

**APPENDIX B -
TRIP RATE TABLE**

Appendix B. Traffic Impact Rate Table

Fee Rate per Daily VMT = \$ 473

This table uses ITE (9) 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. (8)

ITE LAND USE NAME	ITE LAND USE CODE	ITE LAND USE UNIT (13)	ITE AVERAGE SIZE (1)	ITE GROSS TRIP RATE / UNIT (2)	DISCOUNT PASS-BY TRIPS (4)	DISCOUNT INTRA-CITY TRIPS (11)	AVERAGE TRIP LENGTH (10)	NET NEW VMT IMPACT RATE / UNIT (12)	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) dwelling	210	Dwelling	214	9.6	0%	10%	1.59	13.7	\$ 6,478
Duplex (detached) dwelling	use 210	Dwelling	same	9.6	0%	10%	1.59	13.7	\$ 6,478
Multifamily, 3+ bedrooms	use 231	Dwelling	234	7.4	0%	10%	1.59	10.6	\$ 5,016
Multifamily, under 3 bedrooms	blend 220, 221, 230	Dwelling	250	6.0	0%	10%	1.59	8.6	\$ 4,061
Mobile Home Park	240	Dwelling	168	5.0	0%	10%	1.59	7.1	\$ 3,378
Self-contained Retirement Community (7)	251	Dwelling	862	3.7	0%	10%	1.59	5.3	\$ 2,511
Senior Adult Housing-Attached	252	Dwelling	147	3.5	0%	10%	1.59	5.0	\$ 2,355
Congregate Care Facility, Nursing Home, Elderly Housing (Attached) <i>please see Non-Retail, assisted living facilities</i>									
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.	378	12.8	0%	5%	1.11	13.5	\$ 6,364
Office Building (single building)	blend 710, 714, 715	1000 sq. ft.	150-300	11.4	0%	5%	1.11	12.0	\$ 5,696
Office Park (multiple buildings)	750	1000 sq. ft.	370	11.4	0%	5%	1.11	12.0	\$ 5,696
Research & Development Center	760	1000 sq. ft.	306	8.1	0%	5%	1.11	8.6	\$ 4,045
General Light Industrial	110	1000 sq. ft.	357	7.0	0%	5%	1.11	7.3	\$ 3,476
Industrial Park	130	1000 sq. ft.	447	7.0	0%	5%	1.11	7.3	\$ 3,471
Manufacturing	140	1000 sq. ft.	325	3.8	0%	5%	1.11	4.0	\$ 1,905
General Heavy Industrial	120	1000 sq. ft.	1544	1.5	0%	5%	1.11	1.6	\$ 748
Trucking and Storage Facilities									
Warehousing (Industrial)	150	1000 sq. ft.	354	4.86	0%	5%	1.11	5.2	\$ 2,474
High-Cube Warehouse	152	1000 sq. ft.	302	1.50	0%	5%	1.11	1.6	\$ 748
Truck Terminal	30	Acres	12	81.9	0%	5%	1.11	86.4	\$ 40,850
Mini-warehouse (self-service storage)	151	1000 sq. ft.	58	2.50	0%	5%	1.11	2.6	\$ 1,247
Institutions									
Church, with weekday programs	560	1000 sq. ft.	17	30.0	20%	50%	1.11	13.3	\$ 6,300
School, high	530	1000 sq. ft.	225	12.9	10%	50%	1.11	6.4	\$ 3,045
School, elementary and Junior-high	520	1000 sq. ft.	55	14.5	20%	50%	1.11	6.4	\$ 3,043
Church, no weekday programs	560	1000 sq. ft.	17	8.0	0%	50%	1.11	3.3	\$ 1,575
Assisted Living Facilities									
Nursing Home	620	Beds	89	2.4	10%	50%	1.11	1.2	\$ 560
Congregate Care Facility, Elderly Housing (Attached)	253	Living unit	164	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, 7th 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.

Appendix B. Traffic Impact Rate Table

Fee Rate per Daily VMT = \$ 473

This table uses ITE (1) 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. (2)

ITE LAND USE NAME	ITE LAND USE CODE	ITE LAND USE UNIT (13)	ITE AVERAGE SIZE (1)	ITE GROSS TRIP RATE / UNIT (3)	DISCOUNT PASS-BY TRIPS (4)	DISCOUNT INTRA-CITY TRIPS (11)	AVERAGE TRIP LENGTH (11)	NET NEW VMT IMPACT RATE / UNIT (9)	FEE PER LAND USE UNIT
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)	842	1000 sq. ft.	12	38.9	20%	10%	1.52	42.5	\$ 20,121
Auto Parts Sales	843	1000 sq. ft.	8	61.9	50%	10%	1.52	42.3	\$ 20,030
Car Sales, New and Used	841	1000 sq. ft.	30	33.3	10%	10%	1.52	41.0	\$ 19,416
Automobile Servicing									
Carwash	847	V.S.P. (7)	7	75.0	50%	80%	1.52	11.4	\$ 5,392
Service Station no Mini-Mart	844	V.S.P. (7)	8	168.6	80%	80%	1.52	10.2	\$ 4,848
Service Station with Mini-Mart	845	V.S.P. (7)	10	162.8	80%	80%	1.52	9.9	\$ 4,681
Tire Store	848, 849	V.S.P. (7)	8	32.0	50%	60%	1.52	9.7	\$ 4,601
Quick-Lube Vehicle Servicing	841	V.S.P. (7)	2	51.9	50%	80%	1.52	7.9	\$ 3,731
Social-Recreational Activities									
Drinking Place (pub, tavern, bar)	836	1000 sq. ft.	4	140.0	20%	70%	1.52	51.1	\$ 24,157
Bowling Alley	437	1000 sq. ft.	24	33.3	10%	10%	1.52	41.0	\$ 19,410
Health/Fitness Club	492	1000 sq. ft.	36	32.9	10%	10%	1.52	40.5	\$ 19,177
Lodge, Fraternal Organization, with dining facilities	591	1000 sq. ft.	n/a	48.0	10%	50%	1.52	32.8	\$ 15,530
Restaurant, quality	931	1000 sq. ft.	9	90.0	20%	70%	1.52	32.8	\$ 15,521
Restaurant, sit-down	932	1000 sq. ft.	8	127.2	50%	70%	1.52	29.0	\$ 13,712
Library	590	1000 sq. ft.	16	54.0	10%	70%	1.52	22.2	\$ 10,482
Racquet/Tennis Club	491	1000 sq. ft.	48	14.0	10%	10%	1.52	17.3	\$ 8,170
Restaurant, fast food	934	1000 sq. ft.	4	496.0	80%	90%	1.52	15.1	\$ 7,132
Recreational Community Center	495	1000 sq. ft.	65	22.9	10%	70%	1.52	9.4	\$ 4,441

Notes:

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- (3) Institution of Transportation Engineers, Trip Generation, 7th 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 85,000 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.
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RETAIL									
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Community Retail Focus									
Apparel Store	870	1000 sq. ft.	5	68.4	20%	60%	1.52	32.3	\$ 15,276
Shopping Ctr, under 65,000 sq. ft.(6)	820	1000 sq. ft.	50	70.0	50%	40%	1.52	31.9	\$ 15,098
Convenience Market	851 - 853	1000 sq. ft.	3	640.0	85%	80%	1.52	29.2	\$ 13,804
Hardware, paint store	816	1000 sq. ft.	21	51.3	25%	60%	1.52	23.4	\$ 11,063
Building Materials & Lumber Store	812	1000 sq. ft.	11	45.2	20%	60%	1.52	22.0	\$ 10,390
Specialty retail center (strip mall)	814	1000 sq. ft.	105	44.3	20%	60%	1.52	21.6	\$ 10,197
Video Rental Store	896	1000 sq. ft.	7	140.0	55%	80%	1.52	19.2	\$ 9,059
Pharmacy/Drug Store	880, 881	1000 sq. ft.	13	89.1	30%	80%	1.52	19.0	\$ 8,968
Bank, drive-in	812	1000 sq. ft.	4	246.5	75%	80%	1.52	18.7	\$ 8,861
Supermarket, discount supermarket	850, 854	1000 sq. ft.	62	102.2	45%	80%	1.52	17.1	\$ 8,086
Bank, walk-in	911	1000 sq. ft.	5	166.5	65%	80%	1.52	16.6	\$ 7,875
Destination Retail Focus									
Discount Club (membership warehouse store)	851	1000 sq. ft.	112	41.8	20%	20%	1.52	40.7	\$ 19,234
Electronics Superstore	853	1000 sq. ft.	37	45.0	30%	20%	1.52	38.3	\$ 18,134
Toy / Children's Superstore	854	1000 sq. ft.	48	60.0	30%	40%	1.52	38.3	\$ 18,118
Free-standing Discount Superstore	813	1000 sq. ft.	154	49.2	20%	40%	1.52	35.9	\$ 16,982
Freestanding Discount Store	815	1000 sq. ft.	111	56.0	30%	40%	1.52	35.8	\$ 16,916
Home Improvement superstore	862	1000 sq. ft.	100	29.8	10%	20%	1.52	32.6	\$ 15,426
Factory Outlet Center	823	1000 sq. ft.	146	26.6	10%	20%	1.52	29.1	\$ 13,764
Furniture Store	890	1000 sq. ft.	67	5.1	10%	20%	1.52	5.5	\$ 2,619
Nursery (Garden Center)	817	Acres	4	66.2	10%	20%	1.52	105.3	\$ 49,803
Nursery (Wholesale)	818	Acres	24	19.5	10%	10%	1.52	24.0	\$ 11,356
SPECIAL CASES									
<i>Signature Elements: Characteristics not matched with groups above</i>									
State Motor Vehicles / Licensing Agency	731	1000 sq. ft.	10	166.0	30%	50%	1.52	88.3	\$ 41,777
Medical/Dental Office or Clinic	630, 720	1000 sq. ft.	71	33.0	10%	50%	1.52	22.6	\$ 10,677
Hospital	610	1000 sq. ft.	500	17.6	10%	10%	1.52	21.6	\$ 10,232
US Post Office	732	1000 sq. ft.	31	108.2	60%	70%	1.52	19.7	\$ 9,334
Day Care	565	1000 sq. ft.	4	79.3	80%	95%	1.52	1.2	\$ 570
Hotel/Motel - no convention facilities	310-312, 320	Total Rooms (9)	200	6.5	10%	10%	1.52	8.0	\$ 3,785

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