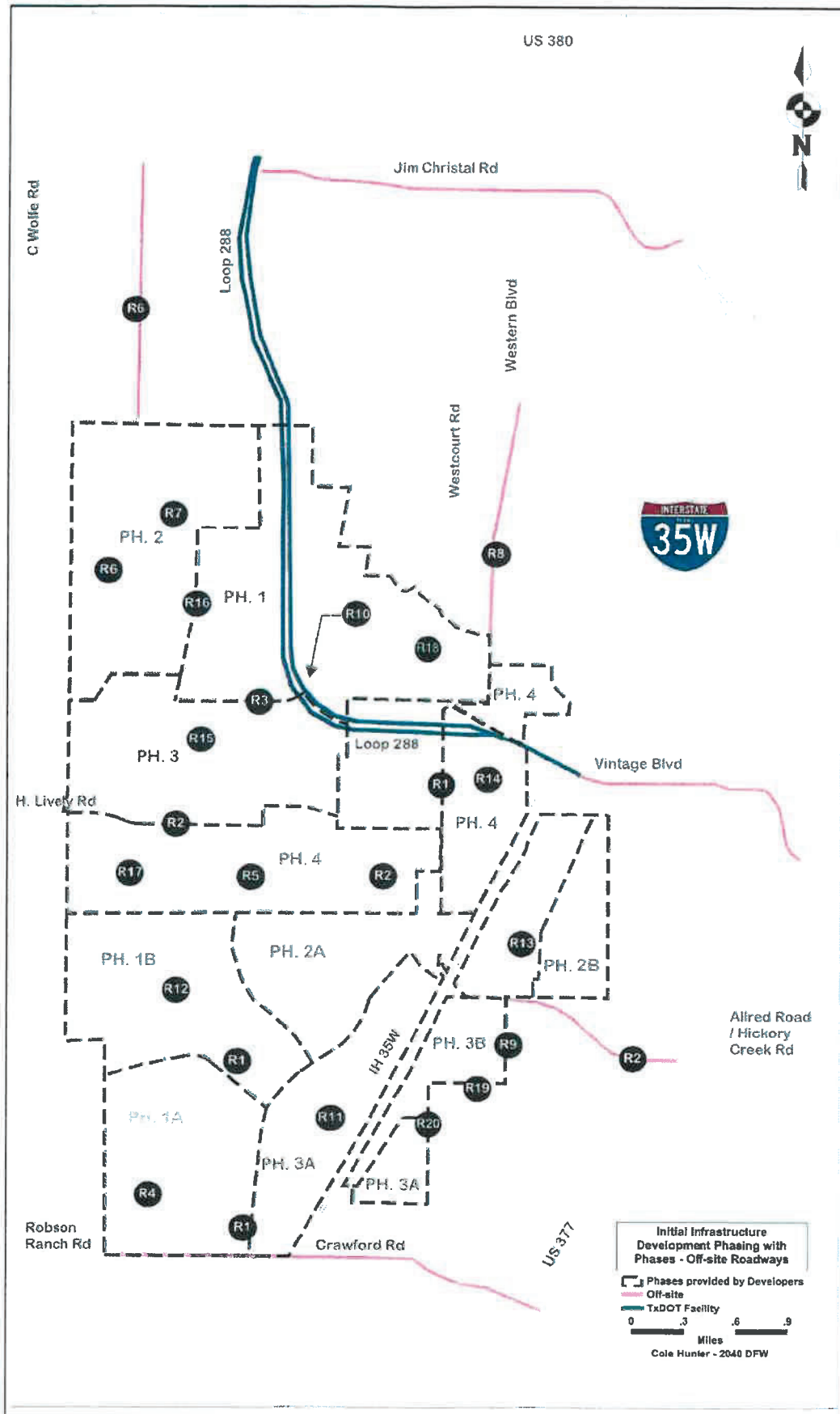


Exhibit F.2 - City Off-sites
Hunter Ranch and Cole Ranch Operating Agreement

EXHIBIT B

SCHEDULE 1

MAXIMUM ASSESSABLE ROADWAY IMPACT FEE PER SERVICE UNIT

Exhibit B - Schedule 1

Service Area	Maximum Assessable Roadway Impact Fee Per Service Unit
Service Area A	\$ 2,496
Service Area B	\$ 3,742
Service Area C	\$ 4,695
Service Area D	\$ 5,265
Service Area E	\$ 3,722

SCHEDULE 2

ROADWAY IMPACT FEE COLLECTION RATE PER SERVICE UNIT

Exhibit B - Schedule 2 Roadway Impact Fee Collection Rate Per Service Unit

Assessment Date	Properties platted on or before 12/31/2024		Properties platted on or after 1/1/2025	
Service Areas	Land Use Type		Land Use Type	
	Residential	Non-Residential	Residential	Non-Residential
A	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
B	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
C	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
D	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40
E	\$ 408.16	\$ 306.12	\$ 796.80	\$ 398.40

EXHIBIT C

(LAND USE EQUIVALENCY TABLE)

Exhibit C - Land Use Equivalency Table											
Land Use Category	ITE Land Use Code	Development Units	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											
Intermodal Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.02	50%	5.01	5.01	9.37
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.65			0.65	10.02	50%	5.01	5.01	3.26
Industrial Park	130	1,000 SF GFA	0.34			0.34	10.02	50%	5.01	5.01	1.70
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	5.01	0.90
Mini-Warehouse	151	1,000 SF GFA	0.15			0.15	10.02	50%	5.01	5.01	0.75
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.94			0.94	9.79	50%	4.90	4.90	4.61
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.51			0.51	9.79	50%	4.90	4.90	2.50
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.39			0.39	9.79	50%	4.90	4.90	1.91
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.32			0.32	9.79	50%	4.90	4.90	1.57
Residential Condominium/Townhome	230	Dwelling Unit	0.36			0.36	9.79	50%	4.90	4.90	1.76
Senior Adult Housing-Single-Family	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.90	1.47
Senior Adult Housing-Multifamily	252	Dwelling Unit	0.25			0.25	9.79	50%	4.90	4.90	1.23
Assisted Living	254	Beds	0.24			0.24	9.79	50%	4.90	4.90	1.18
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.21	3.21	1.89
Motel	320	Room	0.36			0.36	6.43	50%	3.21	3.21	1.16
RECREATIONAL											
Golf Driving Range	432	Tees / Driving Positions	1.25			1.25	7.86	50%	3.93	3.93	4.91
Golf Course	430	Acre	0.28			0.28	7.86	50%	3.93	3.93	1.10
Recreational Community Center	495	1,000 SF GFA	2.50			2.50	7.86	50%	3.93	3.93	9.83
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	7.86	50%	3.93	3.93	5.23
Miniature Golf Course	431	Holes	0.33			0.33	7.86	50%	3.93	3.93	1.30
Multiplex Movie Theater	445	Movie Screens	13.96			13.96	15.77	50%	7.88	6.00	83.76
Racquet / Tennis Club	491	Tennis Court	3.82			3.82	7.86	50%	3.93	3.93	15.01
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	8.31	50%	4.15	4.15	2.03
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.74	1.74	10.84
Elementary School	520	Students	0.16			0.16	3.49	50%	1.74	1.74	0.28
Middle School / Junior High School	522	Students	0.15			0.15	3.49	50%	1.74	1.74	0.26
High School	530	Students	0.14			0.14	3.49	50%	1.74	1.74	0.24
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	5.22	0.57
University / College	550	Students	0.15			0.15	10.44	50%	5.22	5.22	0.78
MEDICAL											
Clinic	630	1,000 SF GFA	3.69			3.69	9.85	50%	4.92	4.92	18.15
Hospital	610	1,000 SF GFA	0.86			0.86	9.85	50%	4.92	4.92	4.23
Nursing Home	620	Beds	0.14			0.14	9.85	50%	4.92	4.92	0.69
Animal Hospital / Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	9.85	50%	4.92	4.92	12.15
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80
General Office Building	710	1,000 SF GFA	1.44			1.44	14.65	50%	7.32	6.00	8.64
Medical-Dental Office Building	720	1,000 SF GFA	3.93			3.93	9.85	50%	4.92	4.92	19.34
Single Tenant Office Building	715	1,000 SF GFA	1.76			1.76	14.65	50%	7.32	6.00	10.56
Office Park	750	1,000 SF GFA	1.30			1.30	14.65	50%	7.32	6.00	7.80
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	4.45	50%	2.22	2.22	4.15
Automobile Parts Sales	843	1,000 SF GFA	4.90	43%	A	2.79	4.45	50%	2.22	2.22	6.19
Gasoline / Service Station	944	Vehicle Fueling Position	13.91	42%	A	8.07	1.20	50%	0.60	0.60	4.84
Gasoline / Service Station w/ Conv Market	945	Vehicle Fueling Position	18.42	56%	B	8.10	1.20	50%	0.60	0.60	4.86
New Car Sales	841	1,000 SF GFA	2.42	20%	B	1.94	5.60	50%	2.80	2.80	5.43
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.22	2.22	6.46
Self-Service Car Wash	947	Wash Stalls	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.75	28%	A	2.70	4.45	50%	2.22	2.22	5.99
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.03	50%	A	16.52	5.64	50%	2.82	2.82	46.59
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	33.21	50%	B	16.61	5.64	50%	2.82	2.82	46.84
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.05	43%	A	5.16	5.64	50%	2.82	2.82	14.55
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	5.64	50%	2.82	2.82	12.32
Coffee / Donut Shop with Drive-Thru Window	937	1,000 SF GFA	38.99	70%	A	11.7	5.64	50%	2.82	2.82	32.99
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.83	30%	C	3.38	5.60	50%	2.80	2.80	9.46
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	5.60	50%	2.80	2.80	13.61
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	5.60	50%	2.80	2.80	3.39
Pharmacy / Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	5.60	50%	2.80	2.80	11.20
Pharmacy / Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.29	49%	A	5.25	5.60	50%	2.80	2.80	14.70
Shopping Center (>150k)	820	1,000 SF GFA	3.40	34%	A	2.24	5.60	50%	2.80	2.80	6.27
Shopping Plaza (40-150k)	821	1,000 SF GFA	5.19	34%	A	3.43	5.60	50%	2.80	2.80	9.60
Strip Retail Plaza (<40k)	822	1,000 SF GFA	6.59	34%	A	4.35	5.60	50%	2.80	2.80	12.18
Supermarket	850	1,000 SF GFA	9.24	36%	A	5.91	5.60	50%	2.80	2.80	16.55
Toy / Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	5.60	50%	2.80	2.80	9.80
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	5.60	50%	2.80	2.80	3.84
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.22	2.22	16.16
Drive-In Bank	912	Drive-in Lanes	27.07	47%	A	14.35	4.45	50%	2.22	2.22	31.86
Hair Salon	918	1,000 SF GFA	1.45	30%	B	1.02	6.41	50%	3.20	3.20	3.26

Key to Sources of Pass-by Rates:

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

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

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