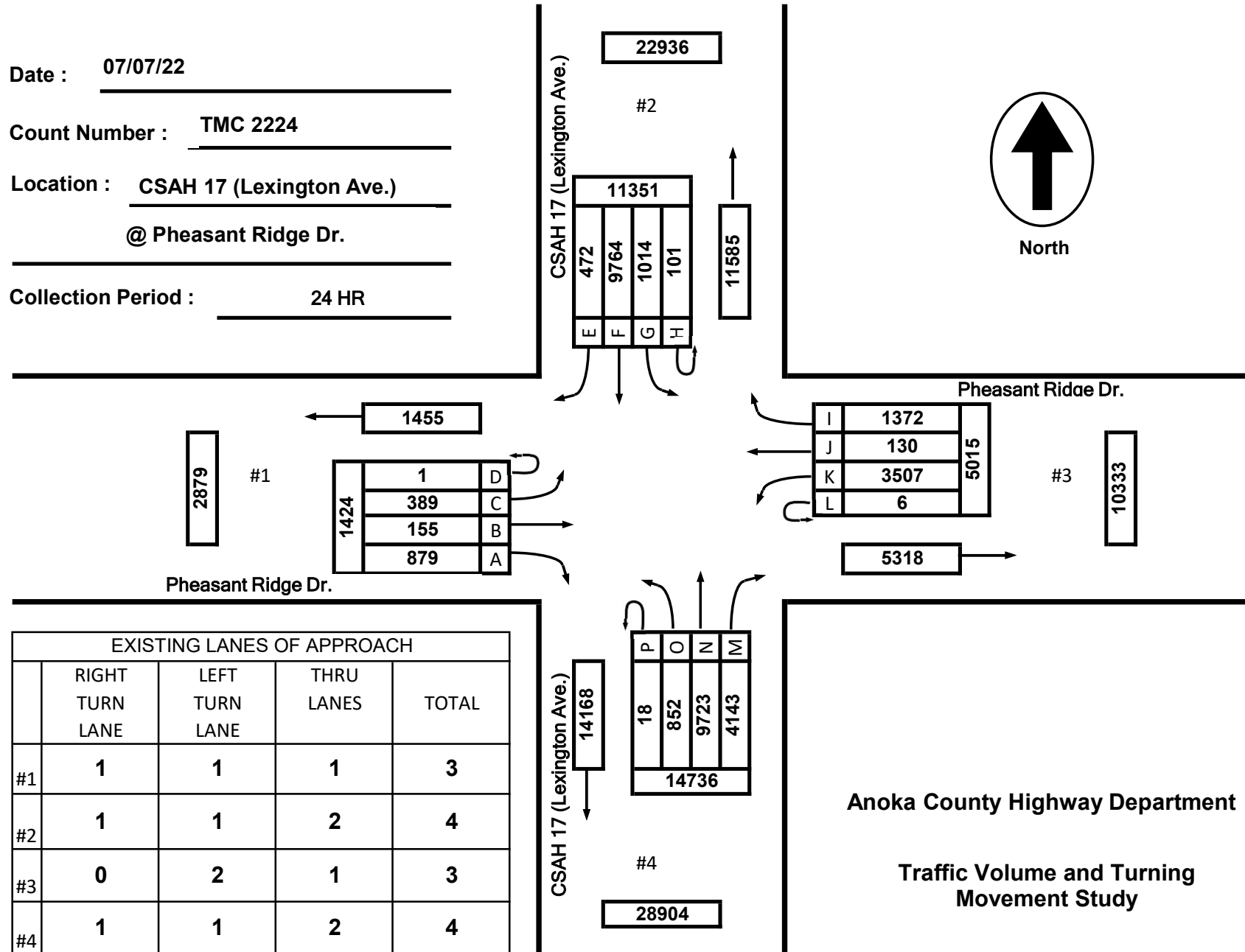


Date : 07/07/22

Count Number : TMC 2224

Location : CSAH 17 (Lexington Ave.)
@ Pheasant Ridge Dr.

Collection Period : 24 HR



Anoka County Highway Department

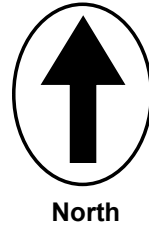
Traffic Volume and Turning Movement Study

Date : 07/07/22

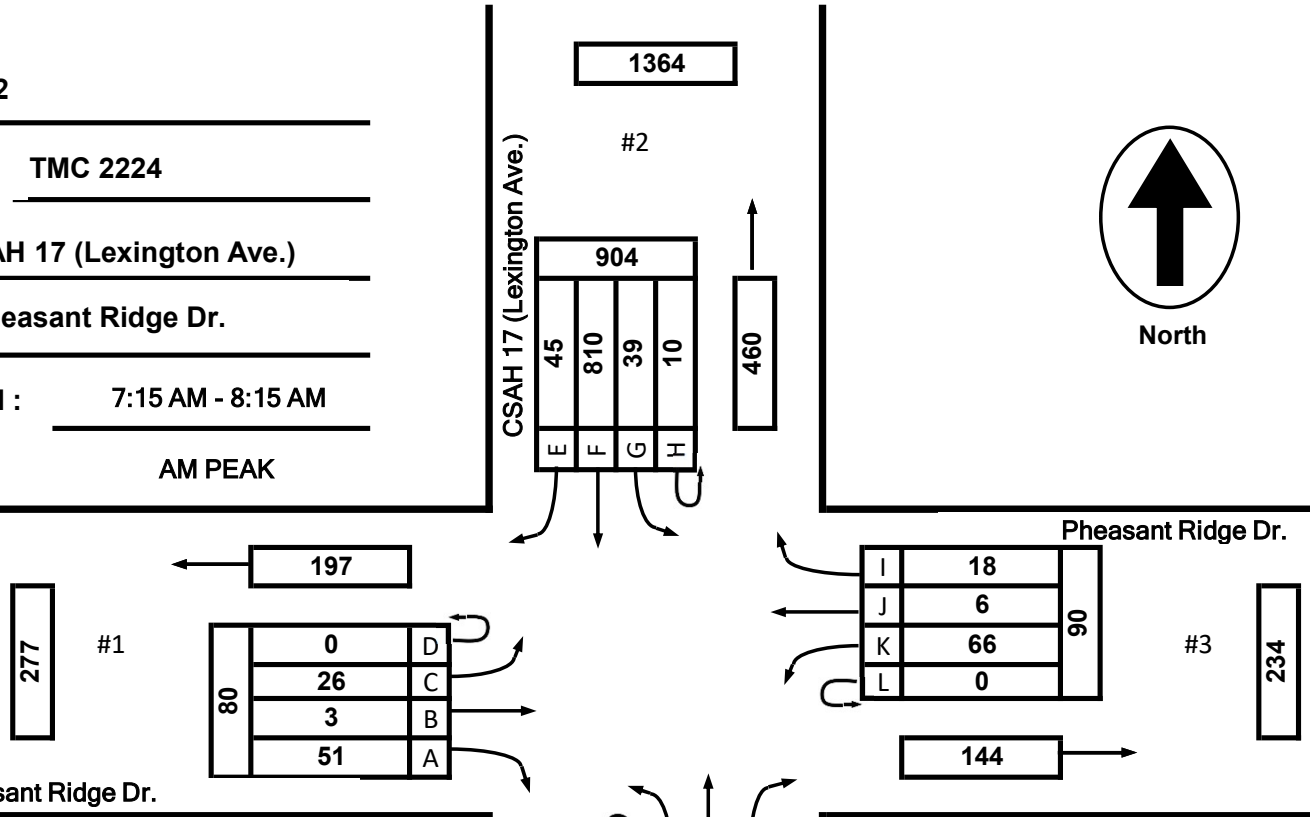
Count Number : TMC 2224

Location : CSAH 17 (Lexington Ave.)
@ Pheasant Ridge Dr.

Collection Period : 7:15 AM - 8:15 AM
AM PEAK



North



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	1	2	4
#3	0	2	1	3
#4	1	1	2	4

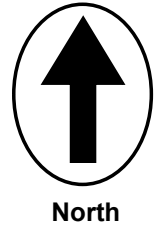
Anoka County Highway Department
Traffic Volume and Turning Movement Study

Date : 07/07/22

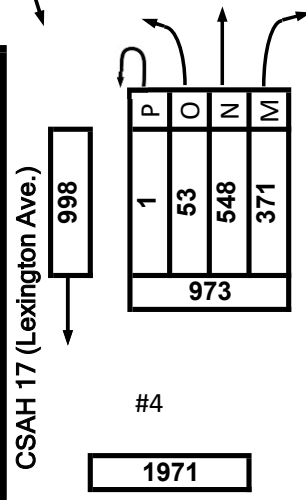
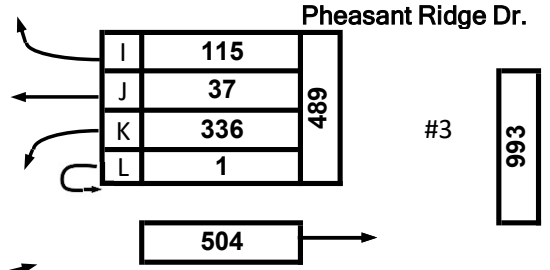
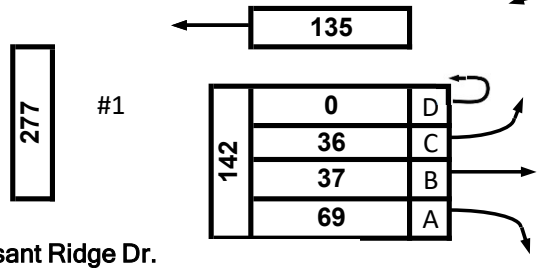
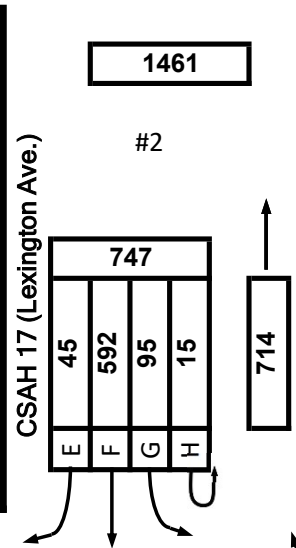
Count Number : TMC 2224

Location : CSAH 17 (Lexington Ave.)
@ Pheasant Ridge Dr.

Collection Period : 12 PM - 1 PM
MIDDAY PEAK



North



Pheasant Ridge Dr.

Pheasant Ridge Dr.

CSAH 17 (Lexington Ave.)

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	1	2	4
#3	0	2	1	3
#4	1	1	2	4

Anoka County Highway Department

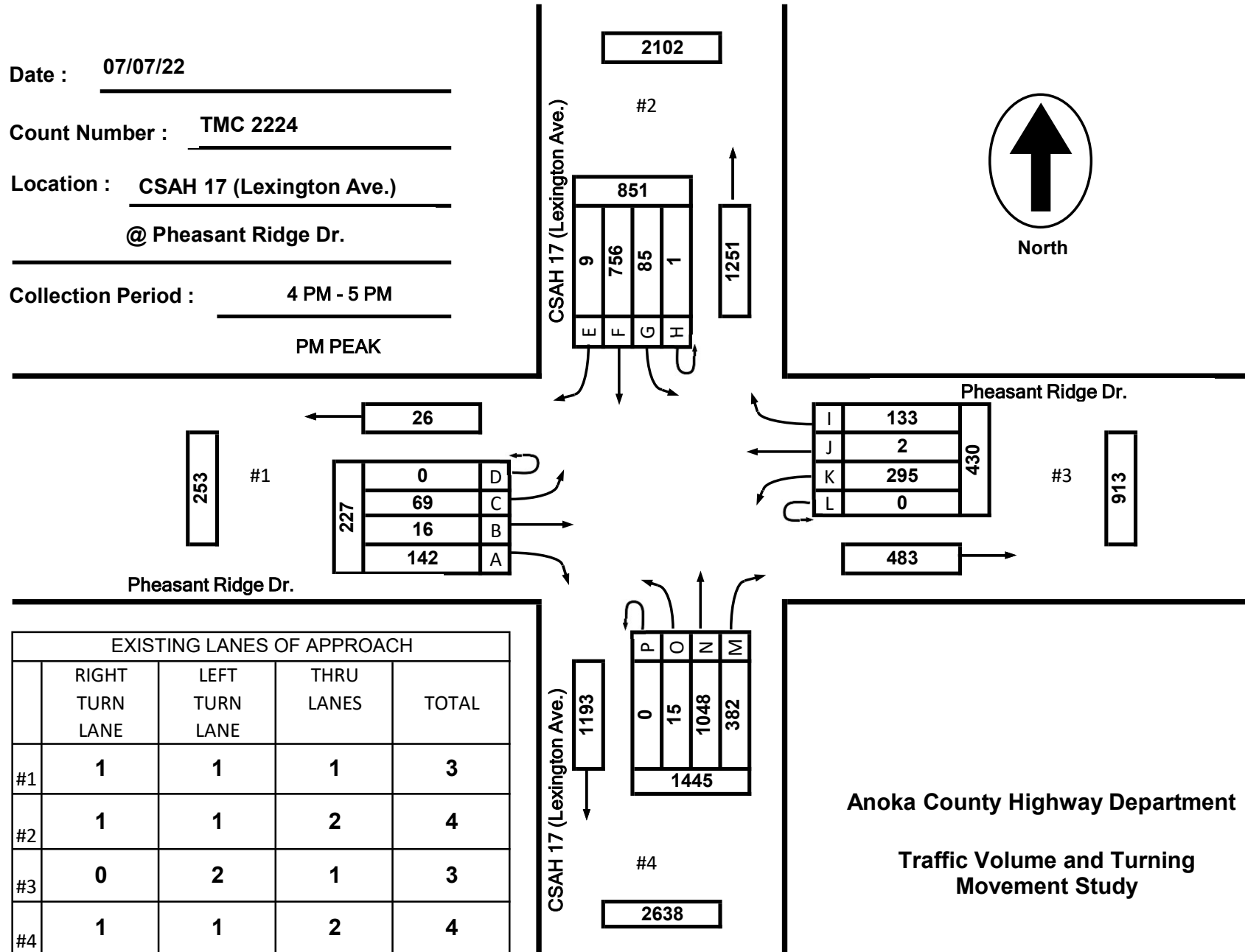
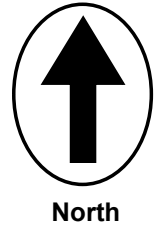
Traffic Volume and Turning Movement Study

Date : 07/07/22

Count Number : TMC 2224

Location : CSAH 17 (Lexington Ave.)
@ Pheasant Ridge Dr.

Collection Period : 4 PM - 5 PM
PM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#2	1	1	2	4
#3	0	2	1	3
#4	1	1	2	4

Anoka County Highway Department

Traffic Volume and Turning Movement Study



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 1

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						Pheasant Ridge Dr. Westbound						CSAH 17 Northbound						Pheasant Ridge Dr. Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
00:00	0	9	0	0	0	9	1	0	11	0	0	12	4	17	0	0	0	21	1	0	1	0	0	2	0	44	44
00:15	0	3	1	0	0	4	1	0	3	0	0	4	2	17	0	0	0	19	0	0	0	0	0	0	0	27	27
00:30	0	5	1	0	0	6	1	0	2	0	0	3	5	10	1	0	0	16	0	0	0	0	0	0	0	25	25
00:45	0	4	0	0	0	4	0	0	5	0	0	5	6	13	0	0	0	19	1	0	0	0	0	1	0	29	29
Total	0	21	2	0	0	23	3	0	21	0	0	24	17	57	1	0	0	75	2	0	1	0	0	3	0	125	125
01:00	0	5	2	0	0	7	1	0	6	0	0	7	1	11	0	0	0	12	0	2	0	0	0	2	0	28	28
01:15	0	11	1	0	0	12	1	1	3	0	0	5	2	11	1	0	0	14	2	0	0	0	0	2	0	33	33
01:30	0	6	2	0	0	8	4	0	2	0	0	6	2	7	0	0	0	9	1	0	0	0	0	1	0	24	24
01:45	0	4	0	0	0	4	0	0	3	0	0	3	0	7	1	0	0	8	4	1	4	0	1	9	1	24	25
Total	0	26	5	0	0	31	6	1	14	0	0	21	5	36	2	0	0	43	7	3	4	0	1	14	1	109	110
02:00	0	1	1	0	0	2	0	0	0	0	0	0	1	8	0	0	0	9	2	0	2	0	0	4	0	15	15
02:15	0	6	0	0	0	6	0	0	1	0	0	1	0	2	0	0	0	2	1	0	0	0	0	1	0	10	10
02:30	0	4	1	0	0	5	0	0	0	0	0	0	2	6	1	0	0	9	0	0	1	0	0	1	0	15	15
02:45	1	7	0	0	0	8	1	0	0	0	0	1	0	4	0	0	0	4	0	0	0	0	0	0	0	13	13
Total	1	18	2	0	0	21	1	0	1	0	0	2	3	20	1	0	0	24	3	0	3	0	0	6	0	53	53
03:00	0	8	0	0	0	8	1	0	0	0	0	1	1	4	0	0	0	5	0	0	0	0	0	0	0	14	14
03:15	0	6	0	0	0	6	0	0	1	0	0	1	0	4	0	0	0	4	1	1	1	0	0	3	0	14	14
03:30	2	7	0	0	0	9	1	0	1	0	0	2	1	8	1	0	0	10	0	0	2	0	0	2	0	23	23
03:45	1	20	0	0	0	21	0	1	0	0	0	1	0	2	1	0	0	3	0	0	0	0	0	0	0	25	25
Total	3	41	0	0	0	44	2	1	2	0	0	5	2	18	2	0	0	22	1	1	3	0	0	5	0	76	76
04:00	0	22	0	0	0	22	0	0	2	0	0	2	3	6	1	0	0	10	0	0	0	0	0	0	0	34	34
04:15	1	30	0	0	0	31	0	0	4	0	0	4	2	8	1	0	0	11	0	0	0	0	0	0	0	46	46
04:30	5	41	1	0	0	47	0	0	2	0	0	2	8	8	1	0	0	17	0	0	0	0	0	0	0	66	66
04:45	0	40	1	0	0	41	0	1	0	0	0	1	10	12	5	0	0	27	0	0	0	0	0	0	0	69	69
Total	6	133	2	0	0	141	0	1	8	0	0	9	23	34	8	0	0	65	0	0	0	0	0	0	0	215	215
05:00	5	51	1	0	0	57	1	0	1	0	0	2	5	13	3	0	0	21	0	0	0	0	0	0	0	80	80
05:15	8	98	3	0	0	109	1	0	1	0	0	2	4	12	8	1	0	25	2	0	0	0	0	2	0	138	138
05:30	11	133	4	0	0	148	0	0	4	0	1	4	9	44	21	0	1	74	2	0	1	0	0	3	2	229	231
05:45	16	112	3	0	0	131	1	0	2	0	0	3	16	60	26	0	0	102	5	0	0	0	0	5	0	241	241
Total	40	394	11	0	0	445	3	0	8	0	1	11	34	129	58	1	1	222	9	0	1	0	0	10	2	688	690



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 2

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						Pheasant Ridge Dr. Westbound						CSAH 17 Northbound						Pheasant Ridge Dr. Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
06:00	7	131	3	0	0	141	1	1	10	0	0	12	8	33	14	0	0	55	1	0	2	0	0	3	0	211	211
06:15	19	171	4	1	0	195	1	0	12	0	0	13	7	55	28	0	0	90	3	0	0	0	0	3	0	301	301
06:30	28	189	4	0	0	221	3	1	7	0	0	11	20	78	38	0	0	136	4	0	2	0	1	6	1	374	375
06:45	41	186	7	0	1	234	3	2	11	0	0	16	26	108	70	0	0	204	12	0	1	0	2	13	3	467	470
Total	95	677	18	1	1	791	8	4	40	0	0	52	61	274	150	0	0	485	20	0	5	0	3	25	4	1353	1357
07:00	23	195	8	2	0	228	3	1	17	0	0	21	14	86	19	0	0	119	9	0	5	0	1	14	1	382	383
07:15	13	200	11	1	0	225	3	0	10	0	0	13	19	92	33	1	0	145	19	1	12	0	0	32	0	415	415
07:30	12	244	6	2	1	264	7	0	19	0	0	26	17	93	30	0	0	140	20	0	10	0	1	30	2	460	462
07:45	12	201	7	4	0	224	4	3	18	0	0	25	35	129	41	0	0	205	7	1	3	0	0	11	0	465	465
Total	60	840	32	9	1	941	17	4	64	0	0	85	85	400	123	1	0	609	55	2	30	0	2	87	3	1722	1725
08:00	8	165	15	3	0	191	4	3	19	0	0	26	31	92	42	0	0	165	5	1	1	0	0	7	0	389	389
08:15	8	172	12	5	0	197	3	0	23	0	0	26	26	94	22	0	0	142	3	0	2	0	0	5	0	370	370
08:30	6	189	9	1	0	205	7	1	20	0	0	28	31	107	19	0	0	157	11	1	1	0	0	13	0	403	403
08:45	7	155	8	2	0	172	5	0	21	0	0	26	37	86	17	0	0	140	5	0	1	0	0	6	0	344	344
Total	29	681	44	11	0	765	19	4	83	0	0	106	125	379	100	0	0	604	24	2	5	0	0	31	0	1506	1506
09:00	4	154	10	3	0	171	9	1	27	0	0	37	31	108	12	0	0	151	9	0	1	0	1	10	1	369	370
09:15	7	168	14	1	0	190	4	0	30	0	0	34	40	100	9	0	0	149	8	2	2	0	0	12	0	385	385
09:30	5	135	11	3	0	154	20	1	25	1	0	47	47	111	9	0	0	167	11	0	2	0	0	13	0	381	381
09:45	6	161	19	7	1	193	7	2	35	0	0	44	66	92	11	0	0	169	11	2	1	0	0	14	1	420	421
Total	22	618	54	14	1	708	40	4	117	1	0	162	184	411	41	0	0	636	39	4	6	0	1	49	2	1555	1557
10:00	1	137	8	2	0	148	13	0	45	0	0	58	49	105	8	0	0	162	8	1	1	0	0	10	0	378	378
10:15	3	162	15	1	0	181	9	1	34	0	0	44	70	113	10	1	0	194	11	0	0	0	0	11	0	430	430
10:30	4	152	11	2	0	169	18	0	40	0	0	58	43	94	8	0	0	145	14	1	2	0	1	17	1	389	390
10:45	1	150	22	1	0	174	21	1	49	0	0	71	69	102	13	0	0	184	5	1	1	0	3	7	3	436	439
Total	9	601	56	6	0	672	61	2	168	0	0	231	231	414	39	1	0	685	38	3	4	0	4	45	4	1633	1637
11:00	3	147	19	1	0	170	24	3	56	1	0	84	90	110	18	1	0	219	13	5	9	0	0	27	0	500	500
11:15	3	136	18	1	0	158	21	3	67	0	0	91	85	110	7	0	0	202	14	8	3	0	1	25	1	476	477
11:30	4	132	24	2	0	162	25	8	71	0	0	104	86	132	5	0	0	223	10	9	7	0	0	26	0	515	515
11:45	8	131	24	2	0	165	26	9	63	0	0	98	88	136	8	1	0	233	16	8	8	0	1	32	1	528	529
Total	18	546	85	6	0	655	96	23	257	1	0	377	349	488	38	2	0	877	53	30	27	0	2	110	2	2019	2021
12:00	8	143	34	2	0	187	27	16	78	1	0	122	86	134	13	1	0	234	31	20	13	0	3	64	3	607	610
12:15	11	150	14	5	0	180	38	9	80	0	0	127	84	142	15	0	0	241	14	9	9	0	1	32	1	580	581
12:30	10	153	24	7	0	194	25	6	80	0	0	111	100	139	10	0	0	249	10	5	10	0	0	25	0	579	579



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 3

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						Pheasant Ridge Dr. Westbound						CSAH 17 Northbound						Pheasant Ridge Dr. Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
12:45	16	146	23	1	0	186	25	6	98	0	0	129	101	133	15	0	0	249	14	3	4	0	1	21	1	585	586
Total	45	592	95	15	0	747	115	37	336	1	0	489	371	548	53	1	0	973	69	37	36	0	5	142	5	2351	2356
13:00	8	115	21	4	0	148	33	1	75	0	0	109	84	143	11	0	0	238	8	2	3	0	0	13	0	508	508
13:15	7	118	18	1	0	144	23	4	68	0	1	95	73	163	12	0	0	248	11	3	3	0	0	17	1	504	505
13:30	5	143	20	3	0	171	23	2	69	0	0	94	99	153	5	0	1	257	10	1	1	0	0	12	1	534	535
13:45	7	154	17	1	1	179	22	0	65	0	0	87	86	125	8	1	3	220	6	3	2	0	1	11	5	497	502
Total	27	530	76	9	1	642	101	7	277	0	1	385	342	584	36	1	4	963	35	9	9	0	1	53	7	2043	2050
14:00	4	130	16	1	0	151	41	1	80	0	0	122	79	148	15	1	0	243	11	1	3	0	2	15	2	531	533
14:15	14	144	27	2	2	187	26	2	71	1	0	100	73	166	13	0	0	252	7	3	1	0	3	11	5	550	555
14:30	9	150	13	2	0	174	35	7	66	0	0	108	84	196	27	1	0	308	9	3	5	0	0	17	0	607	607
14:45	12	134	26	4	0	176	30	3	59	0	0	92	87	212	22	0	0	321	11	0	7	0	0	18	0	607	607
Total	39	558	82	9	2	688	132	13	276	1	0	422	323	722	77	2	0	1124	38	7	16	0	5	61	7	2295	2302
15:00	13	128	14	2	0	157	23	5	68	0	0	96	94	177	11	0	0	282	26	4	9	0	0	39	0	574	574
15:15	3	130	17	1	1	151	31	0	67	0	0	98	78	216	7	0	0	301	61	1	32	1	0	95	1	645	646
15:30	10	166	13	0	2	189	30	1	68	0	2	99	74	256	11	0	0	341	77	9	47	0	2	133	6	762	768
15:45	4	150	20	1	0	175	30	1	63	0	0	94	108	234	14	0	0	356	32	2	12	0	2	46	2	671	673
Total	30	574	64	4	3	672	114	7	266	0	2	387	354	883	43	0	0	1280	196	16	100	1	4	313	9	2652	2661
16:00	2	195	22	0	2	219	30	1	69	0	0	100	85	268	5	0	0	358	38	1	18	0	2	57	4	734	738
16:15	4	187	25	0	0	216	36	0	75	0	0	111	103	273	4	0	0	380	22	6	13	0	0	41	0	748	748
16:30	1	185	23	0	0	209	37	1	68	0	0	106	96	253	4	0	0	353	62	7	25	0	0	94	0	762	762
16:45	2	189	15	1	1	207	30	0	83	0	0	113	98	254	2	0	0	354	20	2	13	0	1	35	2	709	711
Total	9	756	85	1	3	851	133	2	295	0	0	430	382	1048	15	0	0	1445	142	16	69	0	3	227	6	2953	2959
17:00	0	164	18	0	0	182	33	0	91	0	0	124	96	276	2	1	0	375	25	1	13	0	0	39	0	720	720
17:15	1	151	22	1	0	175	28	0	77	0	0	105	110	258	1	0	0	369	9	1	2	0	1	12	1	661	662
17:30	0	139	28	0	1	167	49	0	72	0	0	121	99	222	2	1	0	324	10	2	4	0	1	16	2	628	630
17:45	1	146	26	2	1	175	46	1	59	0	0	106	103	209	1	0	0	313	7	0	1	0	2	8	3	602	605
Total	2	600	94	3	2	699	156	1	299	0	0	456	408	965	6	2	0	1381	51	4	20	0	4	75	6	2611	2617
18:00	1	134	20	0	0	155	27	0	81	0	0	108	71	194	0	1	0	266	6	1	0	0	0	7	0	536	536
18:15	0	133	16	1	2	150	23	1	66	0	0	90	91	180	1	2	0	274	4	0	0	0	0	4	2	518	520
18:30	1	128	11	2	1	142	27	1	61	0	0	89	77	143	2	0	0	222	2	0	4	0	0	6	1	459	460
18:45	0	115	18	1	0	134	29	0	69	0	0	98	61	148	1	0	0	210	2	0	0	0	0	2	0	444	444
Total	2	510	65	4	3	581	106	2	277	0	0	385	300	665	4	3	0	972	14	1	4	0	0	19	3	1957	1960



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 4

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						Pheasant Ridge Dr. Westbound						CSAH 17 Northbound						Pheasant Ridge Dr. Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
19:00	1	114	13	1	0	129	29	0	70	0	0	99	75	110	1	0	0	186	4	1	0	0	0	5	0	419	419
19:15	0	103	15	2	1	120	23	0	59	0	0	82	71	145	1	0	0	217	3	0	1	0	1	4	2	423	425
19:30	1	94	13	0	0	108	23	1	72	0	0	96	38	138	1	0	0	177	2	6	3	0	0	11	0	392	392
19:45	0	76	18	0	0	94	27	2	58	1	0	88	55	134	3	1	3	193	1	0	1	0	0	2	3	377	380
Total	2	387	59	3	1	451	102	3	259	1	0	365	239	527	6	1	3	773	10	7	5	0	1	22	5	1611	1616
20:00	0	92	8	1	0	101	19	1	49	0	0	69	37	119	2	1	0	159	1	0	1	0	0	2	0	331	331
20:15	1	75	14	2	0	92	8	0	67	0	0	75	33	112	0	0	0	145	0	0	0	0	1	0	1	312	313
20:30	0	59	9	0	1	68	17	1	42	0	0	60	32	103	2	0	1	137	3	3	0	0	1	6	3	271	274
20:45	0	70	5	1	2	76	15	2	50	0	0	67	41	100	3	1	0	145	2	1	1	0	2	4	4	292	296
Total	1	296	36	4	3	337	59	4	208	0	0	271	143	434	7	2	1	586	6	4	2	0	4	12	8	1206	1214
21:00	1	78	8	0	0	87	16	4	35	0	0	55	27	98	1	1	0	127	1	4	4	0	0	9	0	278	278
21:15	2	53	6	1	0	62	8	4	27	0	0	39	29	71	0	0	0	100	2	2	0	0	0	4	0	205	205
21:30	1	46	6	0	0	53	14	0	41	0	0	55	21	89	2	0	0	112	0	0	0	0	0	0	0	220	220
21:45	0	41	2	0	0	43	13	0	27	1	0	41	11	88	2	0	0	101	1	0	3	0	0	4	0	189	189
Total	4	218	22	1	0	245	51	8	130	1	0	190	88	346	5	1	0	440	4	6	7	0	0	17	0	892	892
22:00	0	31	2	1	0	34	11	0	22	0	0	33	11	59	2	0	0	72	0	0	0	0	0	0	0	139	139
22:15	1	32	8	0	0	41	10	1	19	0	0	30	14	71	3	0	0	88	2	0	0	0	0	2	0	161	161
22:30	5	24	3	0	0	32	7	1	17	0	0	25	12	51	12	0	0	75	2	0	0	0	0	2	0	134	134
22:45	12	16	0	0	0	28	2	0	10	0	0	12	13	47	13	0	0	73	1	0	1	0	0	2	0	115	115
Total	18	103	13	1	0	135	30	2	68	0	0	100	50	228	30	0	0	308	5	0	1	0	0	6	0	549	549
23:00	4	6	6	0	0	16	6	0	9	0	0	15	6	34	2	0	0	42	2	0	0	0	0	2	0	75	75
23:15	3	12	2	0	0	17	6	0	11	0	0	17	7	37	2	0	0	46	14	1	5	0	0	20	0	100	100
23:30	2	11	2	0	1	15	2	0	9	0	0	11	7	20	1	0	0	28	42	2	23	0	1	67	2	121	123
23:45	1	15	2	0	0	18	3	0	4	0	0	7	4	22	2	0	0	28	0	0	3	0	0	3	0	56	56
Total	10	44	12	0	1	66	17	0	33	0	0	50	24	113	7	0	0	144	58	3	31	0	1	92	2	352	354
Grand Total	472	9764	1014	101	22	11351	1372	130	3507	6	4	5015	4143	9723	852	18	9	14736	879	155	389	1	41	1424	76	32526	32602
Apprch %	4.2	86	8.9	0.9			27.4	2.6	69.9	0.1			28.1	66	5.8	0.1		61.7	10.9	27.3	0.1						
Total %	1.5	30	3.1	0.3		34.9	4.2	0.4	10.8	0		15.4	12.7	29.9	2.6	0.1		45.3	2.7	0.5	1.2	0		4.4	0.2	99.8	
Cars +	457	9577	1008	101		11165	1365	125	3483	6		4983	4106	9542	781	18		14456	798	153	380	1		1373	0	0	31977
% Cars +	96.8	98.1	99.4	100	100	98.2	99.5	96.2	99.3	100	100	99.3	99.1	98.1	91.7	100	100	98	90.8	98.7	97.7	100	100	93.7	0	0	98.1
Trucks	15	187	6	0		208	7	5	24	0		36	37	181	71	0		289	81	2	9	0		92	0	0	625
% Trucks	3.2	1.9	0.6	0	0	1.8	0.5	3.8	0.7	0	0	0.7	0.9	1.9	8.3	0	0	2	9.2	1.3	2.3	0	0	6.3	0	0	1.9



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 5

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Start Time	CSAH 17 Southbound					Pheasant Ridge Dr. Westbound					CSAH 17 Northbound					Pheasant Ridge Dr. Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
Peak Hour Analysis From 00:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	13	200	11	1	225	3	0	10	0	13	19	92	33	1	145	19	1	12	0	32	415
07:30	12	244	6	2	264	7	0	19	0	26	17	93	30	0	140	20	0	10	0	30	460
07:45	12	201	7	4	224	4	3	18	0	25	35	129	41	0	205	7	1	3	0	11	465
08:00	8	165	15	3	191	4	3	19	0	26	31	92	42	0	165	5	1	1	0	7	389
Total Volume	45	810	39	10	904	18	6	66	0	90	102	406	146	1	655	51	3	26	0	80	1729
% App. Total	5	89.6	4.3	1.1		20	6.7	73.3	0		15.6	62	22.3	0.2		63.8	3.8	32.5	0		
PHF	.865	.830	.650	.625	.856	.643	.500	.868	.000	.865	.729	.787	.869	.250	.799	.638	.750	.542	.000	.625	.930

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	8	143	34	2	187	27	16	78	1	122	86	134	13	1	234	31	20	13	0	64	607
12:15	11	150	14	5	180	38	9	80	0	127	84	142	15	0	241	14	9	9	0	32	580
12:30	10	153	24	7	194	25	6	80	0	111	100	139	10	0	249	10	5	10	0	25	579
12:45	16	146	23	1	186	25	6	98	0	129	101	133	15	0	249	14	3	4	0	21	585
Total Volume	45	592	95	15	747	115	37	336	1	489	371	548	53	1	973	69	37	36	0	142	2351
% App. Total	6	79.3	12.7	2		23.5	7.6	68.7	0.2		38.1	56.3	5.4	0.1		48.6	26.1	25.4	0		
PHF	.703	.967	.699	.536	.963	.757	.578	.857	.250	.948	.918	.965	.883	.250	.977	.556	.463	.692	.000	.555	.968

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	2	195	22	0	219	30	1	69	0	100	85	268	5	0	358	38	1	18	0	57	734
16:15	4	187	25	0	216	36	0	75	0	111	103	273	4	0	380	22	6	13	0	41	748
16:30	1	185	23	0	209	37	1	68	0	106	96	253	4	0	353	62	7	25	0	94	762
16:45	2	189	15	1	207	30	0	83	0	113	98	254	2	0	354	20	2	13	0	35	709
Total Volume	9	756	85	1	851	133	2	295	0	430	382	1048	15	0	1445	142	16	69	0	227	2953
% App. Total	1.1	88.8	10	0.1		30.9	0.5	68.6	0		26.4	72.5	1	0		62.6	7	30.4	0		
PHF	.563	.969	.850	.250	.971	.899	.500	.889	.000	.951	.927	.960	.750	.000	.951	.573	.571	.690	.000	.604	.969



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 1

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Trucks

Start Time	CSAH 17 Southbound					Pheasant Ridge Dr. Westbound					CSAH 17 Northbound					Pheasant Ridge Dr. Eastbound					Int. Total	
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total		
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	2
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	2
04:00	0	1	0	0	1	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	3
04:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
04:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	0	1	1	0	2	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	6
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	3
05:30	0	2	0	0	2	0	0	1	0	1	0	1	0	1	1	0	0	0	0	1	0	5
05:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	0	4	0	0	1	0	1	1	1	1	0	3	1	0	0	0	1	0	9
06:00	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
06:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	4	0	0	4	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	7
06:45	0	5	0	0	5	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	10
Total	0	12	0	0	12	0	0	1	0	1	0	5	2	0	7	1	0	0	0	1	0	21
07:00	0	8	0	0	8	1	0	0	0	1	1	4	1	0	6	1	0	0	0	1	0	16
07:15	0	0	1	0	1	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	0	7
07:30	0	3	0	0	3	0	0	1	0	1	1	3	1	0	5	1	0	0	0	1	0	10
07:45	0	6	0	0	6	1	0	0	0	1	1	5	1	0	7	1	1	0	0	2	0	16
Total	0	17	1	0	18	2	0	1	0	3	3	16	4	0	23	4	1	0	0	5	0	49
08:00	0	4	0	0	4	1	1	1	0	3	3	3	0	0	6	0	0	0	0	0	0	13
08:15	0	2	0	0	2	0	0	0	0	0	0	3	4	0	7	0	0	0	0	0	0	9
08:30	0	4	0	0	4	0	0	0	0	0	1	5	1	0	7	4	0	0	0	4	0	15
08:45	0	10	0	0	10	0	0	2	0	2	1	6	2	0	9	0	0	0	0	0	0	21
Total	0	20	0	0	20	1	1	3	0	5	5	17	7	0	29	4	0	0	0	4	0	58
09:00	0	6	0	0	6	1	0	0	0	1	0	1	3	0	4	2	0	0	0	2	0	13



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 2

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Trucks

Start Time	CSAH 17 Southbound					Pheasant Ridge Dr. Westbound					CSAH 17 Northbound					Pheasant Ridge Dr. Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
09:15	1	5	0	0	6	0	0	1	0	1	0	4	1	0	5	3	0	0	0	3	15
09:30	0	4	0	0	4	0	0	0	0	0	1	6	3	0	10	0	0	0	0	0	14
09:45	0	5	0	0	5	0	0	0	0	0	1	4	4	0	9	0	1	0	0	1	15
Total	1	20	0	0	21	1	0	1	0	2	2	15	11	0	28	5	1	0	0	6	57
10:00	0	2	0	0	2	0	0	1	0	1	0	5	1	0	6	6	0	0	0	6	15
10:15	0	8	0	0	8	0	1	3	0	4	3	3	1	0	7	0	0	0	0	0	19
10:30	0	2	0	0	2	0	0	0	0	0	1	7	3	0	11	3	0	0	0	3	16
10:45	1	3	0	0	4	0	0	1	0	1	1	7	4	0	12	2	0	0	0	2	19
Total	1	15	0	0	16	0	1	5	0	6	5	22	9	0	36	11	0	0	0	11	69
11:00	1	1	0	0	2	0	1	0	0	1	0	3	3	0	6	4	0	3	0	7	16
11:15	1	4	0	0	5	1	0	0	0	1	3	1	4	0	8	3	0	0	0	3	17
11:30	2	5	0	0	7	1	0	0	0	1	1	2	0	0	3	3	0	1	0	4	15
11:45	0	5	0	0	5	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	13
Total	4	15	0	0	19	2	1	0	0	3	4	12	8	0	24	11	0	4	0	15	61
12:00	0	3	0	0	3	0	0	0	0	0	0	4	4	0	8	1	0	0	0	1	12
12:15	1	8	0	0	9	0	0	0	0	0	3	3	1	0	7	4	0	0	0	4	20
12:30	0	11	0	0	11	0	0	0	0	0	2	3	2	0	7	2	0	1	0	3	21
12:45	0	1	0	0	1	0	0	0	0	0	0	6	1	0	7	4	0	1	0	5	13
Total	1	23	0	0	24	0	0	0	0	0	5	16	8	0	29	11	0	2	0	13	66
13:00	0	3	0	0	3	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	11
13:15	0	6	0	0	6	0	0	0	0	0	0	6	1	0	7	7	0	0	0	7	20
13:30	0	2	0	0	2	0	0	1	0	1	2	3	1	0	6	1	0	0	0	1	10
13:45	2	1	1	0	4	0	0	1	0	1	1	3	1	0	5	1	0	0	0	1	11
Total	2	12	1	0	15	0	0	2	0	2	3	17	5	0	25	10	0	0	0	10	52
14:00	0	4	1	0	5	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	9
14:15	3	3	0	0	6	0	0	2	0	2	0	2	1	0	3	2	0	1	0	3	14
14:30	0	4	0	0	4	0	2	0	0	2	1	4	1	0	6	3	0	0	0	3	15
14:45	1	2	1	0	4	0	0	1	0	1	0	2	1	0	3	3	0	0	0	3	11
Total	4	13	2	0	19	0	2	4	0	6	1	10	4	0	15	8	0	1	0	9	49
15:00	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	6
15:15	0	3	0	0	3	0	0	0	0	0	1	2	1	0	4	2	0	0	0	2	9
15:30	1	2	0	0	3	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	10
15:45	0	1	0	0	1	0	0	1	0	1	0	6	1	0	7	1	0	1	0	2	11
Total	1	9	0	0	10	0	0	1	0	1	1	17	2	0	20	4	0	1	0	5	36
16:00	0	4	0	0	4	0	0	0	0	0	0	2	4	0	6	0	0	0	0	0	10
16:15	1	0	0	0	1	0	0	0	0	0	1	4	1	0	6	2	0	0	0	2	9
16:30	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	1	0	0	0	1	5
16:45	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	3	0	0	0	3	8
Total	1	7	0	0	8	0	0	1	0	1	1	10	6	0	17	6	0	0	0	6	32
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	3
17:15	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
17:30	0	1	0	0	1	1	0	0	0	1	0	4	1	0	5	1	0	0	0	1	8
17:45	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	7
Total	0	5	0	0	5	1	0	0	0	1	1	10	2	0	13	1	0	1	0	2	21
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
18:30	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
18:45	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
Total	0	6	1	0	7	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	11



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2224
 Site Code :
 Start Date : 07/07/2022
 Page No : 3

Weather: Warm & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Trucks

Start Time	CSAH 17 Southbound					Pheasant Ridge Dr. Westbound					CSAH 17 Northbound					Pheasant Ridge Dr. Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
19:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
19:15	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
19:45	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0
20:00	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
20:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	2	0	0	0	2	6
21:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0
Grand Total	15	187	6	0	208	7	5	24	0	36	37	181	71	0	289	81	2	9	0	92	625
Apprch %	7.2	89.9	2.9	0		19.4	13.9	66.7	0		12.8	62.6	24.6	0		88	2.2	9.8	0		
Total %	2.4	29.9	1	0	33.3	1.1	0.8	3.8	0	5.8	5.9	29	11.4	0	46.2	13	0.3	1.4	0	14.7	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17

Number of Lanes : 2+

Total Approach Volume: 14,736

Southbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 11,351

Minor Street Approaches

Eastbound: Pheasant Ridge Dr.

Number of Lanes :2+

Total Approach Volume: 1,424

Westbound: Pheasant Ridge Dr.

Number of Lanes :2+

Total Approach Volume: 5,015

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 13 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Satisfied

Required volumes reached for 15 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Satisfied

Required 1A volumes reached for 14 hours, 8 are needed

Required 1B volumes reached for 16 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Satisfied

Number of hours (15) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Satisfied

Number of one hour periods (49) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Satisfied

Volumes exceed minimums for at least one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Evaluated

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

13 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **2 or more**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **420**

 Veh/Hr Minor = **140**

Time	Major Road CSAH 17					Minor Road Pheasant Ridge Dr.		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
15:45 - 16:45	1447	+	819	=	2266	238	411	Yes
16:45 - 17:45	1422	+	731	=	2153	102	463	Yes
14:45 - 15:45	1245	+	673	=	1918	285	385	Yes
13:45 - 14:45	1023	+	691	=	1714	54	417	Yes
17:45 - 18:45	1075	+	622	=	1697	25	393	Yes
11:45 - 12:45	957	+	726	=	1683	153	458	Yes
12:45 - 13:45	992	+	649	=	1641	63	427	Yes
10:45 - 11:45	828	+	664	=	1492	85	350	Yes
09:45 - 10:45	670	+	691	=	1361	52	204	Yes
08:45 - 09:45	607	+	687	=	1294	41	144	Yes
18:45 - 19:45	790	+	491	=	1281	22	375	Yes
19:45 - 20:45	634	+	355	=	989	10	292	Yes
20:45 - 21:45	484	+	278	=	762	17	216	Yes
07:15 - 08:15	655	+	904	=	1559	80	90	No
06:45 - 07:45	608	+	951	=	1559	89	76	No
07:00 - 08:00	609	+	941	=	1550	87	85	No
07:30 - 08:30	652	+	876	=	1528	53	103	No
06:30 - 07:30	604	+	908	=	1512	65	61	No
07:45 - 08:45	669	+	817	=	1486	36	105	No
06:15 - 07:15	549	+	878	=	1427	36	61	No
08:00 - 09:00	604	+	765	=	1369	31	106	No
08:30 - 09:30	597	+	738	=	1335	41	125	No
08:15 - 09:15	590	+	745	=	1335	34	117	No
06:00 - 07:00	485	+	791	=	1276	25	52	No
05:45 - 06:45	383		688		1071	17	39	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

15 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **2 or more**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **630**
 Veh/Hr Minor = **70**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 17					Pheasant Ridge Dr.		
15:45 - 16:45	1447	+	819	=	2266	238	411	Yes
16:45 - 17:45	1422	+	731	=	2153	102	463	Yes
14:45 - 15:45	1245	+	673	=	1918	285	385	Yes
13:45 - 14:45	1023	+	691	=	1714	54	417	Yes
17:45 - 18:45	1075	+	622	=	1697	25	393	Yes
11:45 - 12:45	957	+	726	=	1683	153	458	Yes
12:45 - 13:45	992	+	649	=	1641	63	427	Yes
06:45 - 07:45	608	+	951	=	1559	89	76	Yes
10:45 - 11:45	828	+	664	=	1492	85	350	Yes
07:45 - 08:45	669	+	817	=	1486	36	105	Yes
09:45 - 10:45	670	+	691	=	1361	52	204	Yes
08:45 - 09:45	607	+	687	=	1294	41	144	Yes
18:45 - 19:45	790	+	491	=	1281	22	375	Yes
19:45 - 20:45	634	+	355	=	989	10	292	Yes
20:45 - 21:45	484	+	278	=	762	17	216	Yes
06:30 - 07:30	604	+	908	=	1512	65	61	No
06:15 - 07:15	549	+	878	=	1427	36	61	No
06:00 - 07:00	485	+	791	=	1276	25	52	No
05:45 - 06:45	383	+	688	=	1071	17	39	No
05:30 - 06:30	321	+	615	=	936	14	32	No
05:15 - 06:15	256	+	529	=	785	13	21	No
05:00 - 06:00	222	+	445	=	667	10	11	No
04:45 - 05:45	147	+	355	=	502	5	9	No
21:45 - 22:45	336	+	150	=	486	8	129	No
22:00 - 23:00	308		135		443	6	100	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

14 hours meet 1A minimums.
16 hours meet 1B minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **2 or more**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **336 504**

Veh/Hr Minor = **112 56**

Major Road CSAH 17

Minor Road Pheasant Ridge Dr.

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:15 - 17:15	1462	+	814	=	2276	209	454	Yes
15:15 - 16:15	1356	+	734	=	2090	331	391	Yes
17:15 - 18:15	1272	+	672	=	1944	43	440	Yes
14:15 - 15:15	1163	+	694	=	1857	85	396	Yes
12:15 - 13:15	977	+	708	=	1685	91	476	Yes
13:15 - 14:15	968	+	645	=	1613	55	398	Yes
11:15 - 12:15	892	+	672	=	1564	147	415	Yes
18:15 - 19:15	892	+	555	=	1447	17	376	Yes
10:15 - 11:15	742	+	694	=	1436	62	257	Yes
08:15 - 09:15	590	+	745	=	1335	34	117	Yes
09:15 - 10:15	647	+	685	=	1332	49	183	Yes
19:15 - 20:15	746		423		1169	19	335	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:15 - 17:15	1462	+	814	=	2276	209	454	Yes
15:15 - 16:15	1356	+	734	=	2090	331	391	Yes
17:15 - 18:15	1272	+	672	=	1944	43	440	Yes
14:15 - 15:15	1163	+	694	=	1857	85	396	Yes
12:15 - 13:15	977	+	708	=	1685	91	476	Yes
13:15 - 14:15	968	+	645	=	1613	55	398	Yes
11:15 - 12:15	892	+	672	=	1564	147	415	Yes
07:15 - 08:15	655	+	904	=	1559	80	90	Yes
18:15 - 19:15	892	+	555	=	1447	17	376	Yes
10:15 - 11:15	742	+	694	=	1436	62	257	Yes
06:15 - 07:15	549	+	878	=	1427	36	61	Yes
08:15 - 09:15	590		745		1335	34	117	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

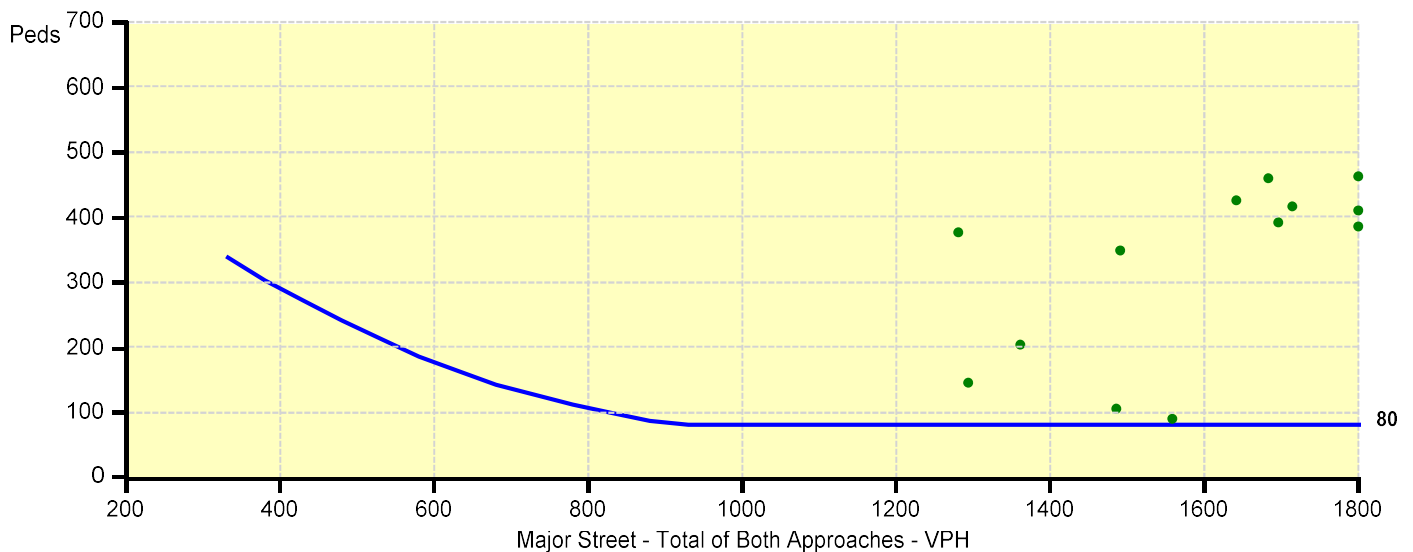
Summary

15 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **2 or more**

Time	Major Road CSAH 17					Minor Road Pheasant Ridge Dr.		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
15:45 - 16:45	1447	+	819	=	2266	238	411	Yes
16:45 - 17:45	1422	+	731	=	2153	102	463	Yes
14:45 - 15:45	1245	+	673	=	1918	285	385	Yes
13:45 - 14:45	1023	+	691	=	1714	54	417	Yes
17:45 - 18:45	1075	+	622	=	1697	25	393	Yes
11:45 - 12:45	957	+	726	=	1683	153	458	Yes
12:45 - 13:45	992	+	649	=	1641	63	427	Yes
06:45 - 07:45	608	+	951	=	1559	89	76	Yes
10:45 - 11:45	828	+	664	=	1492	85	350	Yes
07:45 - 08:45	669	+	817	=	1486	36	105	Yes
09:45 - 10:45	670	+	691	=	1361	52	204	Yes
08:45 - 09:45	607		687		1294	41	144	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

Summary

53 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = **True**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **2 or more**

Time	Major Road CSAH 17				Total	Minor Road Pheasant Ridge Dr.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	1445	+	851	=	2296	227	430	Yes
16:15 - 17:15	1462	+	814	=	2276	209	454	Yes
15:45 - 16:45	1447	+	819	=	2266	238	411	Yes
15:30 - 16:30	1435	+	799	=	2234	277	404	Yes
16:30 - 17:30	1451	+	773	=	2224	180	448	Yes
16:45 - 17:45	1422	+	731	=	2153	102	463	Yes
15:15 - 16:15	1356	+	734	=	2090	331	391	Yes
17:00 - 18:00	1381	+	699	=	2080	75	456	Yes
15:00 - 16:00	1280	+	672	=	1952	313	387	Yes
17:15 - 18:15	1272	+	672	=	1944	43	440	Yes
14:45 - 15:45	1245	+	673	=	1918	285	385	Yes
14:30 - 15:30	1212		658		1870	169	394	Yes

