

Research Forest Drive and Lake Woodlands Drive Corridor Study  
 GEH Comparison with Previous Study Data  
 Date: 2019-10-01

Intersection (AM and PM Peak Hour)	Approach	Movement	Peak Hour Volumes from BGE		Peak Hour Volumes in Analysis		GEH Statistic		Abs Difference		Percent Difference	
			AM (7-8)	PM (5-6)	AM (7-8)	PM (5-6)	AM	PM	AM	PM	AM	PM
EB LWD & GMR	EB	LT	35	28	39	26	0.66	0.38	4	-2	10.3%	7.7%
		THRU	472	685	438	630	1.59	2.14	-34	-55	7.8%	8.7%
		RT	288	395	255	405	2.00	0.50	-33	10	12.9%	2.5%
	NB	THRU	693	1076	704	1072	0.42	0.12	11	-4	1.6%	0.4%
		RT	125	291	117	282	0.73	0.53	-8	-9	6.8%	3.2%
		LT	37	125	37	164	0.00	3.24	0	39	0.0%	23.8%
SB	THRU	412	756	447	687	1.69	2.57	35	-69	7.8%	10.0%	
	RT	15	88	12	89	0.82	0.11	-3	1	25.0%	1.1%	
WB LWD & GMR	WB	LT	84	171	103	163	1.96	0.62	19	-8	18.4%	4.9%
		THRU	690	769	609	792	3.18	0.82	-81	23	13.3%	2.9%
		RT	247	78	299	83	3.15	0.56	52	5	17.4%	6.0%
	NB	LT	192	464	217	467	1.75	0.14	25	3	11.5%	0.6%
		THRU	535	644	523	629	0.52	0.59	-12	-15	2.3%	2.4%
		THRU	373	725	376	686	0.16	1.47	3	-39	0.8%	5.7%
SB	THRU	15	88	12	89	0.82	0.11	-3	1	25.0%	1.1%	
	RT	15	88	12	89	0.82	0.11	-3	1	25.0%	1.1%	
EB RFD & NB GMR	EB	LT	117	134	112	119	0.47	1.33	-5	-15	4.5%	12.6%
		THRU	1090	1295	1253	1303	4.76	0.22	163	8	13.0%	0.6%
	NB	THRU	281	689	239	627	2.60	2.42	-42	-62	17.6%	9.9%
		RT	131	278	118	243	1.17	2.17	-13	-35	11.0%	14.4%
EB RFD & SB GMR	EB	THRU	1114	1383	1301	1367	5.38	0.43	187	-16	14.4%	1.2%
		RT	380	387	363	335	0.88	2.74	-17	-52	4.7%	15.5%
	SB	LT	51	46	57	49	0.82	0.44	6	3	10.5%	6.1%
		THRU	472	303	449	294	1.07	0.52	-23	-9	5.1%	3.1%
WB RFD & NB GMR	WB	THRU	1631	1504	1640	1476	0.22	0.73	9	-28	0.5%	1.9%
		RT	121	118	168	114	3.91	0.37	47	-4	28.0%	3.5%
	NB	LT	207	582	155	527	3.87	2.34	-52	-55	33.5%	10.4%
		THRU	188	242	191	226	0.22	1.05	3	-16	1.6%	7.1%
WB RFD & SB GMR	WB	LT	319	156	326	160	0.39	0.32	7	4	2.1%	2.5%
		THRU	1574	1944	1480	1850	2.41	2.16	-94	-94	6.4%	5.1%
	SB	THRU	192	194	183	188	0.66	0.43	-9	-6	4.9%	3.2%
		RT	161	203	155	214	0.48	0.76	-6	11	3.9%	5.1%

$$GEH = \sqrt{\frac{2(M - C)^2}{M + C}}$$

GEH < 5 is a "good match"  
 GEH between 5 and 10 "warrants investigation"  
 GEH >10 suggests "high probability of a problem"

\*85% of volumes should have a GEH less than 5

% Data GEH <=5	
AM	96.7%
PM	100.0%

% Data GEH <=3	
AM	80.0%
PM	96.7%