

2019 Impact Fee Update

19-0010M2

February 11, 2020

Introduction & Overview

- The project team
- The purpose of today's presentation
- General outline of the presentation
 - The Fundamentals
 - Roadway Improvements Plan
 - Roadway Maximum Assessable Fee
 - Utility Improvements Plans
 - Utility Maximum Assessable Fee



Impact Fees 101

The Fundamentals

What are Impact Fees?

- One-time fee for new development
- Mechanism to recover infrastructure costs required to serve new growth
- ‘Rough Proportionality with mathematical exactitude’
 - Legal way to collect a flexible fee for infrastructure
- Governed by Chapter 395 of the Texas Local Government Code; Established in Texas in 1987

The 5-Year Update Process

- State law requires that impact fees must be updated at least one every five years and involve 3 components
 1. Land Use Assumptions (Completed on Sept. 17, 2019)
 2. Capital Improvements Planning (Draft)
 3. Fee Setting/Adopting the Ordinance

Impact Fees 101

The Fundamentals

Impact Fees in McKinney

- In McKinney, impact fees are used for:
 - Water
 - Wastewater
 - Roadway
- Capital Improvements Advisory Committee
 - Designated as Planning and Zoning Commission, plus one representative from the ETJ.

Terminology

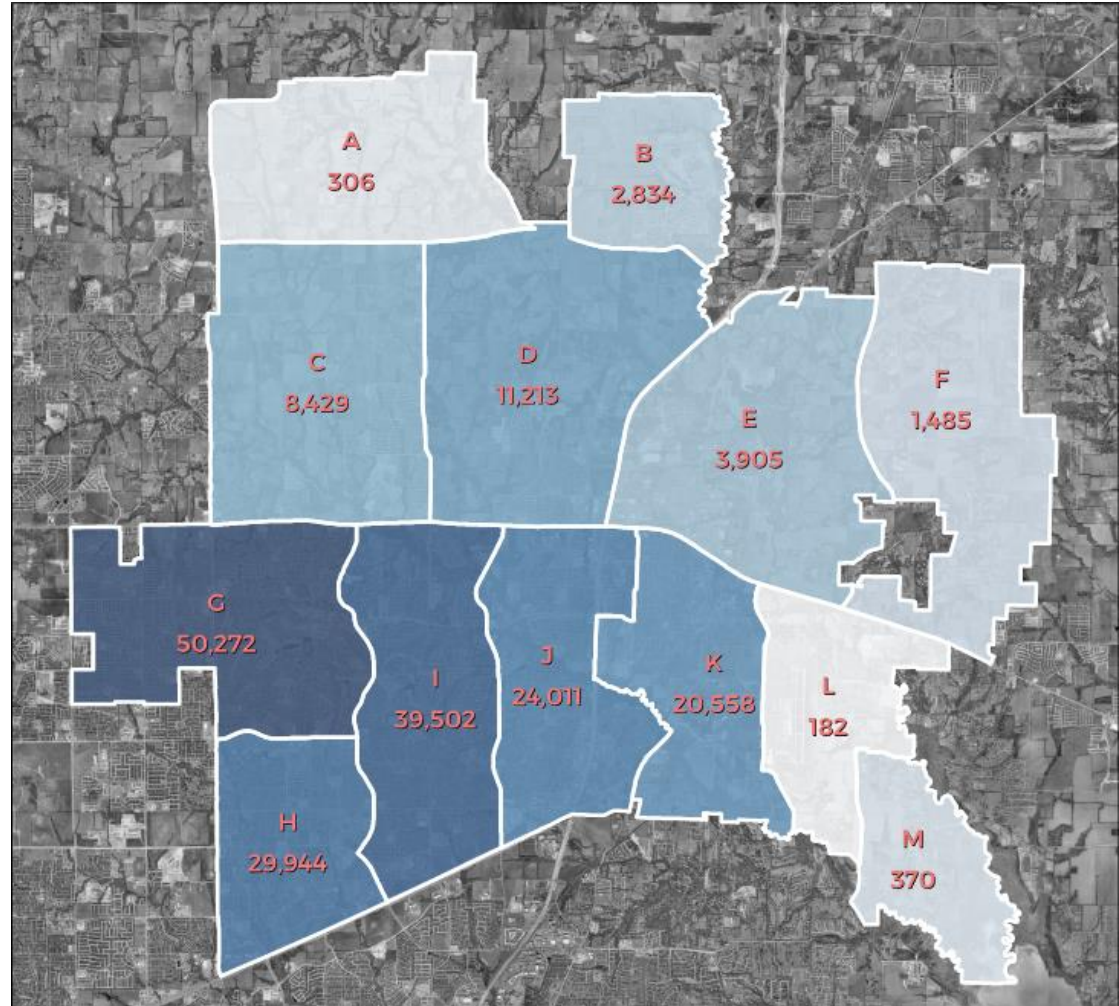
- Service Areas
- Land Use Assumptions
- Service Units
- Capital Improvements Plans
- Maximum Assessable Fee
- Collection Rate

Impact Fee Update Process

The Fundamentals

Land Use Assumptions

- Projects growth over 10-year period to calculate the demand for new infrastructure



2029 Population Growth Projections

Capital Improvements Planning

The Fundamentals

Review and Update Impact Fee CIP

- Identify infrastructure needed to accommodate growth
- Determine excess capacity of existing facilities
- Estimate costs associated with each infrastructure project

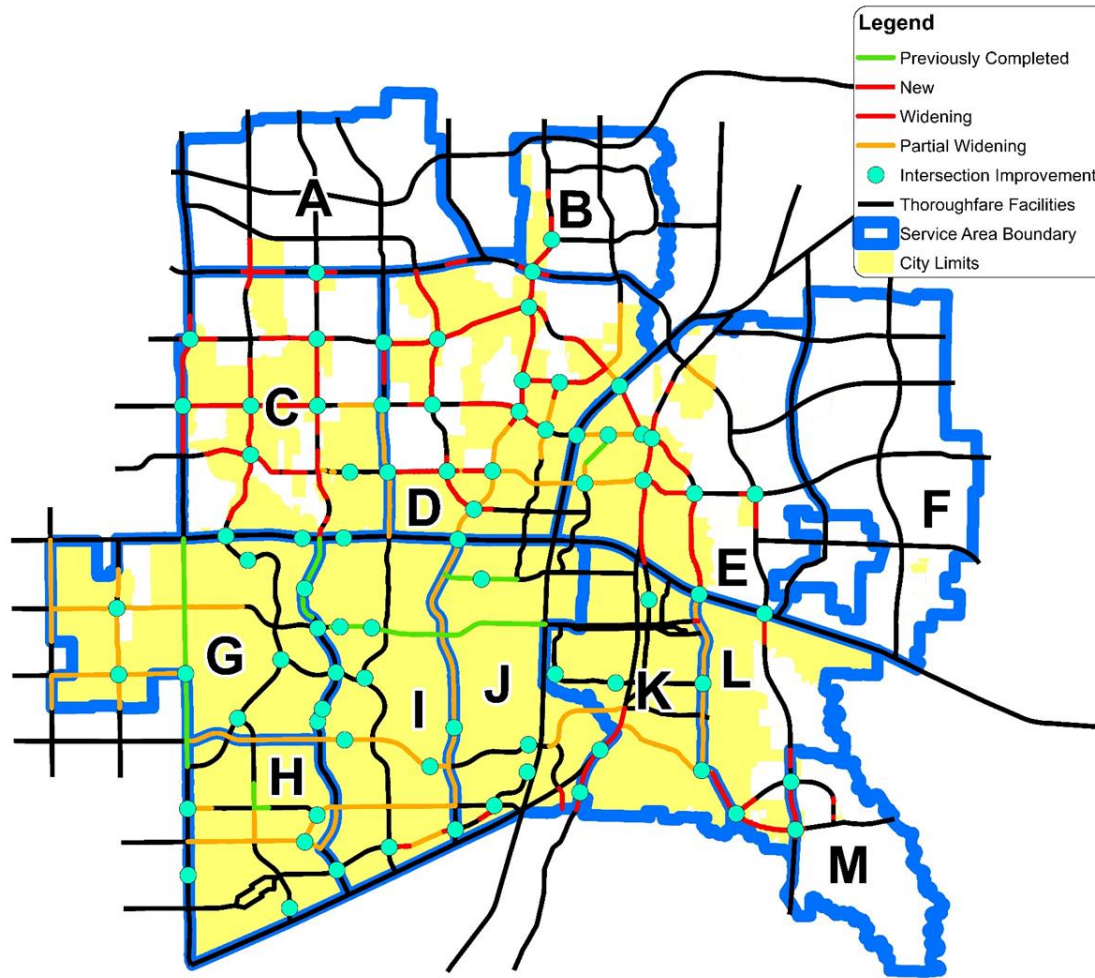
Calculate Max. Assessable Fee

Noteworthy Items

- **Water and Wastewater**
 - Using a credit calculation
- **Wastewater**
 - Including North Texas Municipal Water District

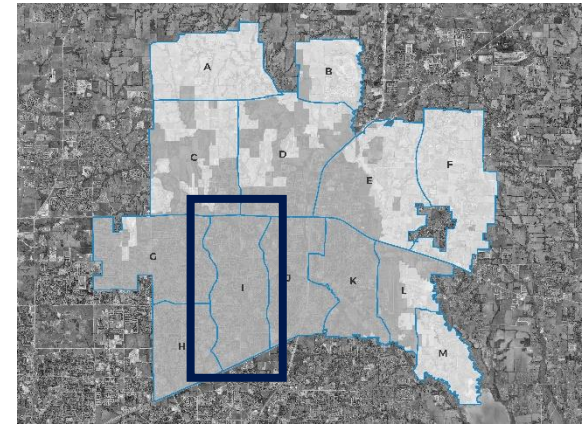
Roadway Impact Fee Update

2019-2029 Roadway Improvement Plan (Draft)



New Service Units

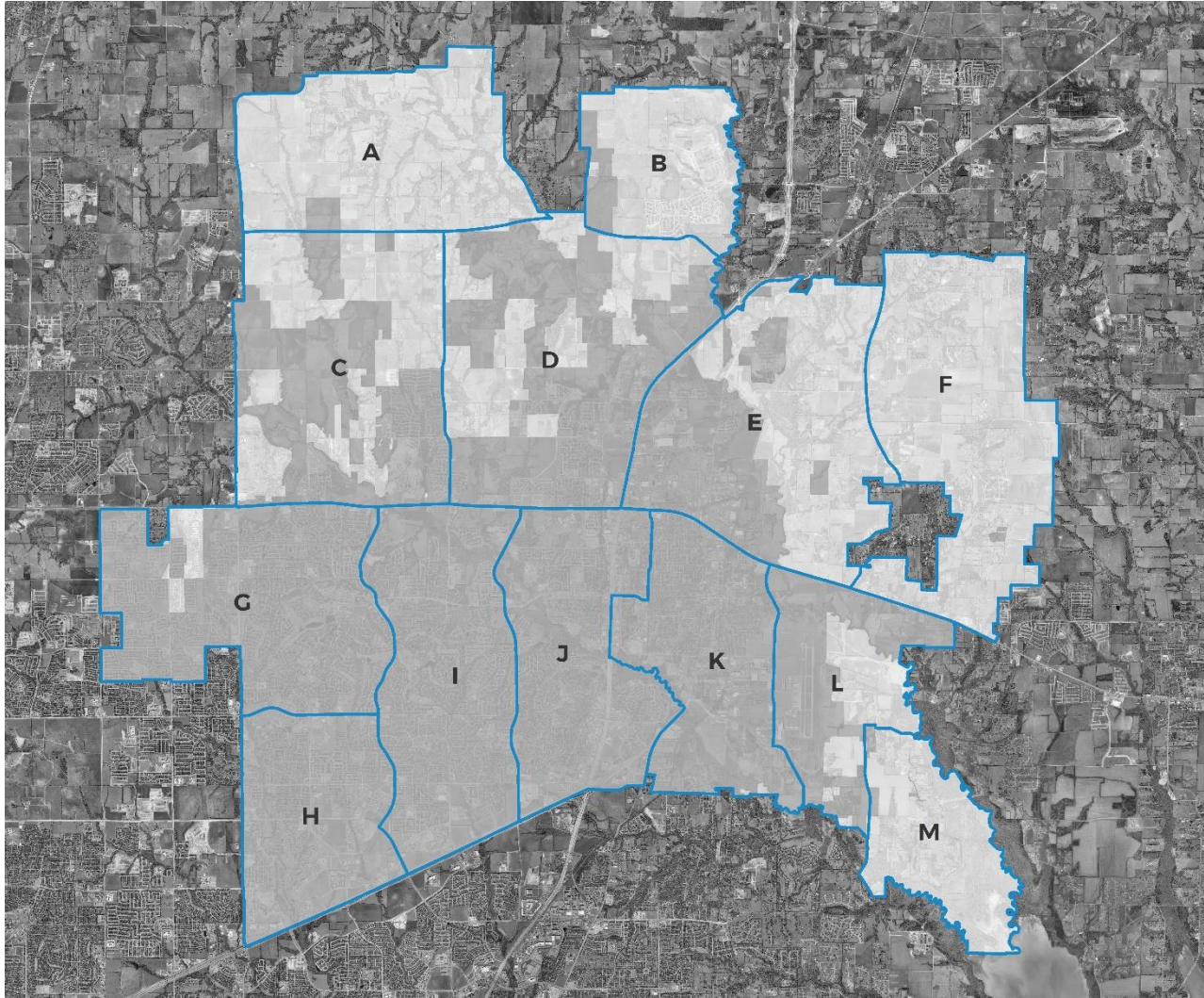
(PROJECTED GROWTH – Service Area I)



Land Use Type	Development Unit	Number of Development Units	Vehicle Miles per Development Unit (Trip Demand Factor)	Total Vehicle-Mile
Residential	Dwelling Unit	1,608	4.85	7,800
Basic (Industrial)	1,000 square feet	112.104	3.16	354
Service (Office)	1,000 square feet	252.841	6.90	1,744
Retail (Commercial)	1,000 square feet	1,199.668	7.03	8,434
			Total	18,332

- Service Area I has 18,332 vehicle-miles of projected demand.

Projected Growth (Vehicle-Miles)



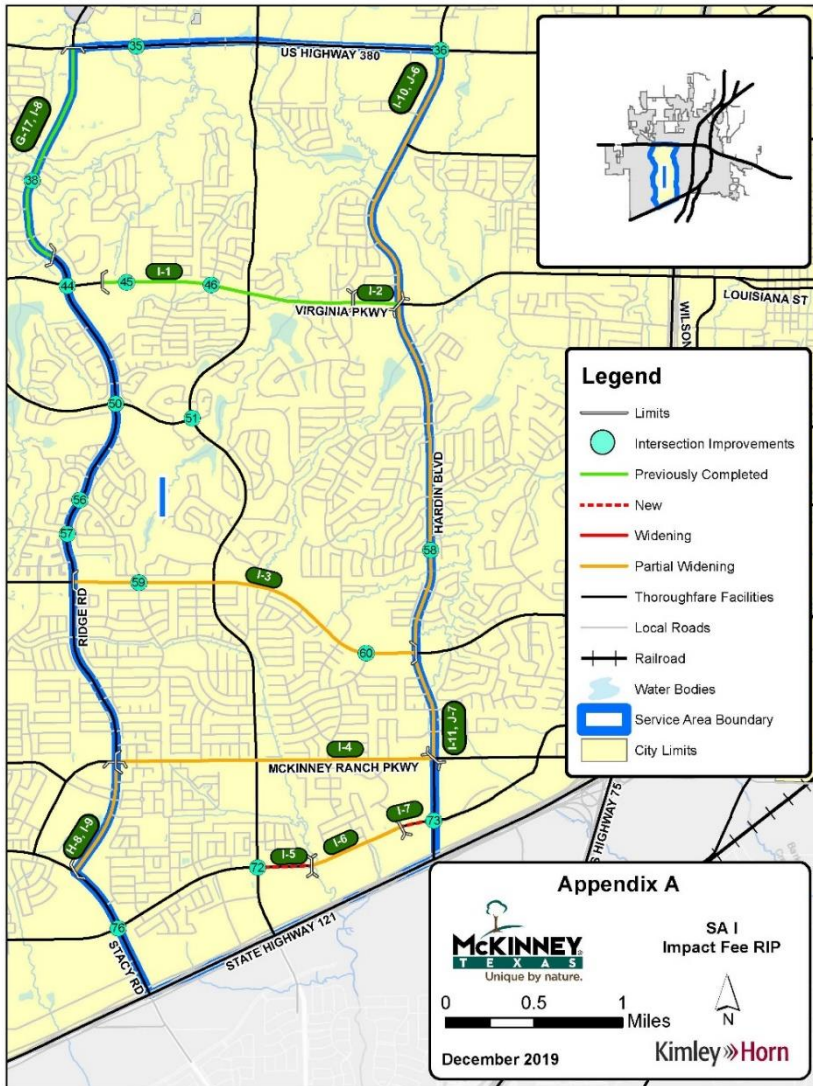
Service Area	Vehicle-Miles
A	0
B	9,578
C	15,582
D	41,299
E	17,845
F	0
G	7,742
H	31,324
I	18,332
J	24,864
K	8,530
L	1,893
M	304



Recoverable Cost

(Service Area I)

- Total Cost of RIP = \$35.6M
- Cost to meet existing demands - \$10.6M
- Cost of existing financing - \$1.4M
- Max. Calculated Fee = \$23.6M
- Credit Calculation - \$449K
- **10-Year Cost = \$23.2M**



Calculating the Maximum Impact Fee

Roadway Impact Fees

$$\text{Max. Impact Fee Per Service Unit} = \frac{\text{Recoverable Cost of the CIP (\$)}}{\text{New Service Units (vehicle - miles)}}$$

- Determine the amount of project growth in each Service Area for a 10-year period.
- Determine the additional capacity needed based on growth projections
- Determine recoverable cost of needed capital constructions to accommodate growth
- Determine cost per service unit

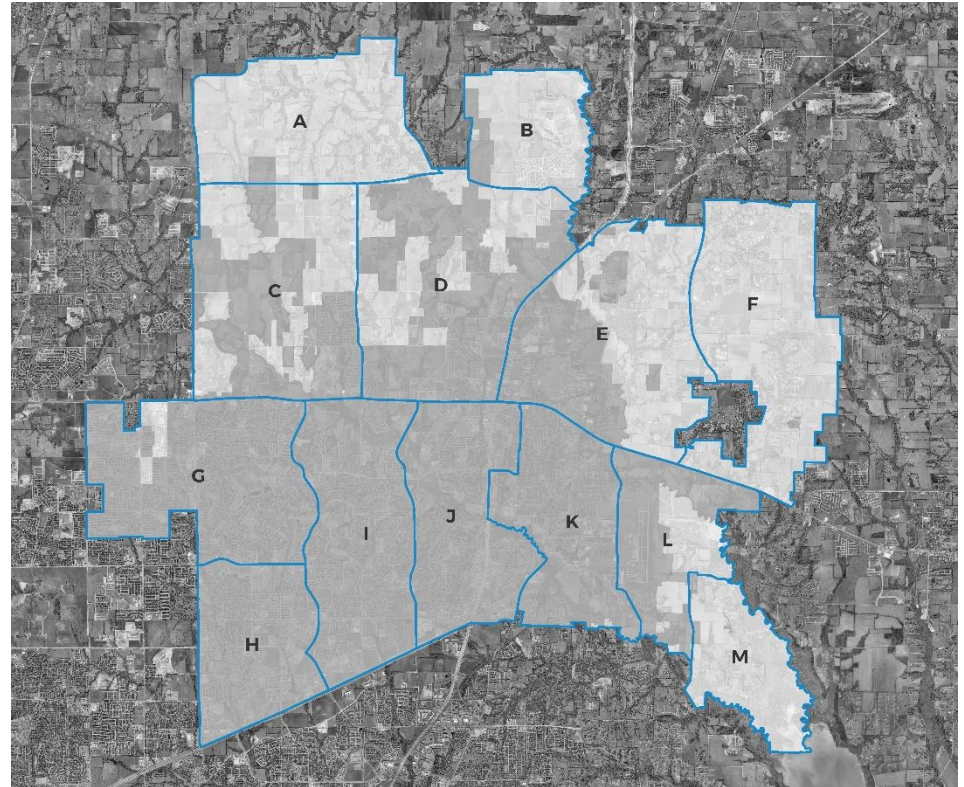
- Service Area I:

$$\frac{\$23.2\text{M recoverable cost}}{18,332 \text{ vehicle-miles}} = \$1,265 / \text{vehicle-mile}$$

2018-2019 Maximum Assessable Fee

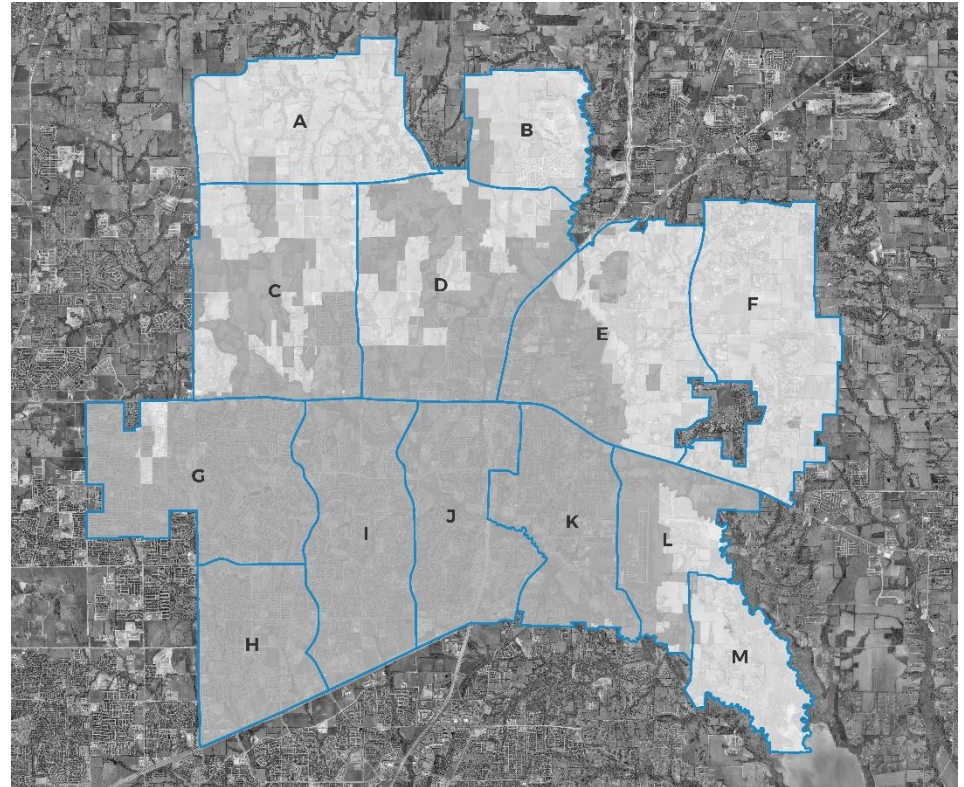
Maximum Assessable Fee per Vehicle-Mile

Service Area	Maximum Assessable Fee per Vehicle-Mile
A	\$0
B	\$1,094
C	\$2,808
D	\$3,438
E	\$2,202
F	\$0
G	\$1,155
H	\$361
I	\$1,265
J	\$347
K	\$1,197
L	\$2,044
M	\$2,406



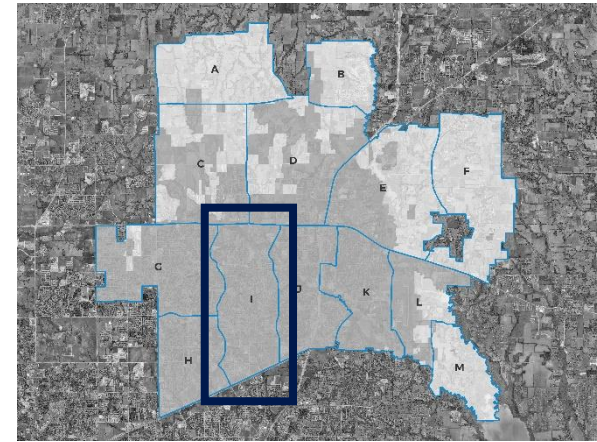
2018-2019 Maximum Assessable Fee

Service Area	2018-2019 Max.		2012-2013 Max.
A	\$0		\$0
B	\$1,094	↑	\$861
C	\$2,808	↑	\$1,500
D	\$3,438	↑	\$1,211
E	\$2,202	↑	\$2,082
F	\$0		\$0
G	\$1,155	↑	\$635
H	\$361	↓	\$393
I	\$1,265	↑	\$755
J	\$347	↓	\$824
K	\$1,197	↑	\$1,182
L	\$2,044	↑	\$1,370
M	\$2,406	↑	\$0



Maximum Assessable Fee

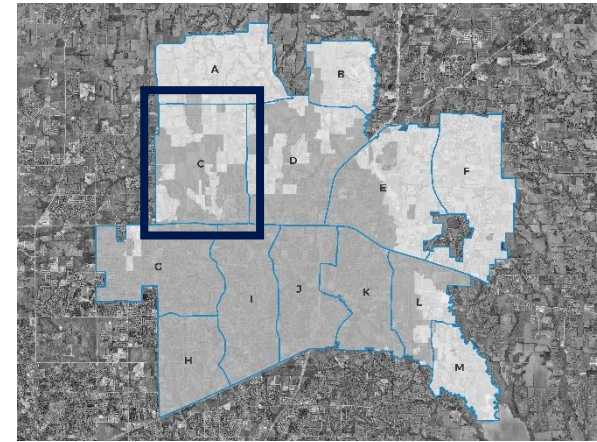
(SAMPLE CALCULATION— Service Area I)



Land Use Type	Development Unit	Number of Development Units	2019 Update				Current Impact Fee Charged
			Trip Demand Factor	Max Fee/SU	Max Fee/DU		
Single Family	Dwelling Unit	1	X 4.85	X \$1,265	= \$6,135	\$3,800	
Shopping Center	1,000 Square Feet	1	7.03	\$1,265	\$8,893	\$3,176	
Office	1,000 Square Feet	1	6.90	\$1,265	\$8,729	\$1,951	
Light Industrial	1,000 Square Feet	1	3.16	\$1,265	\$3,997	\$989	

Maximum Assessable Fee

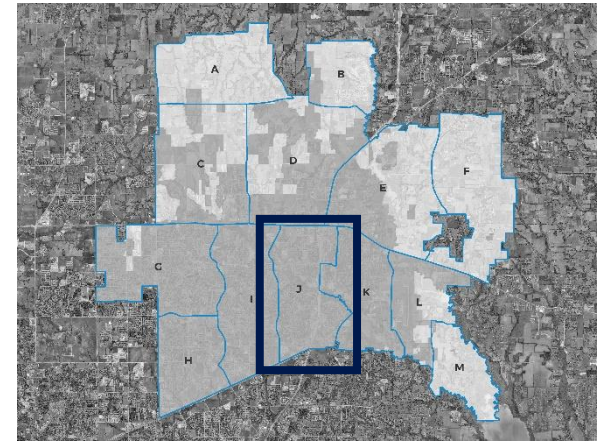
(SAMPLE CALCULATION– Service Area C)



Land Use Type	Development Unit	Number of Development Units	2019 Update				Current Impact Fee Charged
			Trip Demand Factor	Max Fee/SU	Max Fee/DU		
Single Family	Dwelling Unit	1	X 3.96	X \$2,707	= \$11,120	\$3,800	
Shopping Center	1,000 Square Feet	1	7.03	\$2,707	\$19,030	\$4,255	
Office	1,000 Square Feet	1	4.60	\$2,707	\$12,452	\$2,415	
Light Industrial	1,000 Square Feet	1	2.52	\$2,707	\$6,822	\$1,120	

Maximum Assessable Fee

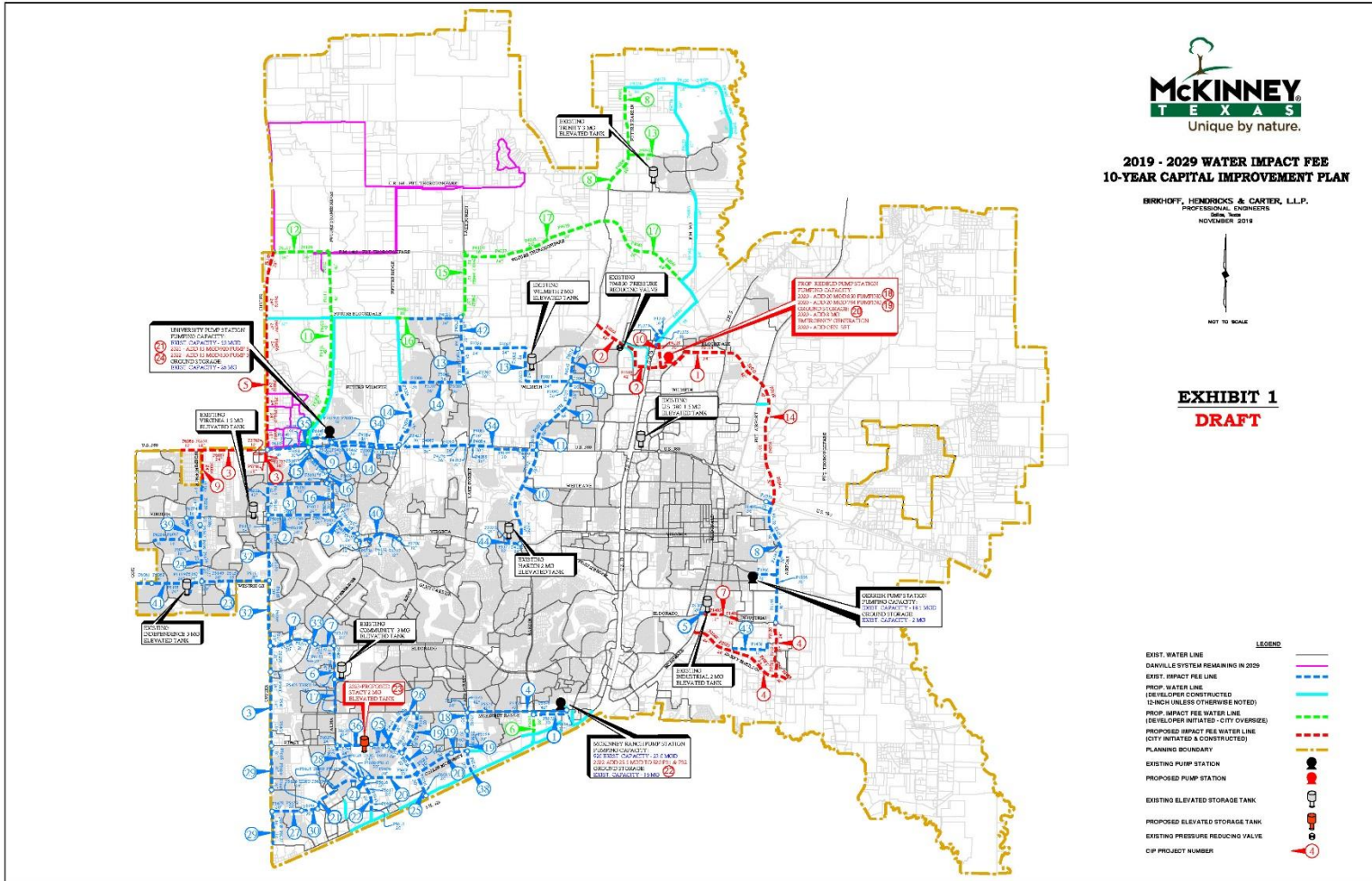
(SAMPLE CALCULATION– Service Area J)



Land Use Type	Development Unit	Number of Development Units	2019 Update				Current Impact Fee Charged
			Trip Demand Factor	Max Fee/SU	Max Fee/DU		
Single Family	Dwelling Unit	1	X 4.85 X	\$387	= \$1,683	\$3,800	
Shopping Center	1,000 Square Feet	1	7.03	\$387	\$2,721	\$3,597	
Office	1,000 Square Feet	1	6.90	\$387	\$2,670	\$2,206	
Light Industrial	1,000 Square Feet	1	3.16	\$387	\$1,223	\$1,114	

Water/Wastewater Impact Fee Update

2019-2029 Water Capital Improvement Plan (Draft)



PROPOSED WATER LINES

Proj. No.	Year	1=City Participation in Cost Oversize 2=City Initiated and Funded		Project	Size	Opinion of Construction Cost (A)
1	2020	2		REDBUD 794 PUMP STATION 54" DISCHARGE LINE	54"	\$ 4,496,262
2	2019	2		REDBUD 850 PUMP STATION 42" DISCHARGE LINE	42"	\$ 8,137,350
3	2020	2		US 380 / INDEPENDENCE LOOP	12", 16", 24"	\$ 2,203,102
4	2021	2		HARRY McKILLOP BLVD. 24" WATER LINE	12", 24"	\$ 8,350,000
5	2021	2		CUSTER 24" NORTH WATER LINE	18", 24"	\$ 11,888,125
6	2021	1		HARDIN SOUTH 16" WATER LINE	16"	\$ 108,900
7	2022	2		INDUSTRIAL BLVD. 12" WATER LINE (PIPE BURST 8" to 12")	12"	\$ 569,109
8	2022	1		HARDIN 24" & 16" (TRINITY FALLS WEST FEED NORTH)	16", 24"	\$ 691,392
9	2022	2		INDEPENDENCE CONNECTION TO US 380	24"	\$ 561,120
10	2023	2		REDBUD PUMP STATION 850 DISCHARGE LINE (T-FALLS EAST FEED)	42"	\$ 737,100
11	2024	1		STONEBRIDGE 42" WATER LINE	42"	\$ 5,342,040
12	2025	1		F.M. 1461 (FUTURE E/W THOROUGHFARE)	16"	\$ 289,560
13	2025	1		COUNTY ROAD 228 16" WATER LINE	16"	\$ 125,100
14	2026	2		AIRPORT WATER LINE NORTH LOOP	30", 36"	\$ 4,821,900
15	2027	1		LAKE FOREST 16" WATER LINE	16"	\$ 337,138
16	2027	1		BLOOMDALE 16" WATER LINE	16"	\$ 200,220
17	2029	1		FUT. 850 EAST / WEST THOROUGHFARE WATER LINE	12", 20", 24"	\$ 2,245,020
Subtotal: Proposed Water Lines						\$ 51,103,438

- (A) Opinion of Cost includes:
- a) Engineer's Opinion of Construction Cost
 - b) Professional Services Fees (Survey, Engineering, Testing, Legal)
 - c) Cost of Easement or Land Acquisitions
- Debt Service based on 20-year simple interest bonds at 4.5%



PUMPING AND STORAGE FACILITIES

Proj. No.	Year	Project	Capacity	Opinion of Construction Cost (A)
18	2020	Redbud Pump Station - Phase I Improvements (850)	20 MGD	\$ 12,600,000
19	2020	Redbud Pump Station - Phase I Improvements (794)	20 MGD	\$ 12,600,000
20	2020	Redbud Pump Station 8-MG Ground Storage Reservoir No. 1	8 MG	\$ 3,828,000
21	2021	University Pump Station Phase III Improvements - Add Pump 920 PS2 Pump 8	15-MGD	\$ 2,482,830
22	2022	McK. Ranch P.S. - Phase I - Replace PS 1 PMPs 6-8, Add 9, PS 2 Pumps 1 & 2	25.5 MGD	\$ 10,574,487
23	2023	Stacy 2-MG Elevated Storage Tank	2 MG	\$ 5,500,000
24	2029	University Pump Station Phase III Improvements - Add Pump 920 PS2 Pump 8	15-MGD	\$ 2,420,000
Subtotal: Pumping and Storage Facilities				\$ 50,005,317
GRAND TOTAL: Water Distribution System CIP				\$ 101,108,755

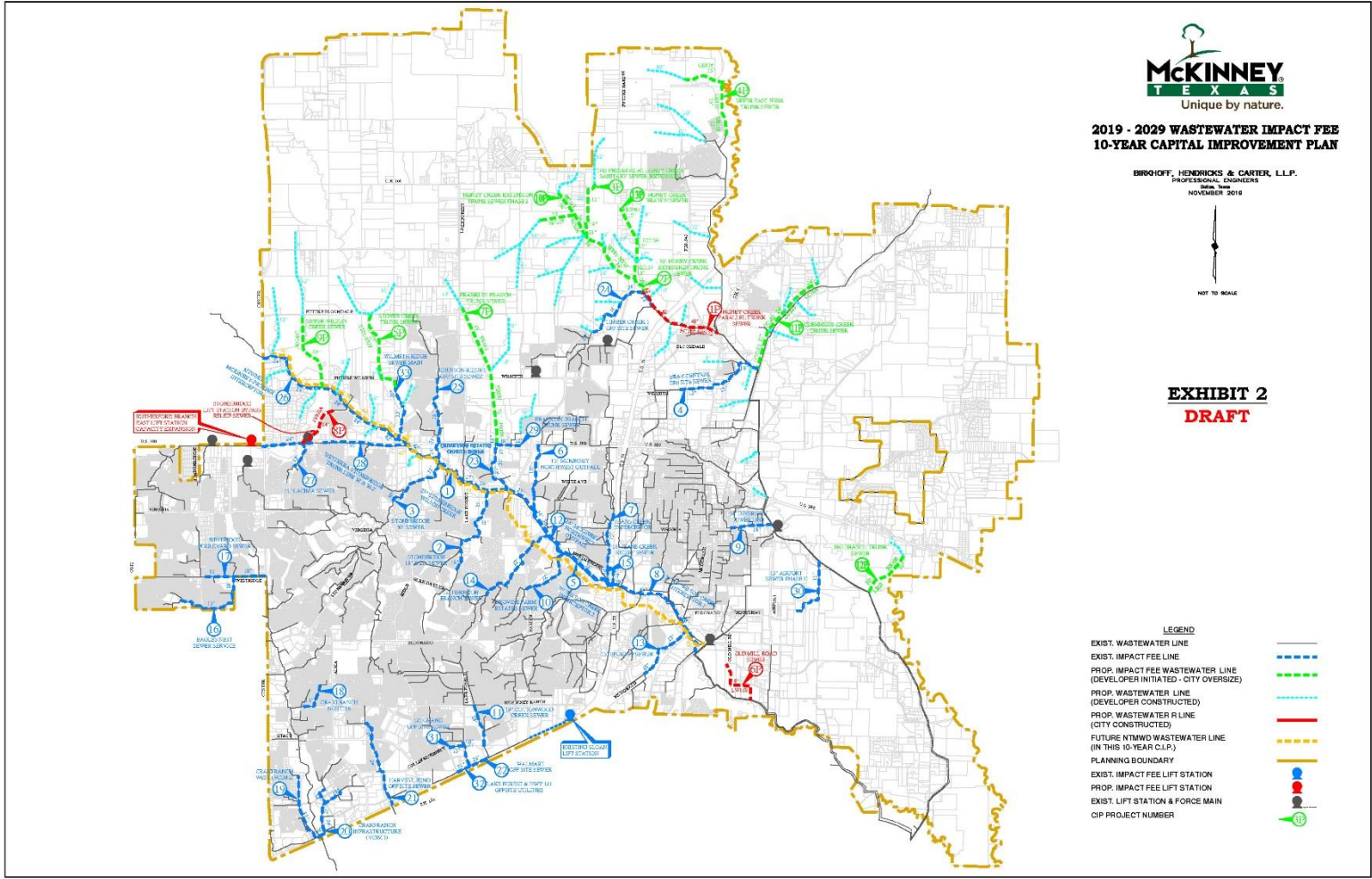
- (A) Opinion of Cost includes:
- a) Engineer's Opinion of Construction Cost
 - b) Professional Services Fees (Survey, Engineering, Testing, Legal)
 - c) Cost of Easement or Land Acquisitions
- Debt Service based on 20-year simple interest bonds at 4.5%

PLANNING EXPENSES

Year	Project	Opinion of Cost (1)
2019	Water & Wastewater System Master Plan & Impact Fee Analysis	\$ 204,417
Subtotal: Planning Expenses		\$ 204,417
GRAND TOTAL: Water Distribution System CIP		\$ 101,313,172

- (1) Opinion of Cost includes:
- a) Engineer's Opinion of Construction Cost
 - b) Professional Services Fees (Survey, Engineering, Testing, Legal)
 - c) Cost of Easement or Land Acquisitions

2019-2029 Wastewater Capital Improvement Plan (Draft)



WASTEWATER COLLECTION C.I.P.

Project LD.	Year		Project	Size	Total Capital Cost (A)
PROPOSED WASTEWATER COLLECTION LINES					
1P	2022	(2)	Honey Creek Parallel Trunk Sewer	42" - 48"	\$ 11,000,000
2P	2020	(1)	36" Honey Creek Extension Trunk Sewer	36"	\$ 1,018,593
3P	2020	(1)	The Preserve at Honey Creek	15" - 21"	\$ 307,836
4P	2021	(1)	Upper East Fork Trunk Sewer	15" - 18"	\$ 324,625
5P	2020	(1)	Stover Creek Trunk Sewer Phase 2	27"	\$ 1,240,000
6P	2020	(2)	Old Mill Road Sewer (WW 1858)	8"	\$ 2,000,000
7P	2022	(1)	Franklin Branch Trunk Sewer	15" - 21"	\$ 696,949
8P	2024	(2)	Stonebridge Lift Station No. 1 Bypass Sewer	24"	\$ 4,000,000
9P	2022	(1)	Upper Wilson Creek Sewer	15"	\$ 224,864
10P	2027	(1)	Honey Creek Extension Trunk Sewer Phase 2	36"	\$ 1,331,872
11P	2025	(1)	Clemons Creek Trunk Sewer	24" - 27"	\$ 1,183,662
12P	2026	(1)	Big Branch Trunk Sewer	30"	\$ 894,445
13P	2026	(1)	Honey Creek Branch Sewer	15" - 18"	\$ 343,825
PROPOSED WASTEWATER COLLECTION LINES SUBTOTAL:					\$ 24,566,671
PROPOSED WASTEWATER LIFT STATIONS					
PWWF-1	2023	(2)	Rutherford Branch East Pumping Capacity Expansion	5.9-MGD	\$ 440,000
PROPOSED WASTEWATER LIFT STATIONS SUBTOTAL:					\$ 440,000
CAPITAL IMPROVEMENTS PLAN TOTAL:					\$ 25,006,671

(A) Opinion of Cost includes:

- a) Engineer's Opinion of Construction Cost
- b) Professional Services Fees (Survey, Engineering, Testing, Legal)
- c) Cost of Easement or Land Acquisitions

10- Year Growth Assumptions

Population Growth Assumption:

	2019	2029	Buildout
Population Assumption (# People)	193,011	262,084	433,874
Percent of Buildout Population (%)	44.5%	60.4%	100.0%
2019 to 2029 Population Growth:		135.8%	

Non-Residential Growth Assumption:

	2019	2029	Buildout
Non-Residential Development (S.F.)	45,987,322	62,513,971	153,580,976
Percent of Buildout Development (%)	29.9%	40.7%	100.0%
2019 to 2029 Population Growth:		135.9%	

2019 - 2029 Water System Living Unit Equivalents (LUE) by Meter Size

Meter Size	2019			2029			New Living Units During Impact Fee Period
	Meter Count	Living Units per Meter	Total Living Units	Meter Count	Living Units per Meter	Total Living Units	
¾"	43,303	1.00	43,303	58,800	1.00	58,799	15,496
1"	14,015	1.67	23,405	19,031	1.67	31,781	8,376
1½"	468	3.33	1,558	636	3.33	2,118	560
2"	2,533	8.33	21,099	3,443	8.33	28,682	7,583
3"	225	16.67	3,750	306	16.67	5,098	1,348
4"	68	33.33	2,266	92	33.33	3,080	814
6"	22	53.33	1,173	30	53.33	1,594	421
8"	9	93.33	839	12	93.33	1,141	302
12"	2	183.33	366	3	183.33	498	132
Totals:	60,645		97,759	82,353		132,791	35,032

2019 - 2029 Waste water System Living Unit Equivalents (LUE) by Meter Size

Meter Size	2019			2029			New Living Units During Impact Fee Period
	Meter Count	Living Units per Meter	Total Living Units	Meter Count	Living Units per Meter	Total Living Units	
¾"	43,084	1.00	43,084	58,503	1.00	58,502	15,418
1"	13,171	1.67	21,995	17,885	1.67	29,867	7,872
1½"	287	3.33	955	390	3.33	1,299	344
2"	1,246	8.33	10,379	1,694	8.33	14,109	3,730
3"	215	16.67	3,584	292	16.67	4,872	1,288
4"	65	33.33	2,166	88	33.33	2,945	779
6"	20	53.33	1,066	27	53.33	1,449	383
8"	9	93.33	839	12	93.33	1,141	302
12"	2	183.33	366	3	183.33	498	132
Totals:	58,099		84,434	78,894		114,682	30,248



Maximum Assessable Utility Impact Fees

$$\text{Max. Impact Fee} = \frac{\text{Eligible Existing Facility Cost} + \text{Eligible Proposed Facility Cost} - \text{Credit Analysis Difference}^{**}}{\text{\# of New Living Unit Equivalents over the next 10 Years}}$$

Living Unit Equivalent = ¾" meter

Water Impact Fee (¾" Meter)

$$\frac{\$42,273,973 + \$58,645,089 - \$39,472,321}{35,032 \text{ LUE's}} = \frac{\$61,446,741}{35,032 \text{ LUE's}} = \$1,754.00/\text{LUE}$$

Wastewater Impact Fee (¾" Meter)

$$\frac{\$1,989,039 + \$135,498,481 - \$49,807,925}{35,032 \text{ LUE's}} = \frac{\$87,679,595}{30,248 \text{ LUE's}} = \$2,899.00/\text{LUE}$$

Wastewater Impact Fee increase is due in part to costs associated with NTMWD facility costs

*Allowable Maximum impact fee is reduced by Ad-Valorem Tax and Revenue Credit per Chapter 395.014(7)(A) LGC

**Credit Analysis Difference amount was the overall calculated difference from the Financial Credit Analysis Report



Utility Impact Fees (Comparison)

2019 Utility Impact Fee Comparison

	2019		2013
Water Impact Fee (3/4" Meter)	\$1,754.00/LUE	↑	\$1.294.70/LUE
Wastewater Impact Fee (3/4" Meter)	\$2,899.00/LUE*	↑	\$162.14/LUE

*2019 Wastewater Fee includes the NTWMD facility expansion costs.

Wastewater Impact Fee Breakdown (\$2,899.00)

<i>NTMWD CIP Costs</i>	\$2,511	<i>McKinney CIP Costs</i>	\$388
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Looking Ahead...

February

- At the February 25, 2020 CIAC meeting, the committee will discuss fee setting.

March

- At the March 17, 2020 City Council Work Session, council will discuss fee setting for the 2019 Impact Fee Update.

April/May

- In April, Public Hearing to discuss amending the Capital Improvements Plan (Roadway and Utility).
- In May, City Council meeting for a Public Hearing to consider Impact Fee Ordinance Amendments.

(This includes any fee amendments and administrative improvements to the Ordinance).

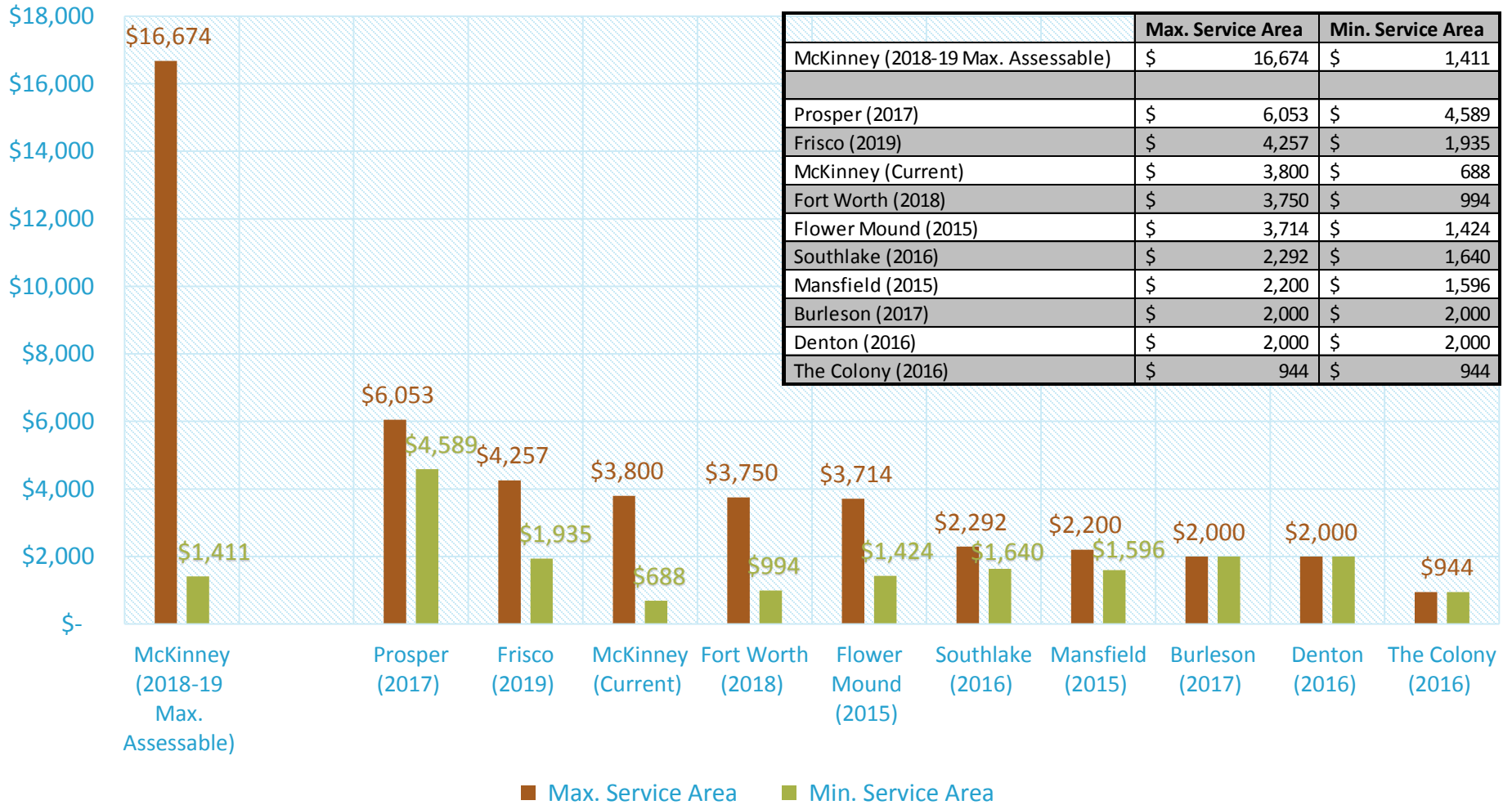




Local City Comparisons

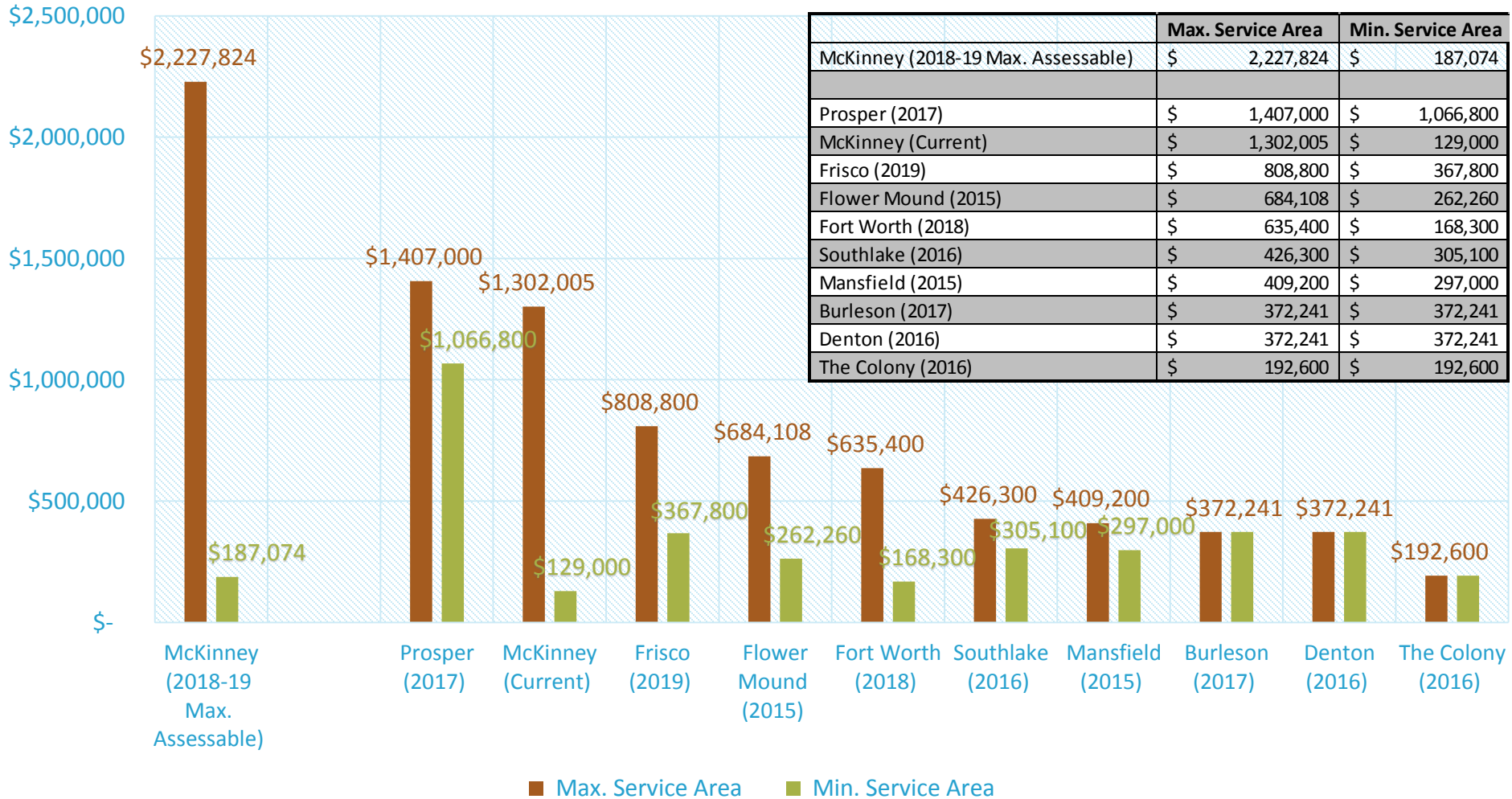
Roadway Impact Fee City Comparison

Actual Fee: One (1) Single Family Dwelling Unit



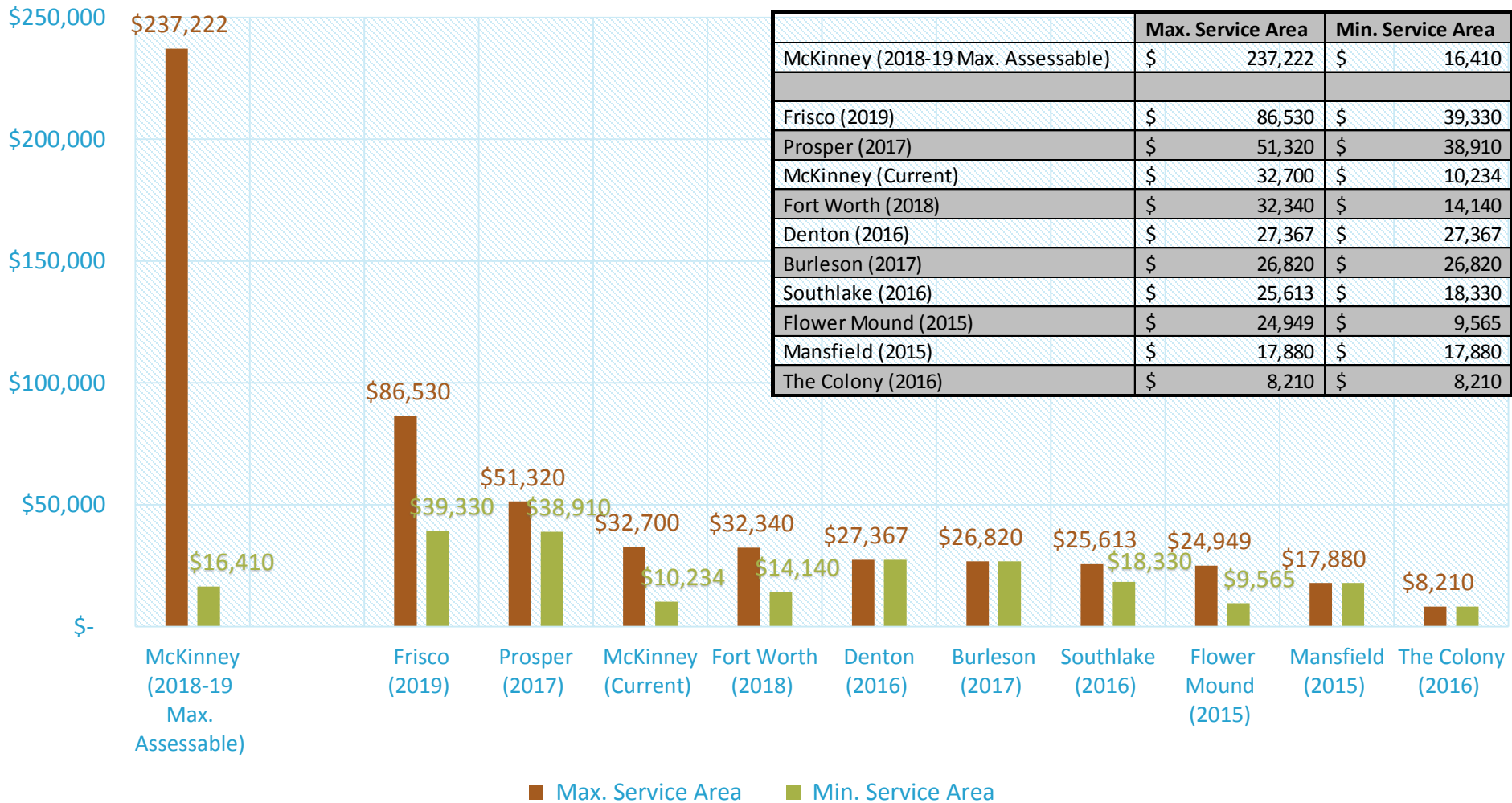
Roadway Impact Fee City Comparison

Actual Fee: 300 Multi-Family Dwelling Units



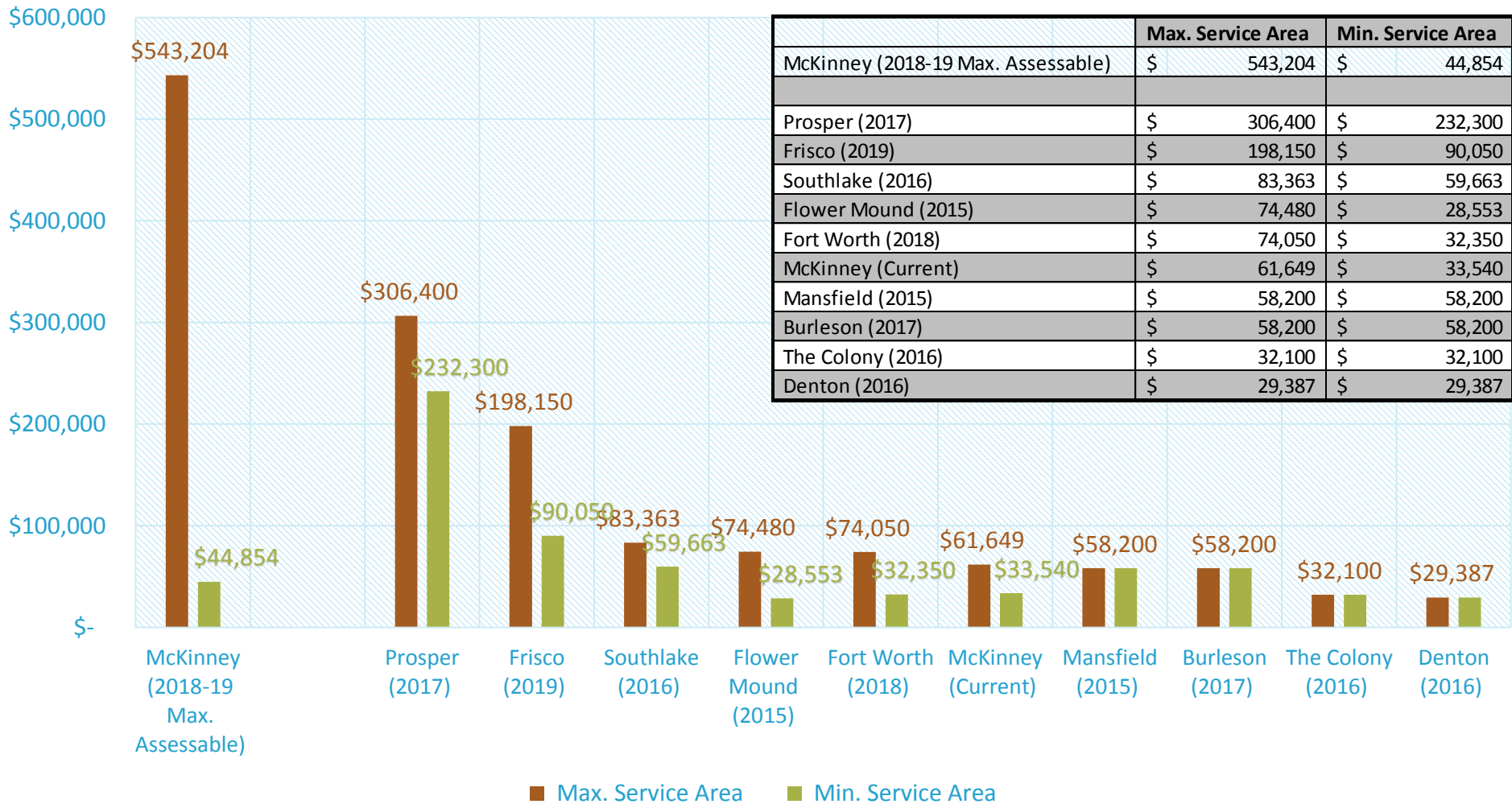
Roadway Impact Fee City Comparison

Actual Fee: 10,000 Square Foot Office Development



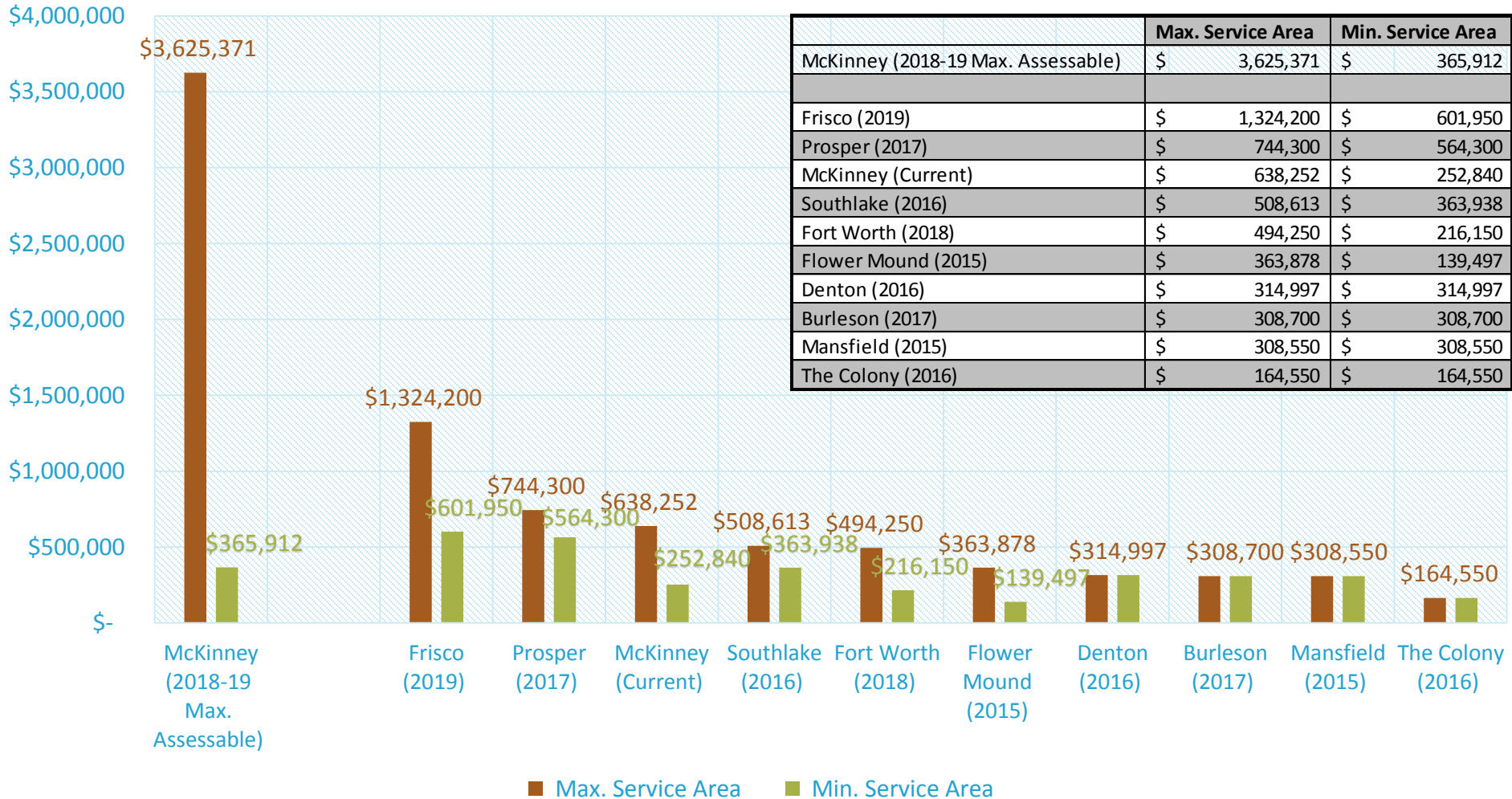
Roadway Impact Fee City Comparison

Actual Fee: 50,000 Square Foot Light Industrial Development

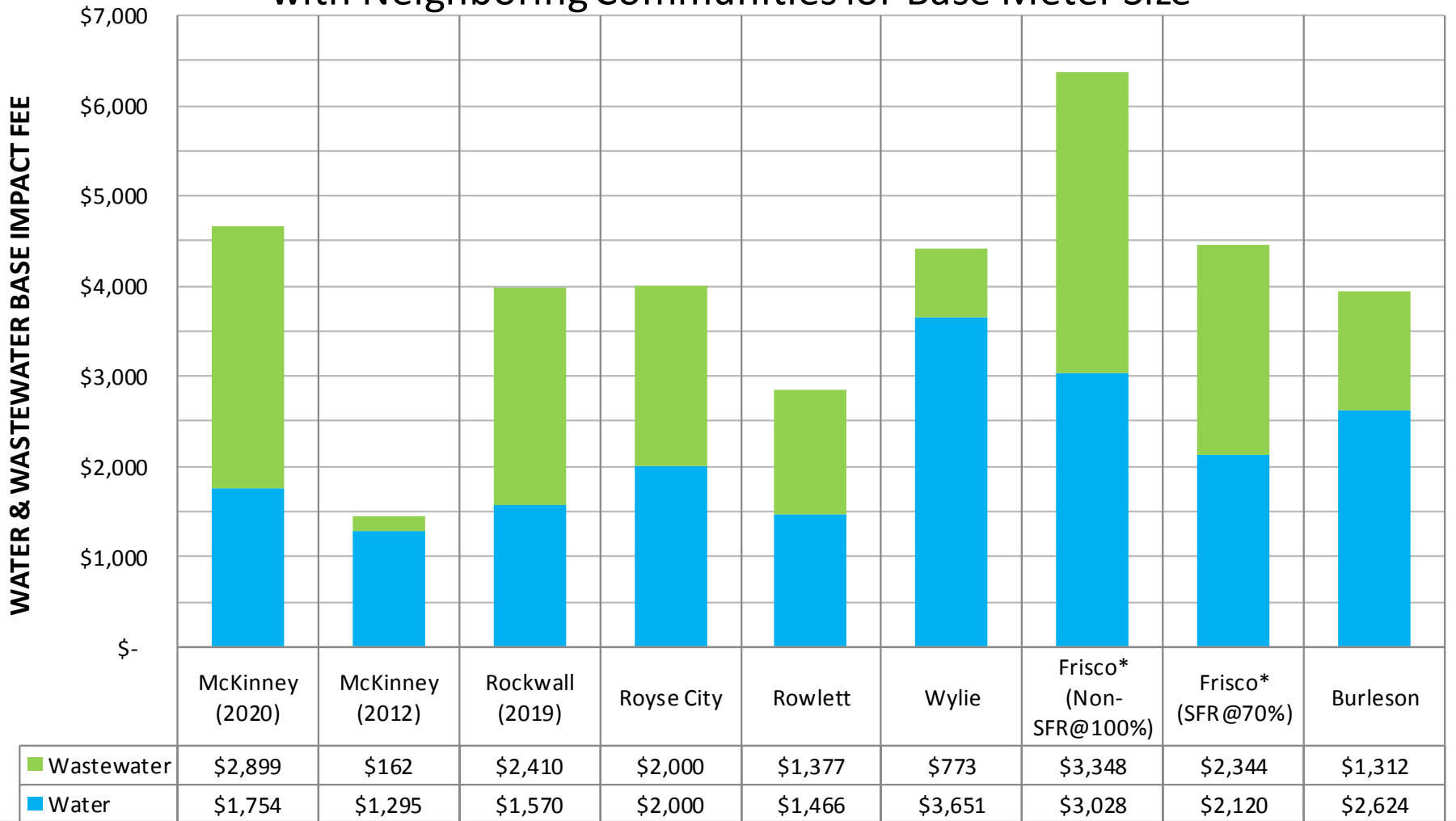


Roadway Impact Fee City Comparison

Actual Fee: 150,000 Square Foot Shopping Center Development



Calculated Impact Fee Comparison with Neighboring Communities for Base Meter Size



** Frisco's Fee Schedule allows 70% of maximum fee for Single Family Land Use for both Water & Wastewater fees shown*