CITY OF MANOR ROADWAY IMPACT FEE CALCULATIONS RECAP/UPDATE

SERVICE UNITS - RECAP

WHAT IS A SERVICE UNIT?

- FOR ROADWAY IMPACT FEES THE SERVICE UNIT IS A VEHICLE MILE
- IN ORDER TO DETERMINE THE COST PER SERVICE UNIT, THE ESTIMATED GROWTH IN VEHICLE MILES IN EACH SERVICE AREA NEEDS TO BE CALCULATED FOR A TEN-YEAR PERIOD (2023-2033)
- ALL CURRENTLY DEVELOPED LAND AND ALL DEVELOPABLE LAND WILL BE CATEGORIZED AS EITHER RESIDENTIAL OR NON-RESIDENTIAL.
- NON-RESIDENTIAL WILL BE BROKEN INTO THREE (3) CATEGORIES:
  - RETAIL, SERVICE, AND BASIC

EXISTING VEHICLE MILES

Service Area	Residential Vehicle Miles (Existing)					Nonresidential SF (Existing)			Trans. Demand Factor			Nonresidential Vehicle Miles (Existing)				Total Vehicle Miles (Existing)
	Single Family Units	Trip Rate / TDF	Multifamily	Trip Rate / TDF	Vehicle Miles	Basic	Service	Retail	Basic	Service	Retail	Basic	Service	Retail	Total	
		0.94		0.51					0.65	1.44	2.24					
1	1519		1870		10,232	443,218	1,249,580	457,950				1,729	6,085	2,116	9,930	20,162
2	1845	4.04	0	2.19	7,454	0	35,000	0	3.9	4.87	4.62	0	162	0	162	7,616
3	1961		0		7,922	0	0	0				0	0	0	0	7,922
TOTALS	5325		1870		25,608	443,218	1,284,580	457,950				1,729	6,247	2,116	10,091	35,700

VEHICLE MILES CALCULATIONS

- THE VEHICLE MILES FOR RESIDENTIAL ARE CALCULATED BY MULTIPLYING THE TDF FOR EITHER SINGLE-FAMILY OR MULTIFAMILY BY THE NUMBER OF DWELLING UNITS

- THE NON-RESIDENTIAL VEHICLE MILES WERE CALCULATED BY ESTIMATING THE SQUARE FOOTAGE OF EACH NON-RESIDENTIAL USE AND THEN MULTIPLYING THE TDF BY THE NUMBER OF THOUSAND SQUARE FEET FOR EACH LAND USE.

- THE RESIDENTIAL AND NON-RESIDENTIAL VEHICLE MILES WERE ADDED TOGETHER TO GET A TOTAL VEHICLE MILES FOR EACH SERVICE AREA.

FUTURE VEHICLE MILES

10-YEAR GROWTH PROJECTIONS	
SERVICE AREA	VEHICLE-MILES
1	17,621
2	**11,997**
3	13,500

FUTURE VEHICLE MILES

Service Area	Residential Vehicle Miles (Future)					Nonresidential SF (Future)			Trans. Demand Factor			Nonresidential Vehicle Miles (Future)				Total Vehicle Miles (Future)
	Single Family Units	Trip Rate TDF	Multifamily	Trip Rate TDF	Vehicle Miles	Basic	Service	Retail	Basic	Service	Retail	Basic	Service	Retail	Total	
		0.94		0.51					0.65	1.44	2.24					
1	1931		1000		9,991	351,470	155,144	1,191,220				1,371	756	5,503	7,630	17,621
2	2529	4.04	224	2.19	10,708	100,000	50,000	142,000	3.9	4.87	4.62	390	244	656	1,290	11,997
3	1961		0		7,922	250,000	300,000	680,000				975	1,461	3,142	5,578	13,500
TOTALS	6421		1224		28,621	701,470	505,144	2,013,220				2,736	2,460	9,301	14,497	43,118

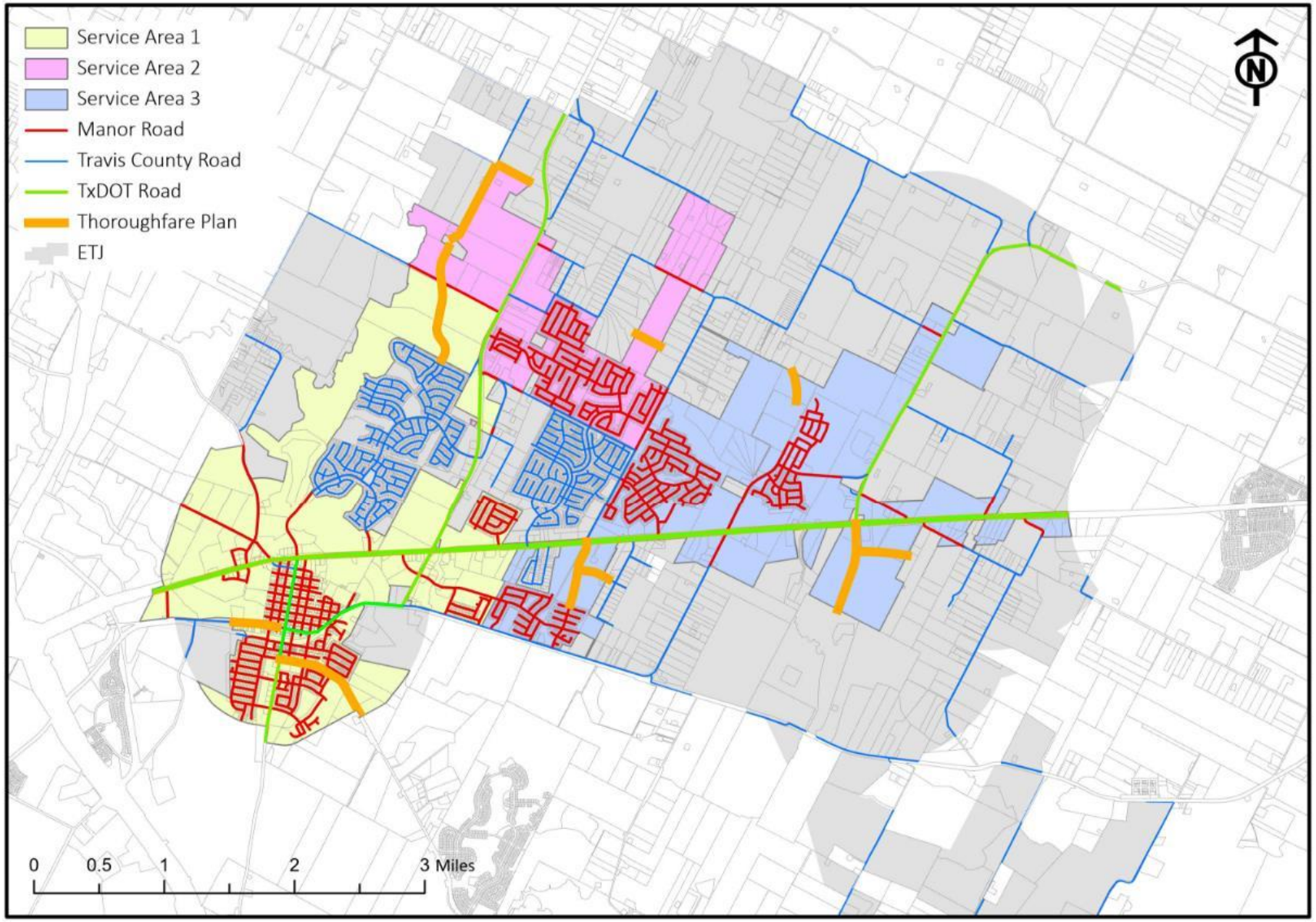
VEHICLE MILES

- THE TOTAL ESTIMATED VEHICLE MILES TO BE ADDED BETWEEN 2023 AND 2033:

  - SERVICE AREA 1 = 17,621 MILES
  - SERVICE AREA 2 = 11,997MILES
  - SERVICE AREA 3 = 13,500

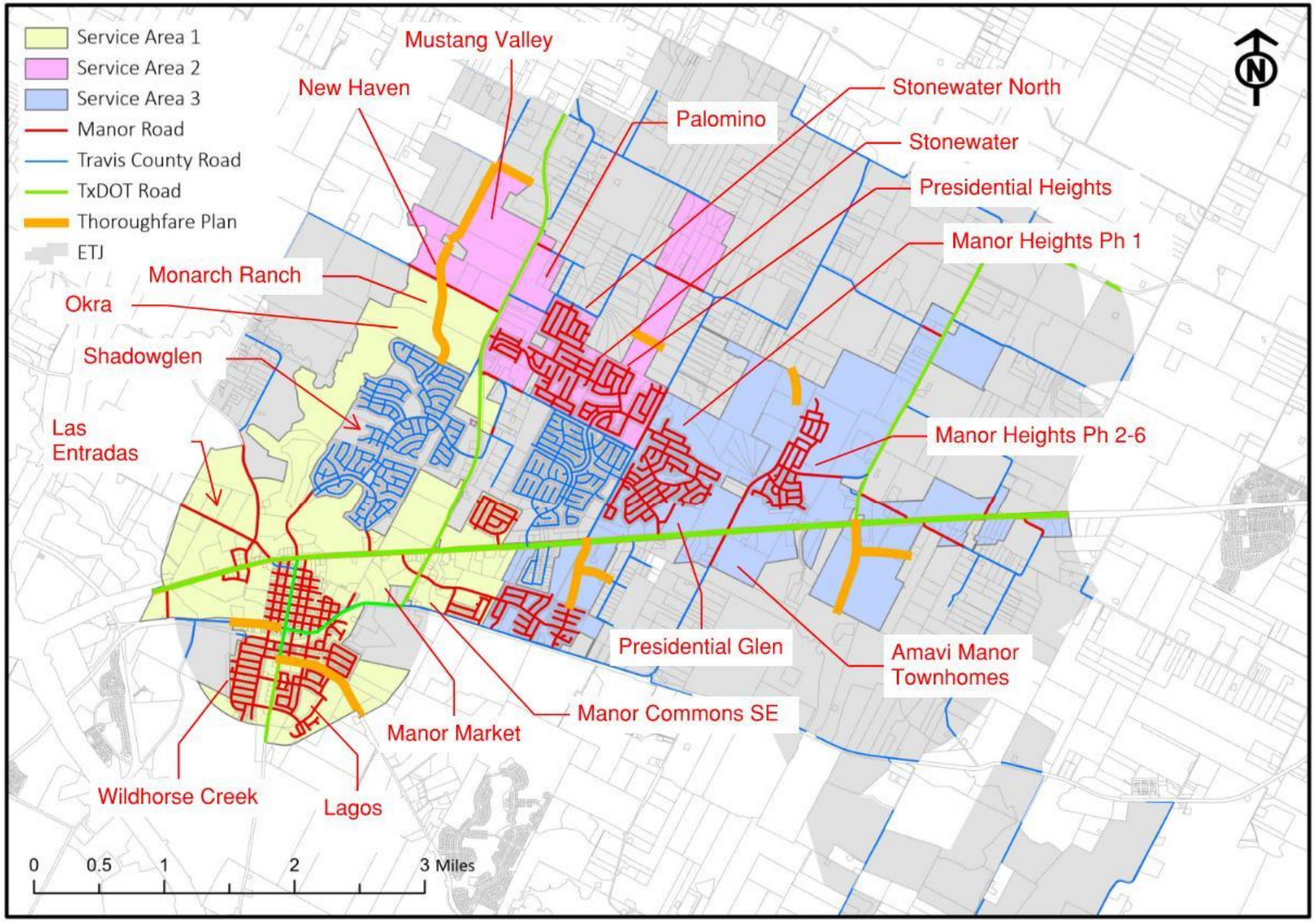
  - TOTAL MILES ADDED = 43,118 (ALL 3 SERVICE AREAS)

Manor Road Impact Fee Map



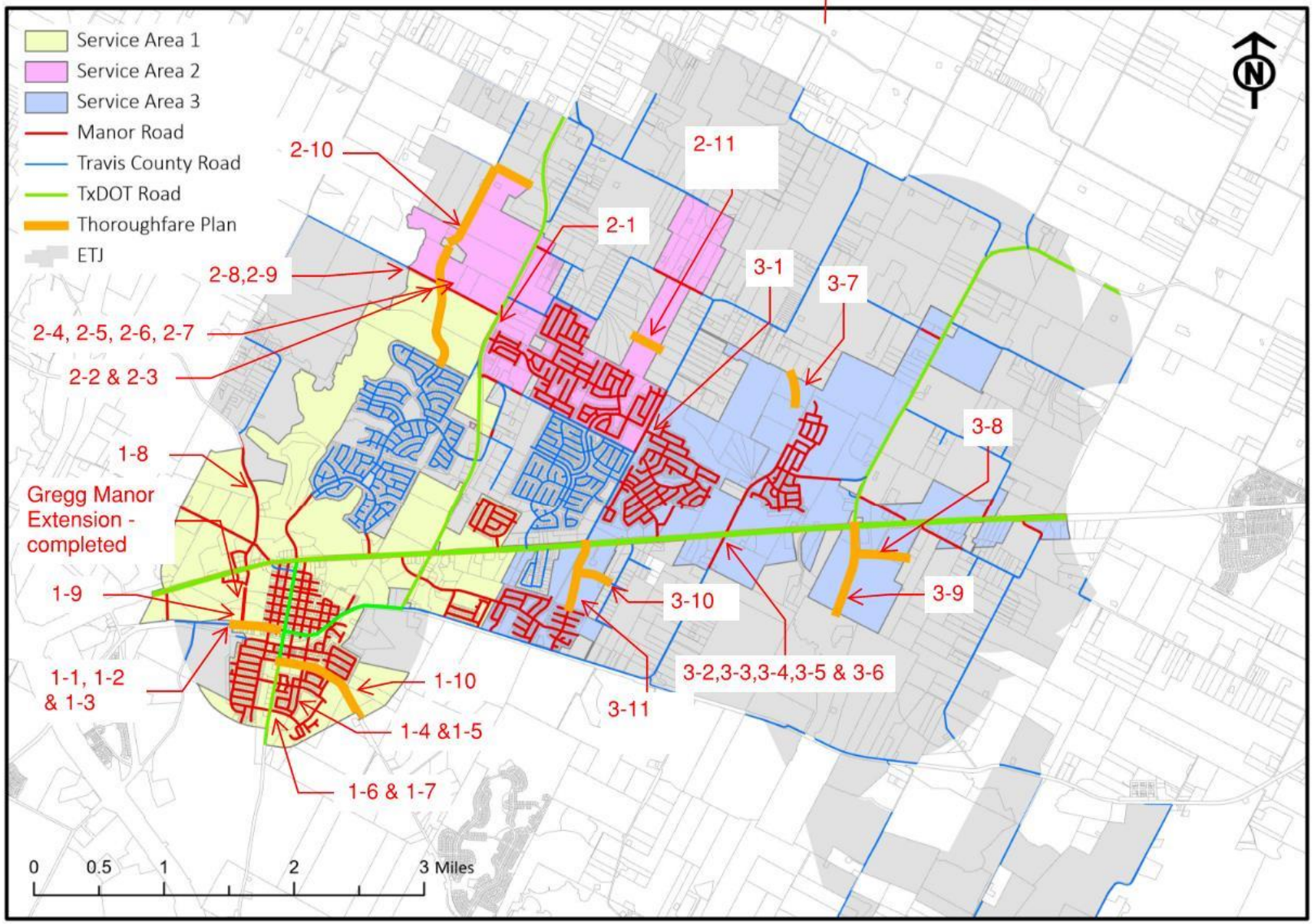
Manor Road Impact Fee Map

Subdivision Locations



Manor Road Impact Fee Map

Project Locations



Capital Improvement Projects for Roadway Impact Fees - Service Area 1

Service Area	Proj. #	Roadway	Project	% in Service Area	Estimated Cost for Portion in Service Area	Project Source (TIA/Thoroughfare Plan)	Notes
1	1-1	West Parsons	Construction of a left turn lane on eastbound approach	100%	$500,000.00	Las Entradas	
	1-2	West Parsons	Construction of right turn lane on the westbound approach	100%	$500,000.00	Las Entradas	
	1-3	West Parsons/Gregg Manor	Installation of a traffic signal	100%	$650,000.00	Las Entradas	
	1-4	LaPoyner/Lexington	NB left turn lane - 100 ft storage & 100 ft of taper	100%	$200,000.00	Wildhorse Commercial	
	1-5	LaPoyner/ Lexington EB	Restripe approach providing exclusive left and through-righer turn lanes	100%	$10,000.00	Wildhorse Commercial	
	1-6	Murchison @ FM 973 EB	Restripe approach providing exclusive left and through-righer turn lanes	100%	$10,000.00	Wildhorse Commercial	
	1-7	Murchison @ FM 973 NB	NB left turn lane - 100 ft storage & 100 ft of taper	100%	$200,000.00	Wildhorse Commercial	
	1-8	Gregg Manor Road	Expansion to Major Arterial	100%	$7,000,000.00	Thoroughfare Plan	
	1-9	West Parsons	Expansion to Major Arterial	100%	$4,000,000.00	Thoroughfare Plan	
	1-10	Blake Manor/Brenham	Expansion to Major Arterial	100%	$5,500,000.00	Thoroughfare Plan	
	1-11	FM 973/Gregg Lane	Westbound through-receiving lane - 850 feet	40%	$120,000.00	Thoroughfare Plan	60% in Service Area 2 (2-1)
	1-12	Gregg Ln between FM 973 and driveway 3	Expand roadway cross section	40%	$680,000.00	Thoroughfare Plan	60% in Service Area 2(2-2)
	1-13	Driveway 3 and Gregg Ln	Add EB right turn bay	40%	$60,000.00	Thoroughfare Plan	60% in Service Area 2 (2-3)
	1-14	Gregg Ln at Roadway 1	Install 425' eastbound left turn lane	40%	$58,000.00	Thoroughfare Plan	60% in Service Area 2 (2-4)
	1-15	Gregg Ln at Roadway 1	Install 235' westbound right turn lane	40%	$58,000.00	Thoroughfare Plan	60% in Service Area 2 (2-5)
	1-16	Gregg Lane at Roadway 2	Install 425' eastbound left turn lane	40%	$58,000.00	Thoroughfare Plan	60% in Service Area 2 (2-6)
	1-17	Gregg Lane at Commercial Driveway 1	Install 415' westbound right turn lane	40%	$58,000.00	Thoroughfare Plan	60% in Service Area 2 (2-7)
	1-18	Gregg Lane	Widen to 1-34E from Roadway 1 to FM 973	40%	$378,000.00	Thoroughfare Plan	60% in Service Area 2 (2-8)
	1-19	Gregg Lane	Expansion to Minor Arterial	40%	$2,400,000.00	Thoroughfare Plan	60% in Service Area 2 (2-9)
	1-20	Cameron Road	Expansion to Major Arterial	40%	$3,200,000.00	Thoroughfare Plan	60% in Service Area 2 (2-10)
				Total Cost	$25,640,000.00		

Capital Improvement Projects for Roadway Impact Fees - Service Area 2

Service Area	Proj. #	Roadway	Project	% in Service Area	Estimated Cost for Portion in Service Area	Project Source (TIA/Thoroughfare Plan)	Notes
2	2-1	FM 973/Gregg Lane	Westbound through-receiving lane - 850 feet	60%	$180,000.00	Palomino	40% in Service Area 1
	2-2	Gregg Ln between FM 973 and driveway 3	Expand roadway cross section	60%	$1,020,000.00	Monarch Ranch	40% in Service Area 1
	2-3	Driveway 3 and Gregg Ln	Add EB right turn bay	60%	$90,000.00	Monarch Ranch	40% in Service Area 1
	2-4	Gregg Ln at Roadway 1	Install 425' eastbound left turn lane	60%	$87,000.00	New Haven	40% in Service Area 1
	2-5	Gregg Ln at Roadway 1	Install 235' westbound right turn lane	60%	$87,000.00	New Haven	40% in Service Area 1
	2-6	Gregg Lane at Roadway 2	Install 425' eastbound left turn lane	60%	$87,000.00	New Haven	40% in Service Area 1
	2-7	Gregg Lane at Commercial Driveway 1	Install 415' westbound right turn lane	60%	$87,000.00	New Haven	40% in Service Area 1
	2-8	Gregg Lane	Widen to 1-34E from Roadway 1 to FM 973	60%	$567,000.00	New Haven	40% in Service Area 1
	2-9	Gregg Lane	Expansion to Minor Arterial	60%	$6,000,000.00	Thoroughfare Plan	40% in Service Area 1
	2-10	Cameron Road	Expansion to Major Arterial	60%	$3,600,000.00	Thoroughfare Plan	40% in Service Area 1
	2-11	Johnson Road	Exension - Minor Arterial	100%	$600,000.00	Thoroughfare Plan	
				Total Cost	$12,405,000.00		

Capital Improvement Projects for Roadway Impact Fees - Service Area 3

Service Area	Proj. #	Roadway	Project	% in Service Area	Estimated Cost for Portion in Service Area	Project Source (TIA/Thoroughfare Plan)	Notes
3	3-1	Bois D'arc	Expand roadway by 4' - City Portion	100%	$700,000.00	Minimax	
	3-2	Old Kimbro Road (SB)	Add 375 LF and 100' Taper SBR Lane	100%	$125,000.00	Manor Heights	
	3-3	Old Kimbro Road	Install 700' EB Right turn Lane (550' deceleration lane with 150' taper)	100%	$280,000.00	Amavi	
	3-4	Old Kimbro Road	Extend the existing left turn lane by an additional 750' and a new 150' taper (constructed with residential - 1st Phase)	100%	$360,000.00	Amavi	
	3-5	Old Kimbro Road	Install 300' NB right turn lane (250' storage + 50' taper)	100%	$120,000.00	Amavi	
	3-6	Old Kimbro Road	Expansion to Major Arterial	100%	$8,000,000.00	Thoroughfare Plan	
	3-7	Old Kimbro	Major Arterial	100%	$750,000.00	Thoroughfare Plan	
	3-8	Voelker Extension	Minor Arterial	100%	$700,000.00	Thoroughfare Plan	
	3-9	FM 1100 Extension	Minor Arterial	100%	$1,000,000.00	Thoroughfare Plan	
	3-10	Viking Jack	Street extension - minor arterial	100%	$750,000.00	Thoroughfare Plan	
	3-11	Bois D'arc Extension	Minor Arterial	100%	$2,000,000.00	Thoroughfare Plan	
				Total Cost	$14,785,000.00		

ROADWAY IMPACT FOR EACH SERVICE AREA

- The maximum impact fee allowable in each of the three service areas is calculated by dividing the Roadway Impact Fee CIP Attributable to Growth by the number of vehicle-miles in the corresponding Service Area.

- 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.

ROADWAY IMPACT FEES PER SERVICE AREA

- CALCULATIONS = SERVICE AREA IMPROVEMENT COSTS/NUMBER OF VEHICLE MILES ADDED

- SERVICE AREA 1 = $25,640,000/17621 = $1455.08 per vehicle mile
- SERVICE AREA 2 = $12,405,000/11997 = $1034.01 per vehicle mile
- SERVICE AREA 3 = $14,785,000/13500 = $1095.19 per vehicle mile

CALCULATION OF ROADWAY IMPACT FEES

- The calculation of roadway impact fees for new development involves a two-step process. Step one is the calculation of the total number of service units that will be generated by the development. Step two is the calculation of the impact fee due by the new development.

Step 1: Determine number of service units (vehicle-miles) generated by the development using the equivalency table.

No. of Development Units	x	Vehicle-miles per development unit	=	Development's Vehicle-miles

Step 2: Calculate the impact fee based on the fee per service unit for the service area where the development is located.

Development's Vehicle-miles	x	Fee per vehicle-mile	=	Impact Fee due from Development

CALCULATION EXAMPLES

- SERVICE AREA 1 HAS A COST PER VEHICLE MILE OF $1455.08

Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles

2150 vehicle-miles x $1455.08/vehicle-mile = $727,540

20,000 square foot (s.f.) Office Building:

20 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 78 vehicle-miles

78 vehicle-miles x $1455.08 /vehicle-mile = $113,496.24

CALCULATION EXAMPLES

<u>50,000 s.f. Retail Center:</u>

50 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 195 vehicle-miles

195 vehicle-miles x $1455.08 /vehicle-mile = $283,740.60

<u>100,000 s.f. Industrial Development:</u>

100 (1,000 s.f. units) x 3.8 vehicle-miles/1,000 s.f. units = 380 vehicle-miles

380 vehicle-miles x $1455.08 /vehicle-mile = $552,930.40

CALCULATION EXAMPLES

- SERVICE AREA 2 HAS A COST PER VEHICLE MILE OF $ 1034.01
- Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles

2150 vehicle-miles x $1034.01 /vehicle-mile = $2,223,121.50

20,000 square foot (s.f.) Office Building:

20 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 78 vehicle-miles

78 vehicle-miles x $1034.01/vehicle-mile = $80,652.78

CALCULATION EXAMPLES

<u>50,000 s.f. Retail Center:</u>

50 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 195 vehicle-miles

195 vehicle-miles x $1034.01 /vehicle-mile = $201,631.95

<u>100,000 s.f. Industrial Development:</u>

100 (1,000 s.f. units) x 3.8 vehicle-miles/1,000 s.f. units = 380 vehicle-miles

380 vehicle-miles x $1034.01 /vehicle-mile = $392,923.80

CALCULATION EXAMPLES

- SERVICE AREA 3 HAS A COST PER VEHICLE MILE OF $ 1095.19
- Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles

2150 vehicle-miles x $1095.19 /vehicle-mile = $2,354,658.50

20,000 square foot (s.f.) Office Building:

20 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 78 vehicle-miles

78 vehicle-miles x $1095.19 /vehicle-mile = $85,424.82

CALCULATION EXAMPLES

<u>50,000 s.f. Retail Center:</u>

50 (1,000 s.f. units) x 3.9 vehicle-miles/1,000 s.f. units = 195 vehicle-miles

195 vehicle-miles x $1095.19 /vehicle-mile = $213,562.05

<u>100,000 s.f. Industrial Development:</u>

100 (1,000 s.f. units) x 3.8 vehicle-miles/1,000 s.f. units = 380 vehicle-miles

380 vehicle-miles x $1095.19 /vehicle-mile = $416,172.20

COMPARISON OF ROADWAY IMPACT FEES

City of Manor	
Roadway Impact Fees	
Impact Fee Comparison Chart -October 2023	
City	Roadway Impact Fee
Austin	High = $5742, Low = $1472
Bastrop	Working on fees currently
Bartlett	Nothing at this time
Belton	Impact Fees do not seem appropriate, timely, or an affordable process for the community at this time, and would discourage development.
Buda	Nothing at this time
Elgin	Nothing at this time
Florence	Nothing at this time
Georgetown	High = $4577, Low = $1247
Harker Heights	Nothing at this time
Holland	Nothing at this time
Jarrell	Nothing at this time
Kyle	Nothing at this time
Liberty Hill	Nothing at this time
Leander	High = $2179, Low = $287
Manor	Nothing at this time
Pflugerville	High = $3156, Low = $1590
Round Rock	Increases over three years - set fee based on residential or non-residential - currently $1,130 per residential service unit and $628 per non-residential service unit
Salado	Nothing at this time
Taylor	Just updated - High = $1,500, Low = $710*
Temple	Nothing at this time
Troy	Nothing at this time
Waco	Varies by service area and land use

*Taylor has 3 service areas - Area 1 - $1500/service unit, Area 2 - $710/service unit, Area 3 - $710/service unit

CITY OF TAYLOR ROADWAY IMPACT FEES

- Taylor recently updated their roadway impact fees.
- Taylor set the effective fees at:
  - Service Area 1 - $1,500/Service Unit
  - Service Area 2 - $710/Service Unit
  - Service Area 3 - $710/Service Unit

- The maximum allowable calculated fees were:
  - Service Area 1 - $7,988/Service Unit
  - Service Area 2 - $1,847/Service Unit
  - Service Area 3 - $710/Service Unit