



CITY OF MANOR ROADWAY IMPACT FEES



VEHICLE MILES

❖ THE TOTAL ESTIMATED VEHICLE MILES TO BE ADDED BETWEEN 2026 AND 2036:

❖ SERVICE AREA 1 = 14,035 MILES

❖ SERVICE AREA 2 = 12,773 MILES

❖ SERVICE AREA 3 = 28,281

❖ TOTAL MILES ADDED = 55,089 (ALL 3 SERVICE AREAS)

NON-RESIDENTIAL

- ❖ RETAIL WOULD BE LAND-USE ACTIVITIES THAT PROVIDE FOR THE SALE OF GOODS. THIS WOULD INCLUDE SUCH ITEMS AS GROCERY STORES AND RESTAURANTS.
- ❖ SERVICE IS ACTIVITIES THAT PROVIDE PERSONAL AND PROFESSIONAL SERVICES AND WOULD INCLUDE GOVERNMENT AND PROFESSIONAL OFFICES AS WELL AS EDUCATIONAL USES.
- ❖ BASIC WOULD-BE ACTIVITIES THAT PRODUCE GOODS AND SERVICES THAT WOULD BE EXPORTED OUT OF THE LOCAL ECONOMY AND WOULD INCLUDE SUCH THINGS AS MANUFACTURING, CONSTRUCTION, TRANSPORTATION, WHOLESALE, TRADE, WAREHOUSING AND OTHER INDUSTRIAL USES.

TRANSPORTATION DEMAND FACTOR

- ❖ THE MAXIMUM TRIP LENGTH WILL VARY BETWEEN THE THREE SERVICE AREAS.
- ❖ FOR SERVICE AREA 1, THE MAXIMUM TRIP LENGTH IS 2 MILES.
- ❖ FOR SERVICE AREA 2, THE MAXIMUM TRIP LENGTH IS 3 MILES.
- ❖ FOR SERVICE AREA 3, THE MAXIMUM TRIP LENGTH IS 4 MILES.
- ❖ THE ORIGIN-DESTINATION REDUCTION (OD) IS USED TO ADJUST THE AVERAGE TRIP LENGTH IN THE COMPUTATION OF THE MAXIMUM TRIP LENGTH. THIS WILL PREVENT TRIPS FROM BEING COUNTED TWICE AS BOTH RESIDENTIAL AND NON-RESIDENTIAL. IF THIS WAS NOT ADJUSTED, THEN A TRIP FROM HOME TO WORK WITH A STOP AT A STORE WOULD RESULT IN THIS BEING COUNTED AS TWO TRIPS. ONLY HALF OF THE TRIP WOULD BE COUNTED AS RESIDENTIAL AND THE OTHER HALF WOULD BE COUNTED AS NON-RESIDENTIAL.

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	<u>Trip Rate</u> TDF	Multifamily	<u>Trip Rate</u> TDF	Vehicle Miles	Basic	Service	Retail	Basic	Service	Retail	Basic	Service	Retail	Total	
		0.94		0.51					0.65	1.44	2.24					
1	2223	4.04	2519	2.19	14,498	736,868	1,421,214	886,986				2,874	6,921	4,098	13,893	28,391
2	2267		254		9,715	0	35,000	35,000	3.9	4.87	4.62	0	162	0	162	9,877
3	2656		250		11,278	0	0	30,000				0	0	139	139	11,416
TOTALS	7146		3023		35,490	736,868	1,456,214	951,986				2,874	7,083	4,236	14,193	49,683

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	<u>Trip Rate</u> TDF	Multifamily	<u>Trip Rate</u> 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	4.04	1000	2.19	9,991	57,820	119,645	700,425	3.9	4.87	4.62	225	583	3,236	4,044	14,035
2	2529		400		11,093	200,000	50,000	142,000				780	244	656	1,680	12,773
3	4500		800		19,932	265,000	350,000	680,000				1,034	1,705	3,142	5,880	25,812
TOTALS	8960		2200		41,016	522,820	519,645	1,522,425				2,039	2,531	7,034	11,603	52,620

ROADWAY IMPACT FEES PER SERVICE AREA- WITH THOROUGHFARE PLAN PROJECTS – WITH CREDITS – NEED TO UPDATE

- SERVICE AREA 1- Max Impact fee: \$1,245.42 per vehicle mile
- SERVICE AREA 1 – 50% Impact fee: \$622.71 per vehicle mile
- SERVICE AREA 2 – Max Impact fee: \$1,457.41 per vehicle mile
- SERVICE AREA 2 – 50% Impact fee: \$728.71 per vehicle mile
- SERVICE AREA 3 - Max Impact fee: \$931.75 per vehicle mile
- SERVICE AREA 3 – 50% Impact fee: \$465.88 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.

$$\begin{array}{ccccc} \text{No. of Development} & & \text{x} & & \text{Vehicle-miles} & = & \text{Development's} \\ \text{Units} & & & & \text{per development unit} & & \text{Vehicle-miles} \end{array}$$

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

$$\begin{array}{ccccc} \text{Development's} & & \text{x} & & \text{Fee per} & & = & & \text{Impact Fee due} \\ \text{Vehicle-miles} & & & & \text{vehicle-mile} & & & & \text{from Development} \end{array}$$

CALCULATION EXAMPLES – MAXIMUM FEES

- SERVICE AREA 1 HAS A MAXIMUM COST PER VEHICLE MILE OF \$1,245.42

Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles
2150 vehicle-miles x \$1,245.42/vehicle-mile = \$2,677,653.00

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 \$1,245.42 /vehicle-mile = \$97,142.76

MAXIMUM FEE

50,000 s.f. Retail Center – Maximum Fee:

$50 \text{ (1,000 s.f. units)} \times 3.9 \text{ vehicle-miles/1,000 s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$1245.42 \text{ /vehicle-mile} = \$242,856.90$

100,000 s.f. Industrial Development – Maximum Fee:

$100 \text{ (1,000 s.f. units)} \times 3.8 \text{ vehicle-miles/1,000 s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$1245.42 \text{ /vehicle-mile} = \$473,259.60$

50% CREDIT OF MAXIMUM FEE

- SERVICE AREA 1 - 50% FEE PER VEHICLE MILE OF \$622.71

Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles
2150 vehicle-miles x \$622.71/vehicle-mile = \$1,338,826.50

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 \$622.71 /vehicle-mile = \$48,571.38

50% CREDIT OF MAXIMUM FEE

50,000 s.f. Retail Center – 50% Fee:

$50 \text{ (1,000 s.f. units)} \times 3.9 \text{ vehicle-miles/1,000 s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$622.71 \text{ /vehicle-mile} = \$121,428.45$

100,000 s.f. Industrial Development – 50% Fee:

$100 \text{ (1,000 s.f. units)} \times 3.8 \text{ vehicle-miles/1,000 s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$622.71 \text{ /vehicle-mile} = \$236,629.80$

MAXIMUM FEE

- SERVICE AREA 2 - MAXIMUM COST PER VEHICLE MILE OF \$ 1,457.41

- Single-Family Dwelling:

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

2150 vehicle-miles x \$1457.41 /vehicle-mile = \$3,133,431.50

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 \$1457.41/vehicle-mile = \$113,677.98

MAXIMUM FEE

50,000 s.f. Retail Center –MAXIMUM FEE:

$50 \text{ (1,000 s.f. units)} \times 3.9 \text{ vehicle-miles/1,000 s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$1457.41 \text{ /vehicle-mile} = \$284,194.95$

100,000 s.f. Industrial Development – MAXIMUM FEE:

$100 \text{ (1,000 s.f. units)} \times 3.8 \text{ vehicle-miles/1,000 s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$1457.41 \text{ /vehicle-mile} = \$553,815.80$

50% CREDIT OF MAXIMUM FEE

- SERVICE AREA 2 - 50% FEE PER VEHICLE MILE OF \$728.71

- Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles
2150 vehicle-miles x \$728.71 /vehicle-mile = \$1,566,726.50

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 \$728.71/vehicle-mile = \$56,839.38

50% CREDIT OF MAXIMUM FEE

50,000 s.f. Retail Center – 50% FEE:

$50 (1,000 \text{ s.f. units}) \times 3.9 \text{ vehicle-miles}/1,000 \text{ s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$728.71/\text{vehicle-mile} = \$142,098.45$

100,000 s.f. Industrial Development – 50% FEE:

$100 (1,000 \text{ s.f. units}) \times 3.8 \text{ vehicle-miles}/1,000 \text{ s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$728.71 / \text{vehicle-mile} = \$276,909.80$

MAXIMUM FEE

- SERVICE AREA 3 HAS A MAXIMUM FEE OF \$ 931.75

Single-Family Dwelling:

500 dwelling units x 4.3 vehicle-miles/dwelling unit = 2150 vehicle-miles
2150 vehicle-miles x \$931.75 /vehicle-mile = \$2,003,262.50

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 \$931.75/vehicle-mile = \$72,676.50

MAXIMUM FEE

50,000 s.f. Retail Center – MAX FEE:

$50 \text{ (1,000 s.f. units)} \times 3.9 \text{ vehicle-miles/1,000 s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$931.75 \text{ /vehicle-mile} = \$181,691.25$

100,000 s.f. Industrial Development – MAX FEE:

$100 \text{ (1,000 s.f. units)} \times 3.8 \text{ vehicle-miles/1,000 s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$931.75 \text{ /vehicle-mile} = \$354,065.00$

50% CREDIT OF MAXIMUM FEE

- SERVICE AREA 3 50% FEE OF \$465.88

- Single-Family Dwelling:

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

2150 vehicle-miles x \$465.88/vehicle-mile = \$1,001,642.00

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 \$465.88 /vehicle-mile = \$36,338.64

50% CREDIT OF MAXIMUM FEE

50,000 s.f. Retail Center – 50% FEE:

$50 (1,000 \text{ s.f. units}) \times 3.9 \text{ vehicle-miles}/1,000 \text{ s.f. units} = 195 \text{ vehicle-miles}$

$195 \text{ vehicle-miles} \times \$465.88 / \text{vehicle-mile} = \$90,846.50$

100,000 s.f. Industrial Development – 50% FEE:

$100 (1,000 \text{ s.f. units}) \times 3.8 \text{ vehicle-miles}/1,000 \text{ s.f. units} = 380 \text{ vehicle-miles}$

$380 \text{ vehicle-miles} \times \$465.88 / \text{vehicle-mile} = \$178,174.40$