

# Alliant Engineering, Inc.

733 Marquette Ave #700, Minneapolis, MN 55402

Engler Blvd & TH 212 E Ramp  
 Ref Pt: 149+00.819  
 data by: Alliant Inc  
 TURN MOVEMENT COUNT

File Name : 1736521\_Engler & TH 212 E Ramp  
 Site Code : 1736521  
 Start Date : 3/6/2019  
 Page No : 1

## Groups Printed- Cars - Trucks

Start Time	TH 212 E Ramp Southbound					Engler Blvd Westbound					TH 212 E Ramp Northbound					Engler Blvd Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:00 AM	0	0	0	0	0	17	20	0	0	37	7	0	0	0	7	0	31	119	0	150	194
06:15 AM	0	0	0	0	0	23	26	0	0	49	10	0	3	0	13	0	35	155	0	190	252
06:30 AM	0	0	0	0	0	24	47	0	0	71	11	0	2	0	13	0	51	199	0	250	334
06:45 AM	0	0	0	0	0	26	26	0	0	52	32	0	1	0	33	0	71	212	0	283	368
Total	0	0	0	0	0	90	119	0	0	209	60	0	6	0	66	0	188	685	0	873	1148
07:00 AM	0	0	0	0	0	34	35	5	0	74	17	0	7	0	24	0	59	215	0	274	372
07:15 AM	0	0	0	0	0	39	47	0	0	86	33	0	7	0	40	0	84	197	0	281	407
07:30 AM	0	0	0	0	0	33	58	0	0	91	37	0	5	0	42	0	88	206	0	294	427
07:45 AM	0	0	0	0	0	20	68	0	0	88	28	0	4	0	32	0	90	169	0	259	379
Total	0	0	0	0	0	126	208	5	0	339	115	0	23	0	138	0	321	787	0	1108	1585
08:00 AM	0	0	0	0	0	19	45	0	0	64	25	4	4	0	33	0	84	132	0	216	313
08:15 AM	0	0	0	0	0	22	45	0	0	67	29	0	2	0	31	0	84	143	0	227	325
08:30 AM	0	0	0	0	0	19	46	0	0	65	23	0	8	0	31	0	78	139	0	217	313
08:45 AM	0	0	0	0	0	18	37	0	0	55	21	1	2	0	24	0	59	124	0	183	262
Total	0	0	0	0	0	78	173	0	0	251	98	5	16	0	119	0	305	538	0	843	1213
09:00 AM	0	0	0	0	0	13	37	0	0	50	26	0	2	0	28	0	50	89	0	139	217
09:15 AM	0	0	0	0	0	7	25	0	0	32	16	1	2	0	19	0	41	87	0	128	179
09:30 AM	0	0	0	0	0	9	33	0	0	42	8	0	0	0	8	0	40	76	0	116	166
09:45 AM	0	0	0	0	0	4	32	0	0	36	6	0	0	0	6	0	34	61	0	95	137
Total	0	0	0	0	0	33	127	0	0	160	56	1	4	0	61	0	165	313	0	478	699
10:00 AM	0	0	0	0	0	8	34	0	0	42	12	1	2	0	15	0	36	62	0	98	155
10:15 AM	0	0	0	0	0	3	32	0	0	35	6	0	2	0	8	0	40	67	0	107	150
10:30 AM	0	0	0	0	0	4	33	0	0	37	6	0	2	0	8	0	33	72	0	105	150
10:45 AM	0	0	0	0	0	4	26	0	0	30	3	0	4	0	7	0	55	63	0	118	155
Total	0	0	0	0	0	19	125	0	0	144	27	1	10	0	38	0	164	264	0	428	610
11:00 AM	0	0	0	0	0	6	27	0	0	33	11	0	4	0	15	0	32	58	0	90	138
11:15 AM	0	0	0	0	0	8	35	0	0	43	8	0	0	0	8	0	32	57	0	89	140
11:30 AM	0	0	0	0	0	5	30	0	0	35	7	0	2	0	9	0	40	56	0	96	140
11:45 AM	0	0	0	0	0	6	28	0	0	34	8	0	0	0	8	0	32	46	0	78	120
Total	0	0	0	0	0	25	120	0	0	145	34	0	6	0	40	0	136	217	0	353	538
12:00 PM	0	0	0	0	0	8	37	0	0	45	9	0	2	0	11	0	25	49	0	74	130
12:15 PM	0	0	0	0	0	8	35	0	0	43	11	0	1	0	12	0	33	68	0	101	156
12:30 PM	0	0	0	0	0	7	39	0	0	46	11	0	3	0	14	0	41	42	0	83	143
12:45 PM	0	0	0	0	0	4	42	0	0	46	10	0	2	0	12	0	46	50	0	96	154
Total	0	0	0	0	0	27	153	0	0	180	41	0	8	0	49	0	145	209	0	354	583
01:00 PM	0	0	0	0	0	4	43	0	0	47	9	0	1	0	10	0	32	39	0	71	128
01:15 PM	0	0	0	0	0	2	46	0	0	48	10	0	3	0	13	0	39	52	0	91	152
01:30 PM	0	0	0	0	0	2	40	0	0	42	9	0	5	0	14	0	37	47	0	84	140
01:45 PM	0	0	0	0	0	4	41	0	0	45	8	0	2	0	10	0	37	45	0	82	137
Total	0	0	0	0	0	12	170	0	0	182	36	0	11	0	47	0	145	183	0	328	557
02:00 PM	0	0	0	0	0	9	46	0	0	55	7	0	1	0	8	0	30	44	0	74	137
02:15 PM	0	0	0	0	0	1	45	0	0	46	11	0	3	0	14	0	35	41	0	76	136
02:30 PM	0	0	0	0	0	10	59	0	0	69	13	0	8	0	21	0	62	35	0	97	187
02:45 PM	0	0	0	0	0	15	64	0	0	79	11	0	2	0	13	0	50	48	0	98	190
Total	0	0	0	0	0	35	214	0	0	249	42	0	14	0	56	0	177	168	0	345	650
03:00 PM	0	0	0	0	0	17	65	0	0	82	16	0	3	0	19	0	62	46	0	108	209
03:15 PM	0	0	0	0	0	7	69	0	0	76	29	0	1	0	30	0	65	59	0	124	230
03:30 PM	0	0	0	0	0	12	79	0	0	91	18	2	2	0	22	0	53	49	0	102	215

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File Name : 1736521\_Engler & TH 212 E Ramp  
 Site Code : 1736521  
 Start Date : 3/6/2019  
 Page No : 2

Groups Printed- Cars - Trucks

Start Time	TH 212 E Ramp Southbound					Engler Blvd Westbound					TH 212 E Ramp Northbound					Engler Blvd Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
03:45 PM	0	0	0	0	0	10	90	0	0	100	23	0	5	0	28	0	73	52	0	125	253
Total	0	0	0	0	0	46	303	0	0	349	86	2	11	0	99	0	253	206	0	459	907
04:00 PM	0	0	0	0	0	12	108	0	0	120	17	0	6	0	23	0	49	47	0	96	239
04:15 PM	0	0	0	0	0	10	88	1	0	99	13	0	1	0	14	0	77	49	0	126	239
04:30 PM	0	0	0	0	0	9	107	0	0	116	9	0	4	0	13	0	68	60	0	128	257
04:45 PM	0	0	0	0	0	11	111	0	0	122	18	0	8	0	26	0	90	41	0	131	279
Total	0	0	0	0	0	42	414	1	0	457	57	0	19	0	76	0	284	197	0	481	1014
05:00 PM	0	0	0	0	0	11	91	0	0	102	14	0	5	0	19	0	61	37	0	98	219
05:15 PM	0	0	0	0	0	11	104	0	0	115	11	1	2	0	14	0	80	58	0	138	267
05:30 PM	0	0	0	0	0	8	85	0	0	93	22	0	7	0	29	0	67	51	0	118	240
05:45 PM	0	0	0	0	0	11	89	0	0	100	17	0	4	0	21	0	50	47	0	97	218
Total	0	0	0	0	0	41	369	0	0	410	64	1	18	0	83	0	258	193	0	451	944
06:00 PM	0	0	0	0	0	8	71	0	0	79	12	0	4	0	16	0	56	31	0	87	182
06:15 PM	0	0	0	0	0	13	66	0	0	79	23	0	6	0	29	0	48	47	0	95	203
06:30 PM	0	0	0	0	0	13	45	0	0	58	9	0	2	0	11	0	57	47	0	104	173
06:45 PM	0	0	0	0	0	4	52	0	0	56	14	0	2	0	16	0	45	30	0	75	147
Total	0	0	0	0	0	38	234	0	0	272	58	0	14	0	72	0	206	155	0	361	705
Grand Total	0	0	0	0	0	612	2729	6	0	3347	774	10	160	0	944	0	2747	4115	0	6862	11153
Apprch %	0	0	0	0	0	18.3	81.5	0.2	0		82	1.1	16.9	0		0	40	60	0		
Total %	0	0	0	0	0	5.5	24.5	0.1	0	30	6.9	0.1	1.4	0	8.5	0	24.6	36.9	0	61.5	
Cars	0	0	0	0	0	607	2631	4	0	3242	739	9	143	0	891	0	2657	4022	0	6679	10812
% Cars	0	0	0	0	0	99.2	96.4	66.7	0	96.9	95.5	90	89.4	0	94.4	0	96.7	97.7	0	97.3	96.9
Trucks	0	0	0	0	0	5	98	2	0	105	35	1	17	0	53	0	90	93	0	183	341
% Trucks	0	0	0	0	0	0.8	3.6	33.3	0	3.1	4.5	10	10.6	0	5.6	0	3.3	2.3	0	2.7	3.1

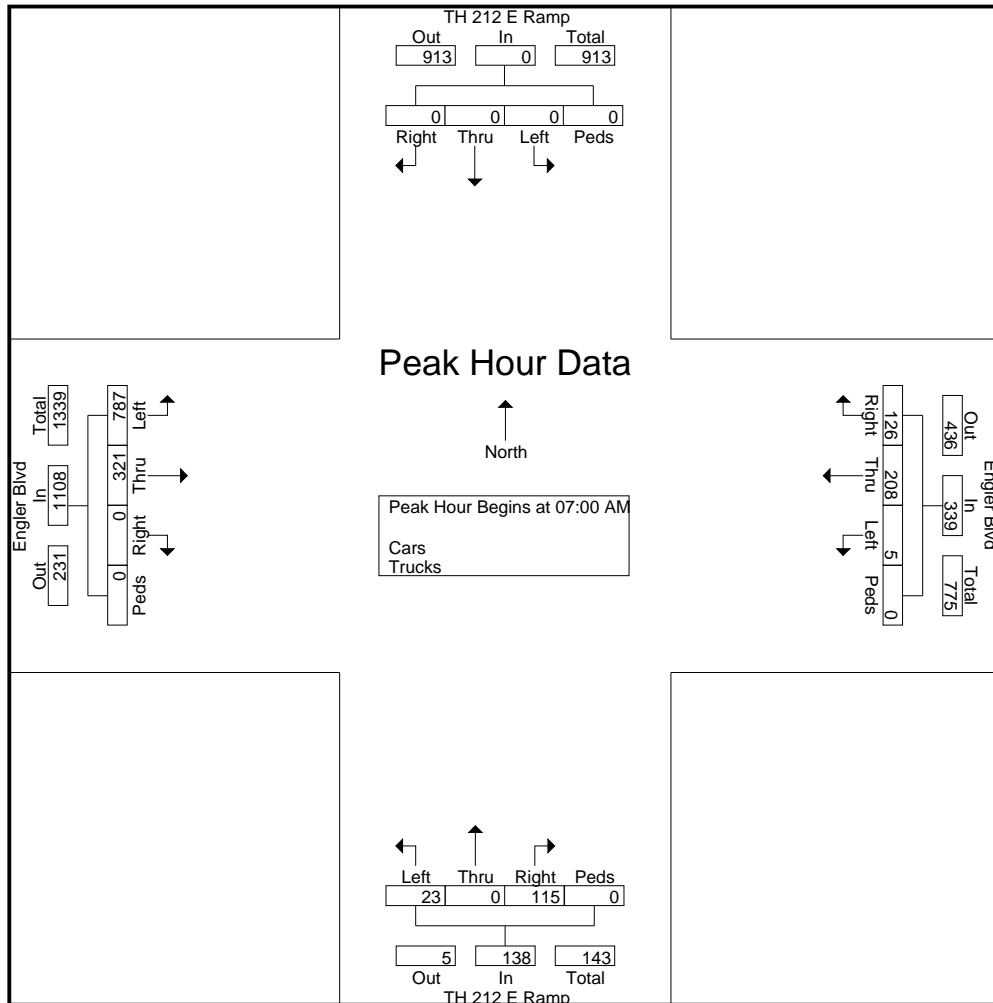
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	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	34	35	5	0	74	17	0	7	0	24	0	59	215	0	274	372
07:15 AM	0	0	0	0	0	39	47	0	0	86	33	0	7	0	40	0	84	197	0	281	407
07:30 AM	0	0	0	0	0	33	58	0	0	91	37	0	5	0	42	0	88	206	0	294	427
07:45 AM	0	0	0	0	0	20	68	0	0	88	28	0	4	0	32	0	90	169	0	259	379
Total Volume	0	0	0	0	0	126	208	5	0	339	115	0	23	0	138	0	321	787	0	1108	1585
% App. Total	0	0	0	0	0	37.2	61.4	1.5	0		83.3	0	16.7	0		0	29	71	0		
PHF	.000	.000	.000	.000	.000	.808	.765	.250	.000	.931	.777	.000	.821	.000	.821	.000	.892	.915	.000	.942	.928



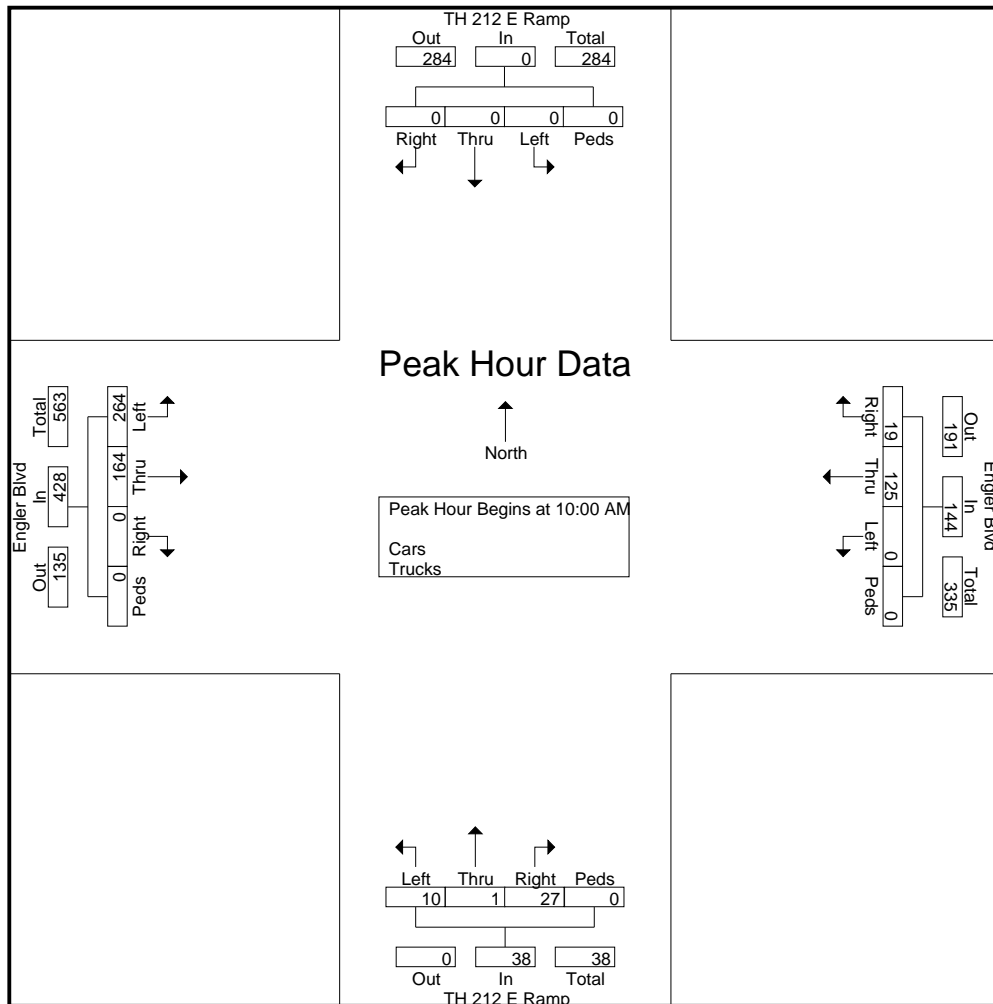
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Start Time	TH 212 E Ramp Southbound					Engler Blvd Westbound					TH 212 E Ramp Northbound					Engler Blvd Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 10:00 AM																					
10:00 AM	0	0	0	0	0	8	34	0	0	42	12	1	2	0	15	0	36	62	0	98	155
10:15 AM	0	0	0	0	0	3	32	0	0	35	6	0	2	0	8	0	40	67	0	107	150
10:30 AM	0	0	0	0	0	4	33	0	0	37	6	0	2	0	8	0	33	72	0	105	150
10:45 AM	0	0	0	0	0	4	26	0	0	30	3	0	4	0	7	0	55	63	0	118	155
Total Volume	0	0	0	0	0	19	125	0	0	144	27	1	10	0	38	0	164	264	0	428	610
% App. Total	0	0	0	0	0	13.2	86.8	0	0		71.1	2.6	26.3	0		0	38.3	61.7	0		
PHF	.000	.000	.000	.000	.000	.594	.919	.000	.000	.857	.563	.250	.625	.000	.633	.000	.745	.917	.000	.907	.984



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Start Time	TH 212 E Ramp Southbound					Engler Blvd Westbound					TH 212 E Ramp Northbound					Engler Blvd Eastbound					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	9	107	0	0	116	9	0	4	0	13	0	68	60	0	128	257
04:45 PM	0	0	0	0	0	11	111	0	0	122	18	0	8	0	26	0	90	41	0	131	279
05:00 PM	0	0	0	0	0	11	91	0	0	102	14	0	5	0	19	0	61	37	0	98	219
05:15 PM	0	0	0	0	0	11	104	0	0	115	11	1	2	0	14	0	80	58	0	138	267
Total Volume	0	0	0	0	0	42	413	0	0	455	52	1	19	0	72	0	299	196	0	495	1022
% App. Total	0	0	0	0	0	9.2	90.8	0	0	0	72.2	1.4	26.4	0	0	0	60.4	39.6	0	0	
PHF	.000	.000	.000	.000	.000	.955	.930	.000	.000	.932	.722	.250	.594	.000	.692	.000	.831	.817	.000	.897	.916

