

Table 13. 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											
Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.02	50%	5.01	4.00	7.48
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.63			0.63	10.02	50%	5.01	4.00	2.52
Industrial Park	130	1,000 SF GFA	0.40			0.40	10.02	50%	5.01	4.00	1.60
Warehousing	150	1,000 SF GFA	0.18			0.18	10.02	50%	5.01	4.00	0.72
Mini-Warehouse	151	1,000 SF GFA	0.17			0.17	10.02	50%	5.01	4.00	0.68
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.99			0.99	9.79	50%	4.90	4.00	3.96
Multi-Family Housing (Low-Rise)	220	Dwelling Unit	0.56			0.56	9.79	50%	4.90	4.00	2.24
Multi-Family Housing (Mid-Rise)	221	Dwelling Unit	0.44			0.44	9.79	50%	4.90	4.00	1.76
Multi-Family Housing (High-Rise)	222	Dwelling Unit	0.36			0.36	9.79	50%	4.90	4.00	1.44
Mobile Home Park / Manufactured Housing	240	Dwelling Unit	0.46			0.46	9.79	50%	4.90	4.00	1.84
Senior Adult Housing-Detached	251	Dwelling Unit	0.30			0.30	9.79	50%	4.90	4.00	1.20
Senior Adult Housing-Attached	252	Dwelling Unit	0.26			0.26	9.79	50%	4.90	4.00	1.04
Assisted Living	254	Beds	0.48			0.48	9.79	50%	4.90	4.00	1.92
LODGING											
Hotel	310	Room	0.60			0.60	6.43	50%	3.22	3.22	1.93
Motel / Other Lodging Facilities	320	Room	0.38			0.38	6.43	50%	3.22	3.22	1.22
RECREATIONAL											
Golf Driving Range	432	Tee	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	2.31			2.31	7.86	50%	3.93	3.93	9.08
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	Hole	0.33			0.33	7.86	50%	3.93	3.93	1.30
Multiplex/Movie Theater	445	Screens	13.73			13.73	15.77	50%	7.89	4.00	54.92
Racquet / Tennis Club	491	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%	4.16	4.00	1.96
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.49	50%	1.75	1.75	10.90
Middle School/Junior High School	522	Students	0.17			0.17	3.49	50%	1.75	1.75	0.30
High School	530	Students	0.14			0.14	3.49	50%	1.75	1.75	0.25
Junior / Community College	540	Students	0.11			0.11	10.44	50%	5.22	4.00	0.44
University / College	550	Students	0.15			0.15	10.44	50%	5.22	4.00	0.60
MEDICAL											
Clinic	630	1,000 SF GFA	3.28			3.28	7.55	50%	3.78	3.78	12.40
Hospital	610	1,000 SF GFA	0.97			0.97	7.55	50%	3.78	3.78	3.67
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	3.30	7.55	50%	3.78	3.78	12.46

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 13. Continued 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
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	0.60			0.60	14.65	50%	7.33	4.00	2.40
General Office Building	710	1,000 SF GFA	1.15			1.15	14.65	50%	7.33	4.00	4.60
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	9.85	50%	4.93	4.00	13.84
Single Tenant Office Building	715	1,000 SF GFA	1.71			1.71	14.65	50%	7.33	4.00	6.84
Office Park	750	1,000 SF GFA	1.07			1.07	14.65	50%	7.33	4.00	4.28
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF Occ. GLA	3.11	40%	B	1.87	4.45	50%	2.23	2.23	4.17
Automobile Parts Sales	843	1,000 SF GFA	4.91	43%	A	2.80	4.45	50%	2.23	2.23	6.24
Casoline/Service Station	944	Vehicle Fueling Position	14.03	42%	A	8.14	1.20	50%	0.60	0.60	4.88
Casoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	13.99	56%	B	6.16	1.20	50%	0.60	0.60	3.70
New Car Sales	841	1,000 SF GFA	3.75	20%	B	3.00	5.60	50%	2.80	2.80	8.40
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	4.45	50%	2.23	2.23	6.49
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.98	28%	A	2.87	4.45	50%	2.23	2.23	6.40
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.67	50%	A	16.34	5.64	50%	2.82	2.82	46.08
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	28.34	50%	B	14.17	5.64	50%	2.82	2.82	39.96
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.77	43%	A	5.57	5.64	50%	2.82	2.82	15.71
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	43.38	70%	A	13.01	5.64	50%	2.40	2.40	31.22
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%	B	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	820	1,000 SF GFA	3.81	34%	A	2.51	5.60	50%	2.80	2.80	7.03
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
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	4.45	50%	2.23	2.23	16.23
Drive-In Bank	912	Drive-in Lanes	20.45	47%	A	10.84	4.45	50%	2.23	2.23	24.17

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
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6. 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

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 13 [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: 3.96
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	<i>From Table 12, Line 18 [Maximum Assessable Fee Per Service Unit]</i> Service Area: \$1,665
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 * 3.96 * \$1,665 Maximum Assessable Impact Fee = \$6,593

Example 2: Development Type – 125,000 square foot Shopping Center

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	Determine Development Unit and Vehicle-Miles Per Development Unit
	<i>From Table 13 [Land Use – Vehicle-mile Equivalency Table]</i> Development Type: 125,000 square feet of Shopping Center Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 7.03
Step 2	Determine Maximum Assessable Impact Fee Per Service Unit
	<i>From Table 12, Line 18 [Maximum Assessable Fee Per Service Unit]</i> Service Area: \$1,665
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 * 7.03 * \$1,665 Maximum Assessable Impact Fee = \$1,463,119