

# INSTITUTE OF TRANSPORTATION ENGINEERS

## COMMON TRIP GENERATION RATES (PM Peak Hour)

(Trip Generation Manual, 9th Edition)

Code	Description	Unit of Measure	Trips Per Unit
<b>PORT AND TERMINAL</b>			
30	Truck Terminal	Acres	6.55
90	Park and Ride Lot with Bus Service	Parking Spaces	0.62
<b>INDUSTRIAL</b>			
110	General Light Industrial	1,000 SF	0.97
120	General Heavy Industrial	Acres	2.16
130	Industrial Park	1,000 SF	0.85
140	Manufacturing	1,000 SF	0.73
150	Warehousing	1,000 SF	0.32
151	Mini-Warehouse	1,000 SF	0.26
152	High-Cube Warehouse	1,000 SF	0.12
170	Utilities	1,000 SF	0.76
<b>RESIDENTIAL</b>			
210	Single-Family Detached Housing	Dwelling Units	1.00
220	Apartment	Dwelling Units	0.62
221	Low-Rise Apartment	Dwelling Units	0.58
230	Residential Condominium / Townhouse	Dwelling Units	0.52
240	Mobile Home Park	Dwelling Units	0.59
251	Senior Adult Housing - Detached	Dwelling Units	0.27
252	Senior Adult Housing - Attached	Dwelling Units	0.25
253	Congregate Care Facility	Dwelling Units	0.17
254	Assisted Living	Beds	0.22
255	Continuing Care Retirement Community	Dwelling Units	0.16
<b>LODGING</b>			
310	Hotel	Rooms	0.60
320	Motel	Rooms	0.47
330	Resort Hotel	Rooms	0.42
<b>RECREATIONAL</b>			
411	City Park	Acres	0.19
412	County Park	Acres	0.09
413	State Park	Acres	0.07
415	Beach Park	Acres	1.30
416	Campground / Recreation Vehicle Park	Camp Sites	0.27
417	Regional Park	Acres	0.20
420	Marina	Berths	0.19
430	Golf Course	Acres	0.30
431	Miniature Golf Course	Holes	0.33

Code	Description	Unit of Measure	Trips Per Unit
432	Golf Driving Range	Tees / Driving Positions	1.25
433	Batting Cages	Cages	2.22
435	Multi-Purpose Recreational Facility	Acres	5.77
437	Bowling Alley	1,000 SF	1.71
441	Live Theater	Seats	0.02
443	Movie Theater without Matinee	1,000 SF	6.16
444	Movie Theater with Matinee	1,000 SF	3.80
445	Multiplex Movie Theater	1,000 SF	4.91
452	Horse Race Track	Acres	4.30
454	Dog Race Track	Attendance Capacity	0.15
460	Arena	Acres	3.33
473	Casino / Video Lottery Establishment	1,000 SF	13.43
480	Amusement Park	Acres	3.95
488	Soccer Complex	Fields	17.70
490	Tennis Courts	Courts	3.88
491	Racquet / Tennis Club	Courts	3.35
492	Health / Fitness Club	1,000 SF	3.53
493	Athletic Club	1,000 SF	5.96
495	Recreational Community Center	1,000 SF	1.45
<b>INSTITUTIONAL</b>			
520	Elementary School	1,000 SF	1.21
522	Middle School / Junior High School	1,000 SF	1.19
530	High School	1,000 SF	0.97
536	Private School (K-12)	Students	0.17
540	Junior / Community College	1,000 SF	2.54
560	Church	1,000 SF	0.55
565	Daycare Center	1,000 SF	12.46
566	Cemetery	Acres	0.84
571	Prison	1,000 SF	2.91
580	Museum	1,000 SF	0.18
590	Library	1,000 SF	7.30
591	Lodge / Fraternal Organization	Members	0.03
<b>MEDICAL</b>			
610	Hospital	1,000 SF	0.93
620	Nursing Home	1,000 SF	0.74
630	Clinic	1,000 SF	5.18
640	Animal Hospital / Veterinary Clinic	1,000 SF	4.72

Code	Description	Unit of Measure	Trips Per Unit
<b>OFFICE</b>			
710	General Office Building	1,000 SF	1.49
714	Corporate Headquarters Building	1,000 SF	1.41
715	Single Tenant Office Building	1,000 SF	1.74
720	Medical-Dental Office Building	1,000 SF	3.57
730	Government Office Building	1,000 SF	1.21
732	United States Post Office	1,000 SF	1.22
733	Government Office Complex	1,000 SF	2.85
750	Office Park	1,000 SF	1.48
760	Research and Development Center	1,000 SF	1.07
770	Business Park	1,000 SF	1.29
<b>RETAIL</b>			
812	Building Materials and Lumber Store	1,000 SF	4.49
813	Free-Standing Discount Superstore	1,000 SF	4.35
814	Variety Store	1,000 SF	6.82
815	Free Standing Discount Store	1,000 SF	4.98
816	Hardware / Paint Store	1,000 SF	4.84
817	Nursery (Garden Center)	1,000 SF	6.94
818	Nursery (Wholesale)	1,000 SF	5.17
820	Shopping Center	1,000 SF	3.71
823	Factory Outlet Center	1,000 SF	2.29
826	Specialty Retail Center	1,000 SF	2.71
841	New Car Sales	1,000 SF	2.62
842	Recreational Vehicle Sales	1,000 SF	2.54
843	Automobile Parts Sales	1,000 SF	5.98
848	Tire Store	1,000 SF	4.15
850	Supermarket	1,000 SF	9.48
851	Convenience Market (Open 24 Hours)	1,000 SF	52.41
852	Convenience Market (Open 15-16 Hours)	1,000 SF	34.57
853	Convenience Market with Gasoline Pumps	1,000 SF	50.92
854	Discount Supermarket	1,000 SF	8.34
857	Discount Club	1,000 SF	4.18
860	Wholesale Market	1,000 SF	0.88
861	Sporting Goods Superstore	1,000 SF	1.84
862	Home Improvement Superstore	1,000 SF	2.33
863	Electronics Superstore	1,000 SF	4.50
864	Toy / Children's Superstore	1,000 SF	4.99
866	Pet Supply Superstore	1,000 SF	3.38
867	Office Supply Superstore	1,000 SF	3.40
875	Department Store	1,000 SF	1.87

Code	Description	Unit of Measure	Trips Per Unit
876	Apparel Store	1,000 SF	3.83
879	Arts and Craft Store	1,000 SF	6.21
880	Pharmacy / Drugstore without Drive-Through Window	1,000 SF	8.4
881	Pharmacy / Drugstore with Drive-Through Window	1,000 SF	9.91
890	Furniture Store	1,000 SF	0.45
896	DVD/Video Rental Store	1,000 SF	13.60
<b>SERVICES</b>			
911	Walk-In Bank	1,000 SF	12.13
912	Drive-In Bank	1,000 SF	24.30
918	Hair Salon	1,000 SF	1.93
925	Drinking Place	1,000 SF	11.34
931	Quality Restaurant	1,000 SF	7.49
932	High-Turnover (Sit-Down) Restaurant	1,000 SF	11.15
933	Fast Food Restaurant without Drive-Through Window	1,000 SF	26.15
934	Fast Food Restaurant with Drive-Through Window	1,000 SF	33.84
935	Fast Food Restaurant with Drive-Through Window and No Indoor Seating	1,000 SF	153.85
936	Coffee / Donut Shop without Drive-Through Window	1,000 SF	40.75
937	Coffee / Donut Shop with Drive-Through Window	1,000 SF	42.8
938	Coffee / Donut Shop with Drive-Through Window and No Indoor Seating	1,000 SF	75
940	Bread / Donut / Bagel Shop with Drive-Through Window	1,000 SF	18.99
941	Quick Lubrication Vehicle Shop	Service Bays	5.19
942	Automobile Care Center	1,000 SF	3.11
943	Automobile Parts and Service Center	1,000 SF	4.46
944	Gasoline / Service Station	Fueling Positions	13.87
945	Gasoline / Service Station with Convenience Market	Fueling Positions	13.51
946	Gasoline / Service Station with Convenience Market and Car Wash	Fueling Positions	13.94
947	Self Service Car Wash	Stalls	5.54
948	Automated Car Wash	1,000 SF	14.12
950	Truck Stop	1,000 SF	13.63

**Note: All land uses in the 800 and 900 series are entitled to a "passby" trip reduction of 60% if less than 50,000 ft<sup>2</sup> or a reduction of 40% if equal to or greater than 50,000 ft<sup>2</sup>.**

\* Approximated by 10% of Weekday average rate.