

Appendix B. Traffic Impact Rate Table

Fee Rate per Daily VMT = \$ 473

This table uses ITE⁽³⁾ driveway trip rates, with adjustments, to derive the net new impact per unit of development, in vehicle-miles-traveled (VMT). See ITE for details of land use categories.⁽⁹⁾

ITE LAND USE NAME	ITE LAND USE CODE	ITE LAND USE UNIT ⁽¹³⁾	ITE AVERAGE SIZE ⁽⁹⁾	ITE GROSS TRIP RATE / UNIT ⁽³⁾	DISCOUNT PASS-BY TRIPS ⁽⁴⁾	DISCOUNT INTRA-CITY TRIPS ⁽¹⁰⁾	AVERAGE TRIP LENGTH ⁽¹¹⁾	NET NEW VMT IMPACT RATE / UNIT ⁽⁹⁾	FEE PER LAND USE UNIT
RESIDENTIAL									
<i>Signature elements: places where people live with active lifestyles. Afternoon peak hour traffic is mainly inbound.</i>									
Single-Family Detached Housing	210	Dwelling	264	9.4	0%	10%	1.59	13.5	\$ 6,390
Duplex (detached) dwelling	use 210	Dwelling	264	9.4	0%	10%	1.59	13.5	\$ 6,390
Multifamily Housing, Low Rise (2 stories max)	220	Dwelling	168	7.4	0%	10%	1.59	10.6	\$ 5,022
Multifamily Housing, Med/High Rise (3+ stories)	Blend 221, 222	Dwelling	200-425	5.0	0%	10%	1.59	7.1	\$ 3,350
Mobile Home Park	240	Dwelling	160	5.0	0%	10%	1.59	7.2	\$ 3,384
Senior Adult Housing - Detached	251	Dwelling	655	4.3	0%	10%	1.59	6.1	\$ 2,890
Senior Adult Housing - Attached	252	Dwelling	81	3.7	0%	10%	1.59	5.3	\$ 2,504

Congregate Care Facility, Nursing Home

please see Non-Retail, assisted living facilities

NON-RETAIL									
<i>Signature elements: places where most traffic is generated by employees, rather than customers, patrons or residents. Includes some public facilities and some assisted-living types of residential facilities. Peak hour main direction varies.</i>									
Employment Centers									
Business Park (multiple buildings)	770	1000 sq. ft.	393	12.4	0%	5%	1.11	13.1	\$ 6,205
Small Office Building (single building)	712	1000 sq. ft.	2	16.2	0%	5%	1.11	17.1	\$ 8,075
Office Building (single building)	blend 710, 714, 715	1000 sq. ft.	120-260	9.7	0%	5%	1.11	10.2	\$ 4,813
Office Park (multiple buildings)	750	1000 sq. ft.	409	11.1	0%	5%	1.11	11.7	\$ 5,521
Research & Development Center	760	1000 sq. ft.	200	11.3	0%	5%	1.11	11.9	\$ 5,616 % T ⁽¹²⁾
General Light Industrial	110	1000 sq. ft.	64	5.0	0%	5%	1.11	5.2	\$ 2,474 % T ⁽¹²⁾
Industrial Park	130	1000 sq. ft.	762	3.4	0%	5%	1.11	3.6	\$ 1,681 % T ⁽¹²⁾
Manufacturing	140	1000 sq. ft.	209	3.9	0%	5%	1.11	4.1	\$ 1,960 % T ⁽¹²⁾
Trucking and Storage Facilities									
Warehousing	150	1000 sq. ft.	285	1.74	0%	5%	1.11	1.8	\$ 868 % T ⁽¹²⁾
High-Cube Transload and Short-Term Storage Warehouse	154	1000 sq. ft.	798	1.40	0%	5%	1.11	1.5	\$ 698 % T ⁽¹²⁾
High-Cube Fulfillment Center Warehouse	155	1000 sq. ft.	1466	8.18	0%	5%	1.11	8.6	\$ 4,080 % T ⁽¹²⁾
High-Cube Parcel Hub Warehouse	156	1000 sq. ft.	363	7.75	0%	5%	1.11	8.2	\$ 3,866 % T ⁽¹²⁾
High-Cube Cold Storage Warehouse	157	1000 sq. ft.	569	2.12	0%	5%	1.11	2.2	\$ 1,057 % T ⁽¹²⁾
Intermodal Truck Terminal	30	1000 sq. ft.	21	19.7	0%	5%	1.11	20.8	\$ 9,826 % T ⁽¹²⁾
Data Center	160	1000 sq. ft.	169	0.99	0%	5%	1.11	1.0	\$ 494 % T ⁽¹²⁾
Specialty Trade Contractor	180	1000 sq. ft.	6	10.22	0%	5%	1.11	10.8	\$ 5,098 % T ⁽¹²⁾
Mini-warehouse (self-service storage)	151	1000 sq. ft.	52	1.51	0%	5%	1.11	1.6	\$ 753
Institutions									
Church	560	1000 sq. ft.	21	7.0	20%	50%	1.11	3.1	\$ 1,460
School, High School	530	1000 sq. ft.	231	14.1	10%	50%	1.11	7.0	\$ 3,324
School, Elementary School	520	1000 sq. ft.	84	19.5	20%	50%	1.11	8.7	\$ 4,099
School, Middle School/Junior High School	522	1000 sq. ft.	125	20.2	20%	50%	1.11	9.0	\$ 4,236
Assisted Living Facilities									
Nursing Home	620	Beds	160	3.1	10%	50%	1.11	1.5	\$ 723
Congregate Care Facility	253	Dwelling	194	2.0	10%	50%	1.11	1.0	\$ 477

Notes:

- (1) V.S.P. (Vehicle Servicing Position) = space provided for one vehicle to be fueled or washed; not necessarily "pumps" or "hoses"
- (2) Use total rooms for hotel/motel; 15% vacancy factor is incorporated in gross trip rate. Excludes facilities with major restaurants and meeting places.
- (3) Institution of Transportation Engineers, Trip Generation, 10th edition. Some ITE rates are smoothed and averaged to eliminate statistically insignificant differences.
- (4) Pass-by Diversion Reduction eliminates trips diverted from the stream of traffic "passing by" a retail site, which add no vehicle-miles of impact on the road system.
- (5) Net New VMT Impact Trip Rate = ITE Gross Trip Rate * (1 - % Pass-by - % Intra-City) * Average Trip Length.
- (6) For shopping centers over 65,000 sq. ft., see ITE for logarithmic trip rate formula.
- (7) A retirement community is "self-contained" only if it provides a full range of facilities on-site for medical care, recreation, shopping, dining, etc. similar to a small city. For "assisted living" retirement facilities serving the non-driving elderly with caregivers employed on-site, use Congregate Care Centers under NON-RETAIL.
- (8) Average size of developments comprising the ITE database. May be useful to distinguish between otherwise similar-sounding classes.
- (9) Trip rate for any land use not covered by this table shall be determined by the Director of Public Works.
- (10) Discounts half of each trip beginning and ending within city, to avoid charge for same impact at both ends.
- (11) Average miles per net new trip on city streets (only), determined using Five Traffic Forecasting Model
- (12) This land use generates heavy truck travel. Truck surcharge must be calculated.
- (13) Units expressed as 1000 sq. ft. refer to habitable gross building area, not land area. Units expressed as "acres" refer to land area.

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RETAIL									
<i>Signature elements: non-residential activity with traffic generated mainly by customers or patrons, not employees. Inbound and outbound are roughly equal most of the day. Some public facilities are thus "retail".</i>									
Automobile-related Sales									
Auto Care Center (multiple stores)	942	1000 sq. ft.	17	35.8	20%	10%	1.52	39.2	\$ 18,532
Auto Parts Sales	843	1000 sq. ft.	8	55.3	50%	10%	1.52	37.9	\$ 17,904
Car Sales, New and Used	840, 841	1000 sq. ft.	2-36	27.5	10%	10%	1.52	33.8	\$ 15,986
Automobile Servicing									
Carwash - Self-Service	947	V.S.P. ⁽¹⁾	5	108.0	50%	80%	1.52	16.4	\$ 7,765
Carwash - Automated	948	1000 sq. ft.	2	163.3	50%	80%	1.52	24.8	\$ 11,741
Carwash and Detail Center	949	Stalls	7	156.2	50%	80%	1.52	23.7	\$ 11,230
Gasoline/Service Station no Mini-Mart	944	V.S.P. ⁽¹⁾	8	172.1	80%	80%	1.52	10.5	\$ 4,949
Gasoline/Service Station with Mini-Mart	945	V.S.P. ⁽¹⁾	18	205.4	80%	80%	1.52	12.5	\$ 5,906
Tire Store	848, 849	V.S.P. ⁽¹⁾	9	31.9	50%	60%	1.52	9.7	\$ 4,588
Quick-Lube Vehicle Servicing	941	V.S.P. ⁽¹⁾	3	40.0	50%	80%	1.52	6.1	\$ 2,876
Social-Recreational Activities									
Drinking Place (pub, tavern, bar)	925	1000 sq. ft.	4	139.7	20%	70%	1.52	51.0	\$ 24,110
Bowling Alley	437	1000 sq. ft.	24	29.0	10%	10%	1.52	35.7	\$ 16,888
Health/Fitness Club	492	1000 sq. ft.	37	41.4	10%	10%	1.52	51.0	\$ 24,110
Multiplex Movie Theater	445	Movie Screens	17	175.4	10%	70%	1.52	72.0	\$ 34,041
Restaurant, quality	931	1000 sq. ft.	9	83.8	20%	70%	1.52	30.6	\$ 14,467
Restaurant, High-Turnover (sit-down)	932	1000 sq. ft.	5	112.2	50%	70%	1.52	25.6	\$ 12,098
Coffee/Donut Shop without Drive-Through Window	936	1000 sq. ft.	5	344.9	80%	80%	1.52	21.0	\$ 9,920
Coffee/Donut Shop with Drive-Through Window	937	1000 sq. ft.	2	820.4	90%	80%	1.52	24.9	\$ 11,796
Library	590	1000 sq. ft.	16	72.1	10%	70%	1.52	29.6	\$ 13,986
Racquet/Tennis Club	491	Tennis Courts	9	27.7	10%	10%	1.52	34.1	\$ 16,137
Restaurant, fast food with Drive-Through	934	1000 sq. ft.	3	471.0	80%	90%	1.52	14.3	\$ 6,772
Recreational Community Center	495	1000 sq. ft.	78	28.8	10%	70%	1.52	11.8	\$ 5,595

Notes:

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RETAIL									
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Community Retail Focus									
Apparel Store	876	1000 sq. ft.	5	66.4	20%	60%	1.52	32.3	\$ 15,276
Shopping Ctr, under 65,000 sq. ft. ⁽⁶⁾	820	1000 sq. ft.	50	37.8	50%	40%	1.52	17.2	\$ 8,142
Convenience Market	851, 853	1000 sq. ft.	3	693.2	85%	80%	1.52	31.6	\$ 14,952
Hardware, paint store	816	1000 sq. ft.	15	9.1	25%	60%	1.52	4.2	\$ 1,971
Building Materials & Lumber Store	812	1000 sq. ft.	17	18.1	20%	60%	1.52	8.8	\$ 4,153
Variety Store	814	1000 sq. ft.	9	63.5	20%	60%	1.52	30.9	\$ 14,602
Pharmacy/Drug Store	880, 881	1000 sq. ft.	12	99.7	30%	80%	1.52	21.2	\$ 10,036
Bank, drive-in	912	1000 sq. ft.	4	100.0	75%	80%	1.52	7.6	\$ 3,596
Supermarket, discount supermarket	850, 854	1000 sq. ft.	57	98.8	45%	80%	1.52	16.5	\$ 7,816
Bank, walk-in	911	1000 sq. ft.	5	59.4	65%	80%	1.52	6.3	\$ 2,991
Destination Retail Focus									
Discount Club (membership warehouse store)	857	1000 sq. ft.	112	41.8	20%	20%	1.52	40.7	\$ 19,234
Electronics Superstore	863	1000 sq. ft.	37	41.1	30%	20%	1.52	34.9	\$ 16,527
Toy / Children's Superstore	864	1000 sq. ft.	46	57.5	30%	40%	1.52	36.7	\$ 17,363
Free-standing Discount Superstore	813	1000 sq. ft.	195	50.7	20%	40%	1.52	37.0	\$ 17,497
Freestanding Discount Store	815	1000 sq. ft.	111	53.1	30%	40%	1.52	33.9	\$ 16,040
Home improvement superstore	862	1000 sq. ft.	135	30.7	10%	20%	1.52	33.6	\$ 15,913
Factory Outlet Center	823	1000 sq. ft.	137	26.6	10%	20%	1.52	29.1	\$ 13,764
Furniture Store	890	1000 sq. ft.	41	6.3	10%	20%	1.52	6.9	\$ 3,261
Nursery (Garden Center)	817	Acres	3	108.1	10%	20%	1.52	118.3	\$ 55,958
Nursery (Wholesale)	818	Acres	6	19.5	10%	10%	1.52	24.0	\$ 11,356

SPECIAL CASES	Signature Elements: Characteristics not matched with groups above								FEE PER LAND USE UNIT
State Motor Vehicles / Licensing Agency	731	1000 sq. ft.	22	78.0	30%	50%	1.52	41.5	\$ 19,628
Medical/Dental Office or Clinic	630, 720	1000 sq. ft.	23	36.5	10%	50%	1.52	25.0	\$ 11,802
Hospital	610	1000 sq. ft.	563	10.7	10%	10%	1.52	13.2	\$ 6,243
US Post Office	732	1000 sq. ft.	37	103.9	60%	70%	1.52	19.0	\$ 8,967
Marijuana Dispensary	882	1000 sq. ft.	2	252.7	30%	60%	1.52	107.5	\$ 50,871
Day Care Center	565	1000 sq. ft.	5	47.6	10%	95%	1.52	3.3	\$ 1,541
Hotel - no convention facilities	310	Total Rooms ⁽⁷⁾	146	8.4	10%	10%	1.52	10.3	\$ 4,869
Suites/Business Hotel and Motel - no convention facilities	311, 312, 320	Total Rooms ⁽⁷⁾	100 - 170	3.9	10%	10%	1.52	4.9	\$ 2,294

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