

Table 1
St. Johns County P.M. Peak Hour Trip Rate and Percent New Trips Data

ITE Land Use Code	Land Use Description	Independent Variable	P.M. Peak Hour Trip End Estimation Method	Land Use Maximum Size Threshold By Unit			Percentage New Trips
				Small <= 10.00 PHT Trips	Minor > 10.00 to <= 50.00 PHT Trips	Major (LDTA) > 50.00 PHT Trips	
022	General Aviation Airport	Average Flights Per Day	0.30	33	166	> 166	90%
110	General Light Industrial < 150,000 sf GFA	1,000 sf GFA	0.97	10,309	51,546	> 51,546	92%
110	General Light Industrial > or = 150,000 sf GFA	1,000 sf GFA	$T = 1.43 (X) - 157.36$	N/A	N/A	>	92%
130	Industrial Park	1,000 sf GFA	$T = 0.77(X) + 42.11$	N/A	10,246	> 10,246	92%
140	Manufacturing	1,000 sf GFA	$T = 0.78 (X) - 15.97$	33,294	84,576	> 84,576	92%
150	Warehousing	1,000 sf GFA	$\ln(T) = 0.64 \cdot \ln(X) + 1.14$	6,150	76,042	> 76,042	92%
151	Mini-Warehousing	1,000 sf GFA	$\ln(T) = 1.02 \cdot \ln(X) - 1.49$	41,191	199,557	> 199,557	92%
210	Single Family Detached Housing	Dwelling Units	$\ln(T) = 0.90 \cdot \ln(X) + 0.51$	7	43	> 43	100%
220	Apartment	Dwelling Units	$T = 0.55 (X) + 17.65$	N/A	58	> 58	100%
230	Residential Condominium/Townhouse	Dwelling Units	$\ln(T) = 0.82 \cdot \ln(X) + 0.32$	11	79	> 79	100%
240	Mobile Home Park	Occupied Dwelling	$T = 0.57(X) + 2.06$	13	84	> 84	100%
253	Congregate Care Facility	Occupied Dwelling	0.17	58	294	> 294	74%
254	Assisted Living	Beds	0.22	45	227	> 227	100%
310	Hotel	Occupied Rooms	$\ln(T) = 1.20 \cdot \ln(X) - 1.55$	24	94	> 94	71%
311	All-Suites Hotel	Occupied Rooms	0.55	18	90	> 90	71%
320	Motel	Occupied Rooms	$T = 0.53 (X) + 5.95$	7	83	> 83	59%
330	Resort Hotel	Occupied Rooms	$\ln(T) = 1.13 \cdot \ln(X) - 1.52$	29	122	> 122	75%
412	County Park	Acres	0.06	166	833	> 833	90%
416	Campground/Recreational Vehicle Park	Occupied Camp Sites	0.37	27	135	> 135	90%
417	Regional Park	Acres	0.20	50	250	> 250	90%
420	Marina	Berths	0.19	52	263	> 263	90%
430	Golf Course	Acres	$T = 0.13 (X) + 31.30$	N/A	143	> 143	90%
432	Golf Driving Range	Driving Positions	1.25	8	40	> 40	75%
437	Bowling Alley	1,000 sf GFA	3.54	2,824	14,124	> 14,124	75%
444	Movie Theatre with Matinee	Movie Screens (Friday)	45.91	N/A	1	> 1	85%
492	Health/Fitness Club	1,000 sf GFA	$\ln(T) = 0.95 \cdot \ln(X) + 1.43$	2,505	13,635	> 13,635	75%
520	Elementary School	1,000 sf GFA	1.21	8,264	41,322	> 41,322	80%
530	High School	1,000 sf GFA	0.97	10,309	51,546	> 51,546	90%
540	Junior/Community College	1,000 sf GFA	2.54	3,937	19,685	> 19,685	90%
550	University/College	Students	$T = 0.19 (X) + 118.58$	N/A	N/A	>	90%
560	Church (without school) up to 100,000 sq. ft.	1,000 sf GFA	0.55	18,181	90,909	> 90,909	90%
565	Day Care Center	1,000 sf GFA	12.46	802	4,012	> 4,012	74%
590	Library	1,000 sf GFA	7.30	1,369	6,849	> 6,849	90%
610	Hospital	1,000 sf GFA	1.14	8,771	43,859	> 43,859	77%
620	Nursing Home	1,000 sf GFA	0.74	13,513	67,567	> 67,567	75%
630	Clinic	1,000 sf GFA	5.18	1,930	9,652	> 9,652	92%
640	Animal Hospital/Veterinary Clinic	1,000 sf GFA	4.72	2,118	10,593	> 10,593	70%
710	General Office Building < 33,557 sf GFA	1,000 sf GFA	1.49	6,711	33,557	> 33,557	92%
710	General Office Building > or = 33,557 sf GFA	1,000 sf GFA	$T = 1.12 (X) + 78.81$	N/A	N/A	>	92%
720	Medical/Dental Office Building	1,000 sf GFA	$\ln(T) = 0.88 \cdot \ln(X) + 1.59$	2,247	13,994	> 13,994	77%
732	United States Post Office	1,000 sf GFA	11.12	N/A	4,496	> 4,496	25%
750	Office Park	1,000 sf GFA	$T = 1.22 (X) + 95.83$	N/A	N/A	>	92%
760	Research and Development Centers	1,000 sf GFA	$\ln(T) = 0.82 \cdot \ln(X) + 1.09$	4,387	31,233	> 31,233	92%
770	Business Park	1,000 sf GFA	$\ln(T) = 0.92 \cdot \ln(X) + 0.78$	5,232	30,095	> 30,095	92%
813	Free-Standing Discount Superstore	1,000 sf GFA	4.61	2,169	10,845	> 10,845	72%
814	Specialty Retail Center	1,000 sf GLA	$T = 2.40 (X) + 21.48$	N/A	11,883	> 11,883	50%
815	Free-Standing Discount Store	1,000 sf GFA	5.00	2,000	10,000	> 10,000	83%
816	Hardware/Paint Store	1,000 sf GFA	$T = 3.31 (X) + 27.59$	N/A	6,770	> 6,770	74%
820	Shopping Center	1,000 sf GLA	$\ln(T) = 0.67 \cdot \ln(X) + 3.37$	N/A	N/A	>	Equation
823	Factory Outlet Center	1,000 sf GFA	$\ln(T) = 0.43 \cdot \ln(X) + 3.68$	N/A	N/A	>	Equation
843	Automobile Parts Sales	1,000 sf GFA	$T = 7.87 (X) - 14.86$	3,158	8,241	> 8,241	72%
848	Tire Store	Service Bays	3.54	2	14	> 14	72%
849	Tire Superstore	Service Bays	3.17	3	15	> 15	72%
850	Supermarket	1,000 sf GFA	$\ln(T) = 0.61 \cdot \ln(X) + 3.95$	N/A	939	> 939	64%
851	Convenience Market (Open 24 Hours)	1,000 sf GFA	52.41	N/A	954	> 954	39%
853	Convenience Market with Gasoline Pumps	Vehicle Fueling Positions	19.07	N/A	2	> 2	34%
857	Discount Club	1,000 sf GFA	4.24	N/A	11,792	> 11,792	83%
862	Home Improvement Superstore	1,000 sf GFA	2.37	N/A	21,097	> 21,097	52%
863	Electronics Superstore	1,000 sf GFA	4.99	N/A	10,020	> 10,020	60%
880	Pharmacy/Drugstore without Drive-Through Window	1,000 sf GFA	8.42	1,187	5,938	> 5,938	47%
881	Pharmacy/Drugstore with Drive-Through Window	1,000 sf GFA	10.35	966	4,830	> 4,830	51%
890	Furniture Store	1,000 sf GFA	0.45	22,222	111,111	> 111,111	47%
896	Video Rental Store	1,000 sf GFA	$\ln(T) = 0.93 \cdot \ln(X) + 2.61$	718	4,055	> 4,055	70%
911	Walk-In Bank	1,000 sf GFA	12.13	824	4,122	> 4,122	80%
912	Drive-In Bank	Drive-In Windows	27.41	N/A	1	> 1	53%
931	Quality Restaurant	1,000 sf GFA	7.49	1,335	6,675	> 6,675	56%
932	High-Turnover (Sit-Down) Restaurant	1,000 sf GFA	11.15	896	4,484	> 4,484	57%
933	Fast-Food Restaurant without Drive-Through Window	1,000 sf GFA	26.15	382	1,912	> 1,912	57%
934	Fast-Food Restaurant with Drive-Through Window	1,000 sf GFA	33.84	295	1,477	> 1,477	50%
935	Fast-Food Restaurant with Drive-Through & No Indoor Seating	1,000 sf GFA	153.85	N/A	324	> 324	50%
936	Coffee/Donut Shop with Drive-Through Window	1,000 sf GFA	42.93	232	1,164	> 1,164	50%
941	Quick Lubrication Vehicle Shop	Servicing Positions	5.19	1	9	> 9	72%
945	Gasoline/Service Station with Convenience Market	Vehicle Fueling Positions	13.38	N/A	3	> 3	44%
947	Self-Service Car Wash	Wash Stalls	5.54	1	9	> 9	67%
N/A	Auto Repair/Detailing Center (a)	1,000 sf GFA	2.75	3,636	18,181	> 18,181	83%

Sources:

- Institute of Transportation Engineers, Trip Generation, Eighth Edition, 2008.
- Institute of Transportation Engineers, Trip Generation, Seventh Edition, 2003.
- Institute of Transportation Engineers, Trip Generation, Sixth Edition, 1997.
- Institute of Transportation Engineers, Trip Generation, Fifth Edition, 1991.
- Institute of Transportation Engineers, Trip Generation Handbook, 1998.
- Tindale, Oliver & Associates, Inc.

Notes:

- a Land Use 843 peak hour rate (5.98) divided by daily rate (61.91) produces a peak-to-daily ratio of 0.097. Auto Repair/Detailing Center daily rate (28.40) multiplied by 0.097 produces a 2.75 peak hour average rate.