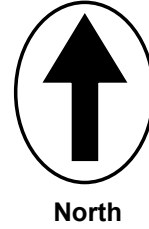


Date : 11/01/22

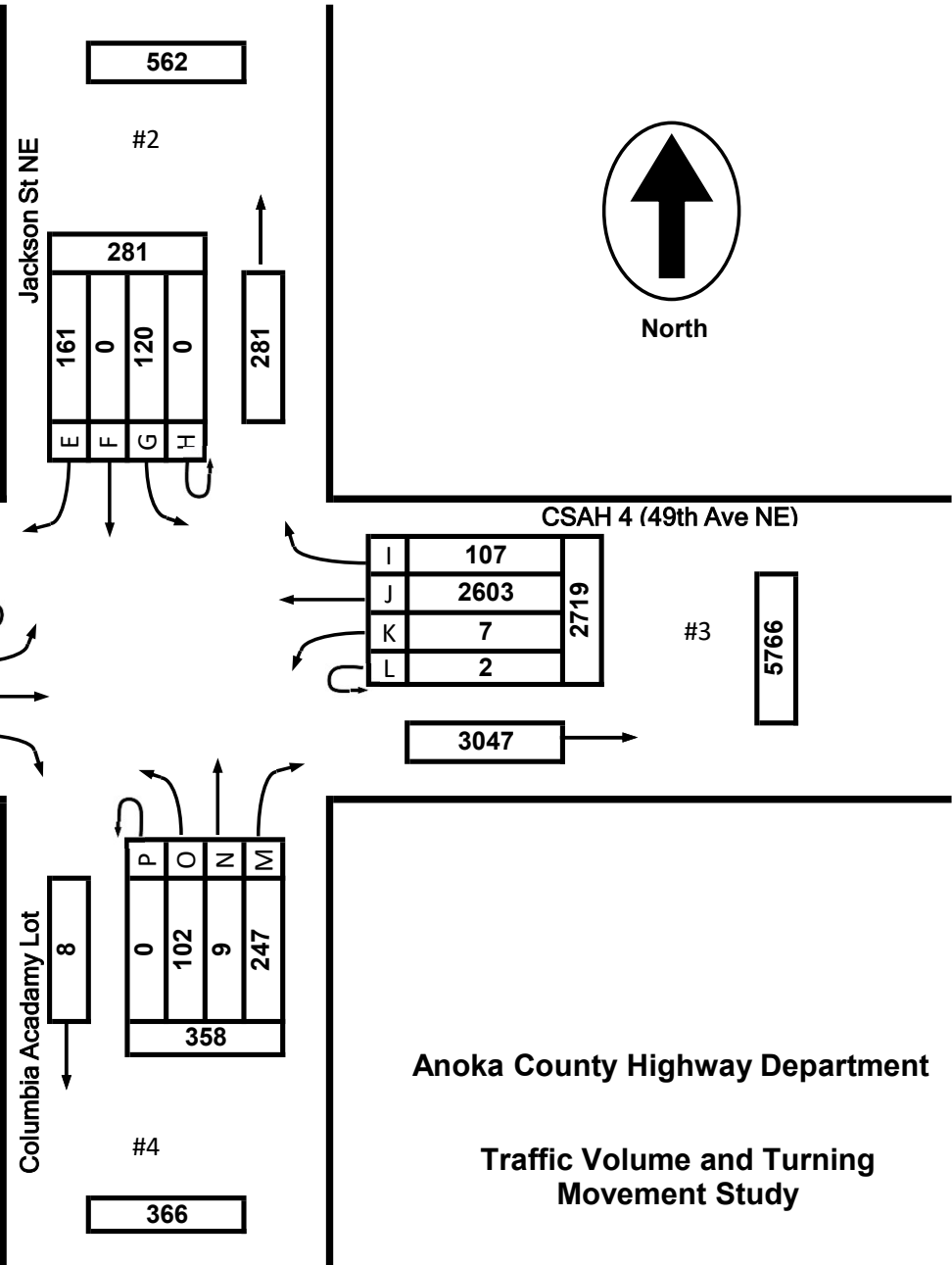
Count Number : TMC 2272

Location : CSAH 4 (49th Ave NE)
@ Jackson St NE

Collection Period : 24 HR



North



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

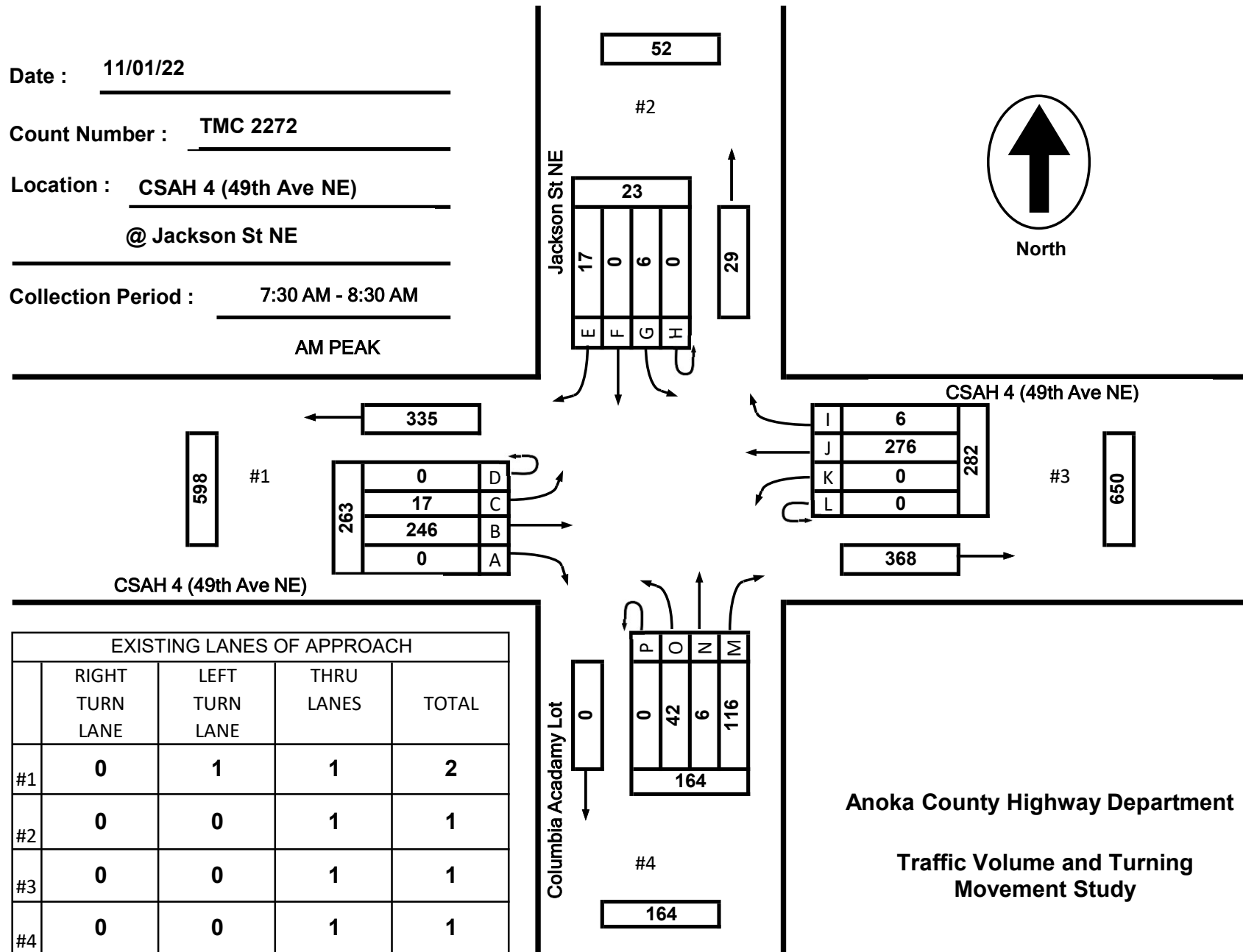
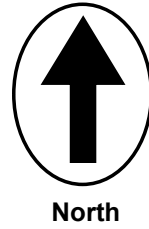
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 11/01/22

Count Number : TMC 2272

Location : CSAH 4 (49th Ave NE)
@ Jackson St NE

Collection Period : 7:30 AM - 8:30 AM
AM PEAK



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

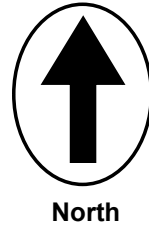
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 11/01/22

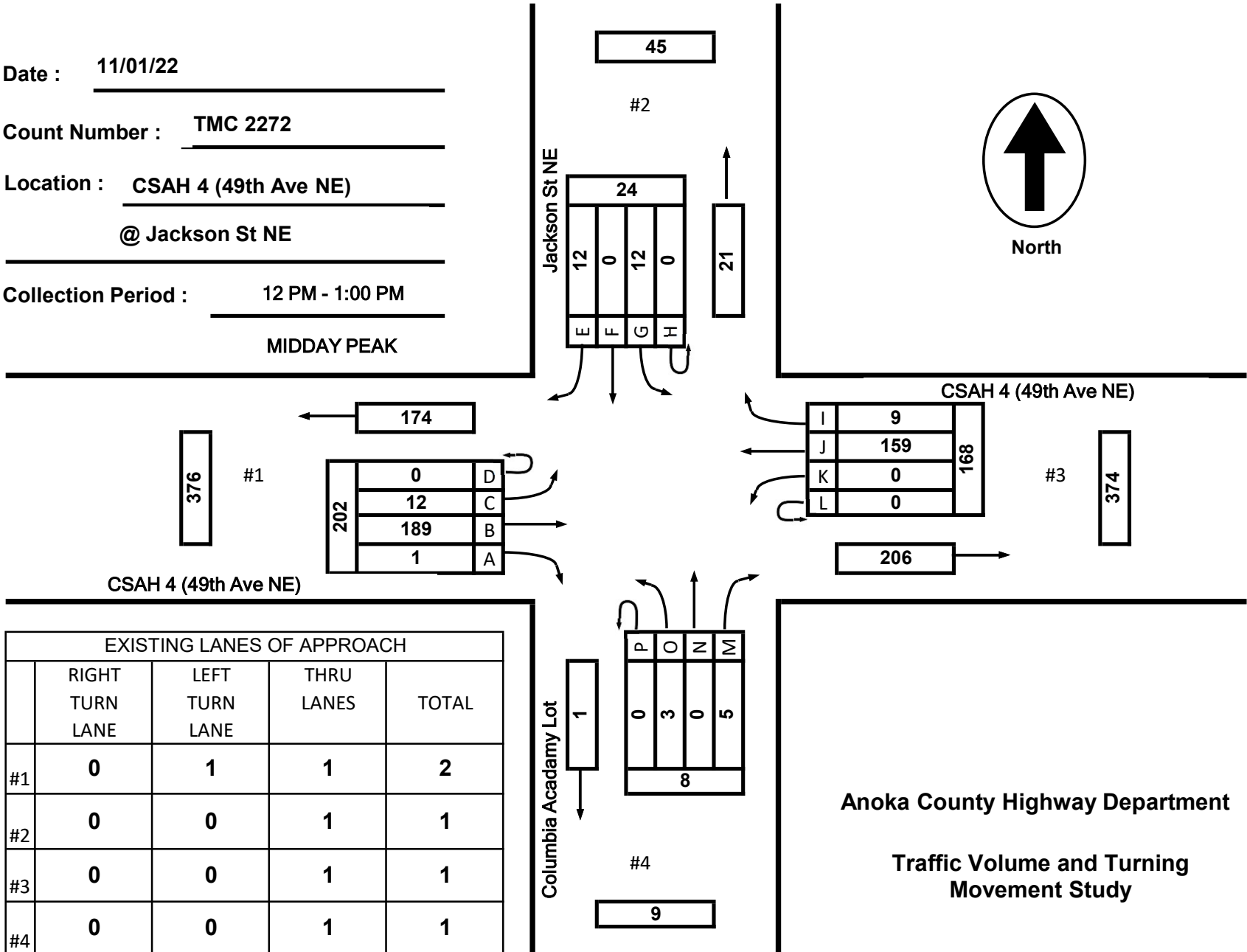
Count Number : TMC 2272

Location : CSAH 4 (49th Ave NE)
@ Jackson St NE

Collection Period : 12 PM - 1:00 PM
MIDDAY PEAK



North



EXISTING LANES OF APPROACH

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

Anoka County Highway Department

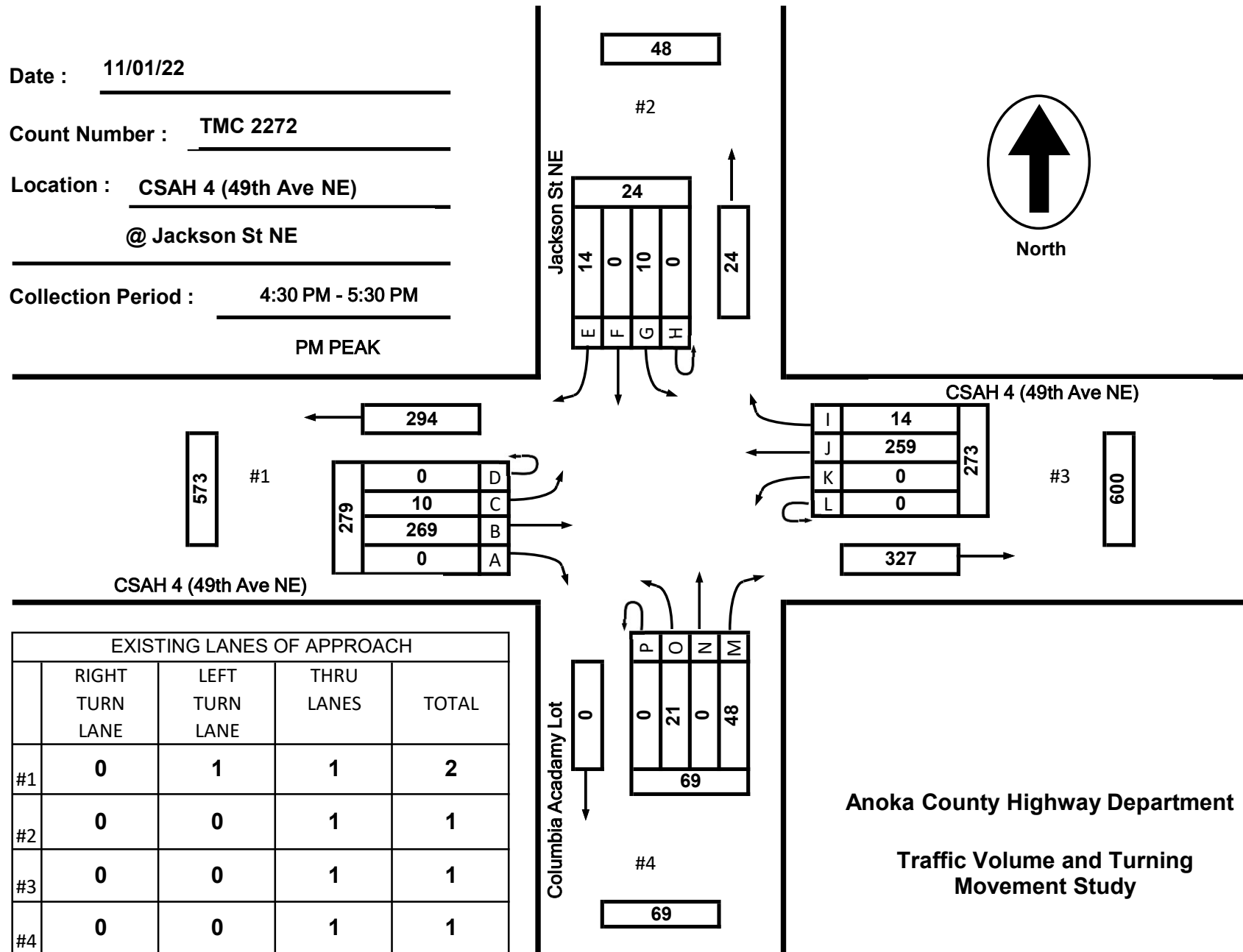
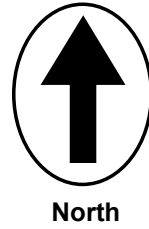
Traffic Volume and Turning Movement Study

Date : 11/01/22

Count Number : TMC 2272

Location : CSAH 4 (49th Ave NE)
@ Jackson St NE

Collection Period : 4:30 PM - 5:30 PM
PM PEAK



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

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 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 1

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Jackson St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Columbia Academy Lot Northbound						CSAH 4 (49th Ave NE) 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	0	0	0	0	0	1	5	0	0	0	6	0	0	0	0	0	0	0	6	1	0	0	7	0	13	13
00:15	0	0	0	0	0	0	2	8	0	0	0	10	0	0	0	0	0	0	0	8	0	0	0	8	0	18	18
00:30	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	1	1	0	0	2	0	5	5
00:45	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	6	6
Total	2	0	0	0	0	2	3	16	0	0	0	19	0	0	0	0	0	0	0	19	2	0	0	21	0	42	42
01:00	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	8	0	0	0	8	0	10	10
01:15	0	0	0	0	0	0	0	6	0	0	0	6	0	0	0	0	0	0	0	4	0	0	0	4	0	10	10
01:30	0	0	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	0	0	6	0	0	0	6	0	10	10
01:45	0	0	0	0	0	0	1	3	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	2	0	6	6
Total	0	0	0	0	0	0	1	14	0	1	0	16	0	0	0	0	0	0	0	20	0	0	0	20	0	36	36
02:00	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0	4	0	7	7
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	4	4
02:30	0	0	0	0	0	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	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	2	0	4	4
Total	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	10	0	0	0	10	0	15	15
03:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	4	4
03:15	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
03:30	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
03:45	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	2	2
Total	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	5	0	0	0	5	0	10	10
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	2
04:15	1	0	0	0	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	4	4
04:30	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	4	0	6	6
04:45	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	7	0	0	0	7	0	8	8
Total	1	0	0	0	0	1	0	5	0	0	0	5	0	0	0	0	0	0	0	14	0	0	0	14	0	20	20
05:00	2	0	0	0	0	2	0	5	0	0	0	5	0	0	0	0	0	0	0	8	0	0	0	8	0	15	15
05:15	1	0	0	0	0	1	0	8	0	0	0	8	0	0	0	0	0	0	0	5	0	0	0	5	0	14	14
05:30	0	0	1	0	0	1	1	12	0	0	0	13	0	0	0	0	0	0	0	10	0	0	0	10	0	24	24
05:45	0	0	1	0	0	1	0	6	0	0	0	6	0	0	0	0	0	0	0	9	1	0	0	10	0	17	17
Total	3	0	2	0	0	5	1	31	0	0	0	32	0	0	0	0	0	0	0	32	1	0	0	33	0	70	70



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 2

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Jackson St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Columbia Academy Lot Northbound						CSAH 4 (49th Ave NE) 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	0	0	1	0	0	1	1	9	0	0	0	10	0	0	0	0	0	0	0	8	0	0	0	8	0	19	19
06:15	1	0	1	0	0	2	0	9	0	0	0	9	0	0	0	0	0	0	0	16	2	0	0	18	0	29	29
06:30	1	0	3	0	0	4	1	17	0	0	0	18	0	0	0	0	0	0	0	20	3	0	0	23	0	45	45
06:45	1	0	0	0	0	1	1	25	0	0	0	26	0	0	0	0	0	0	0	18	0	0	0	18	0	45	45
Total	3	0	5	0	0	8	3	60	0	0	0	63	0	0	0	0	0	0	0	62	5	0	0	67	0	138	138
07:00	1	0	1	0	0	2	0	38	1	0	0	39	1	0	0	0	0	1	0	34	1	0	0	35	0	77	77
07:15	3	0	0	0	0	3	1	48	0	0	0	49	1	0	1	0	0	2	0	53	1	0	0	54	0	108	108
07:30	5	0	0	0	1	5	0	57	0	0	0	57	6	0	2	0	3	8	0	61	7	0	5	68	9	138	147
07:45	5	0	2	0	0	7	2	62	0	0	0	64	24	0	7	0	11	31	0	80	4	0	3	84	14	186	200
Total	14	0	3	0	1	17	3	205	1	0	0	209	32	0	10	0	14	42	0	228	13	0	8	241	23	509	532
08:00	5	0	1	0	0	6	2	84	0	0	2	86	51	3	18	0	5	72	0	61	4	0	6	65	13	229	242
08:15	2	0	3	0	0	5	2	73	0	0	1	75	35	3	15	0	3	53	0	44	2	0	0	46	4	179	183
08:30	0	0	0	0	0	0	0	27	1	0	1	28	9	1	3	0	1	13	0	17	2	0	0	19	2	60	62
08:45	0	0	2	0	0	2	0	19	0	0	0	19	2	0	1	0	0	3	0	23	2	0	1	25	1	49	50
Total	7	0	6	0	0	13	4	203	1	0	4	208	97	7	37	0	9	141	0	145	10	0	7	155	20	517	537
09:00	0	0	1	0	0	1	0	30	0	0	0	30	3	0	1	0	1	4	0	25	0	0	2	25	3	60	63
09:15	4	0	1	0	0	5	1	27	0	0	0	28	1	0	0	0	4	1	0	22	1	0	2	23	6	57	63
09:30	0	0	2	0	0	2	1	18	0	0	0	19	2	1	2	0	2	5	0	27	0	0	0	27	2	53	55
09:45	1	0	2	0	0	3	0	18	0	0	0	18	0	0	2	0	0	2	0	32	1	0	0	33	0	56	56
Total	5	0	6	0	0	11	2	93	0	0	0	95	6	1	5	0	7	12	0	106	2	0	4	108	11	226	237
10:00	2	0	1	0	0	3	1	29	0	0	0	30	1	0	0	0	2	1	0	27	0	0	0	27	2	61	63
10:15	1	0	3	0	0	4	1	27	0	0	0	28	1	0	1	0	1	2	0	29	2	0	0	31	1	65	66
10:30	0	0	0	0	0	0	1	20	0	0	0	21	1	0	0	0	0	1	0	31	1	0	0	32	0	54	54
10:45	3	0	1	0	0	4	2	28	0	0	0	30	3	0	2	0	2	5	0	19	4	0	0	23	2	62	64
Total	6	0	5	0	0	11	5	104	0	0	0	109	6	0	3	0	5	9	0	106	7	0	0	113	5	242	247
11:00	4	0	0	0	0	4	2	30	0	0	0	32	2	0	1	0	1	3	0	26	3	0	0	29	1	68	69
11:15	2	0	2	0	0	4	0	33	0	0	0	33	1	0	1	0	1	2	0	45	2	0	0	47	1	86	87
11:30	2	0	2	0	1	4	2	27	1	0	0	30	2	0	1	0	1	3	0	37	2	0	0	39	2	76	78
11:45	3	0	0	0	0	3	3	43	0	0	0	46	2	0	0	0	0	2	0	37	2	0	1	39	1	90	91
Total	11	0	4	0	1	15	7	133	1	0	0	141	7	0	3	0	3	10	0	145	9	0	1	154	5	320	325
12:00	5	0	1	0	0	6	2	40	0	0	1	42	1	0	1	0	1	2	0	54	3	0	0	57	2	107	109
12:15	2	0	2	0	0	4	2	39	0	0	0	41	2	0	0	0	3	2	0	38	6	0	1	44	4	91	95
12:30	4	0	5	0	1	9	3	42	0	0	0	45	1	0	1	0	1	2	1	43	1	0	1	45	3	101	104



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 3

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Jackson St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Columbia Academy Lot Northbound						CSAH 4 (49th Ave NE) 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	1	0	4	0	0	5	2	38	0	0	0	40	1	0	1	0	0	2	0	54	2	0	0	56	0	103	103
Total	12	0	12	0	1	24	9	159	0	0	1	168	5	0	3	0	5	8	1	189	12	0	2	202	9	402	411
13:00	2	0	2	0	0	4	0	42	0	0	0	42	0	0	0	0	0	0	0	46	2	0	0	48	0	94	94
13:15	2	0	2	0	0	4	1	28	0	0	0	29	1	0	0	0	0	1	0	36	3	0	0	39	0	73	73
13:30	1	0	0	0	0	1	0	40	0	0	0	40	0	0	1	0	1	1	0	40	1	0	0	41	1	83	84
13:45	3	0	1	0	0	4	2	31	0	0	0	33	2	0	1	0	2	3	0	32	3	0	0	35	2	75	77
Total	8	0	5	0	0	13	3	141	0	0	0	144	3	0	2	0	3	5	0	154	9	0	0	163	3	325	328
14:00	7	0	2	0	0	9	1	65	0	0	1	66	0	0	0	0	3	0	0	45	5	0	1	50	5	125	130
14:15	4	0	2	0	2	6	4	50	1	0	0	55	5	0	1	0	12	6	0	77	3	0	10	80	24	147	171
14:30	4	0	4	0	0	8	3	59	0	0	0	62	6	0	1	0	4	7	0	64	1	0	0	65	4	142	146
14:45	3	0	1	0	0	4	2	50	0	0	0	52	3	0	0	0	3	3	0	59	4	0	0	63	3	122	125
Total	18	0	9	0	2	27	10	224	1	0	1	235	14	0	2	0	22	16	0	245	13	0	11	258	36	536	572
15:00	0	0	2	0	0	2	3	69	0	0	0	72	6	0	2	0	0	8	0	65	3	0	5	68	5	150	155
15:15	7	0	3	0	0	10	6	81	0	0	3	87	33	0	18	0	31	51	0	81	2	0	14	83	48	231	279
15:30	3	0	1	0	1	4	2	53	0	0	0	55	4	1	8	0	14	13	0	56	2	0	3	58	18	130	148
15:45	2	0	1	0	0	3	5	50	0	0	3	55	5	0	1	0	7	6	0	56	5	0	4	61	14	125	139
Total	12	0	7	0	1	19	16	253	0	0	6	269	48	1	29	0	52	78	0	258	12	0	26	270	85	636	721
16:00	5	0	7	0	1	12	2	54	0	0	2	56	4	0	0	0	3	4	0	62	4	0	1	66	7	138	145
16:15	2	0	8	0	1	10	0	52	0	0	0	52	2	0	1	0	0	3	0	53	6	0	0	59	1	124	125
16:30	5	0	3	0	0	8	6	49	0	0	0	55	0	0	0	0	2	0	0	58	6	0	1	64	3	127	130
16:45	6	0	2	0	0	8	2	57	0	0	0	59	5	0	0	0	0	5	0	74	5	0	0	79	0	151	151
Total	18	0	20	0	2	38	10	212	0	0	2	222	11	0	1	0	5	12	0	247	21	0	2	268	11	540	551
17:00	3	0	6	0	0	9	1	65	0	0	0	66	2	0	2	0	3	4	0	67	0	0	2	67	5	146	151
17:15	1	0	7	0	0	8	3	59	0	1	0	63	10	0	4	0	2	14	0	59	3	0	2	62	4	147	151
17:30	5	0	5	0	0	10	4	52	1	0	0	57	0	0	0	0	0	0	0	48	5	0	0	53	0	120	120
17:45	2	0	2	0	0	4	2	56	0	0	0	58	1	0	0	0	1	1	0	58	6	0	0	64	1	127	128
Total	11	0	20	0	0	31	10	232	1	1	0	244	13	0	6	0	6	19	0	232	14	0	4	246	10	540	550
18:00	4	0	1	0	0	5	2	47	0	0	0	49	2	0	0	0	2	2	0	45	3	0	0	48	2	104	106
18:15	3	0	0	0	0	3	1	43	0	0	0	44	1	0	1	0	2	2	0	37	2	0	0	39	2	88	90
18:30	1	0	2	0	0	3	0	31	0	0	0	31	0	0	0	0	0	0	0	36	4	0	0	40	0	74	74
18:45	4	0	2	0	0	6	3	33	0	0	0	36	0	0	0	0	0	0	0	39	4	0	0	43	0	85	85
Total	12	0	5	0	0	17	6	154	0	0	0	160	3	0	1	0	4	4	0	157	13	0	0	170	4	351	355



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 4

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Cars + - Trucks

Start Time	Jackson St NE Southbound						CSAH 4 (49th Ave NE) Westbound						Columbia Academy Lot Northbound						CSAH 4 (49th Ave NE) 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	0	0	1	0	0	1	3	41	0	0	0	44	0	0	0	0	0	0	0	36	1	0	0	37	0	82	82
19:15	4	0	0	0	0	4	1	22	0	0	0	23	1	0	0	0	0	1	0	31	1	0	0	32	0	60	60
19:30	1	0	0	0	0	1	1	26	1	0	0	28	1	0	0	0	0	1	0	30	2	0	0	32	0	62	62
19:45	3	0	2	0	0	5	3	30	0	0	0	33	0	0	0	0	0	0	0	23	5	0	0	28	0	66	66
Total	8	0	3	0	0	11	8	119	1	0	0	128	2	0	0	0	0	2	0	120	9	0	0	129	0	270	270
20:00	2	0	2	0	0	4	1	23	0	0	0	24	0	0	0	0	0	0	0	17	2	0	0	19	0	47	47
20:15	1	0	1	0	0	2	0	18	0	0	0	18	0	0	0	0	0	0	0	22	1	0	0	23	0	43	43
20:30	1	0	1	0	0	2	1	29	0	0	0	30	0	0	0	0	0	0	0	19	2	0	2	21	2	53	55
20:45	1	0	0	0	0	1	0	16	0	0	0	16	0	0	0	0	0	0	0	18	1	0	0	19	0	36	36
Total	5	0	4	0	0	9	2	86	0	0	0	88	0	0	0	0	0	0	0	76	6	0	2	82	2	179	181
21:00	0	0	0	0	0	0	0	17	0	0	0	17	0	0	0	0	0	0	0	13	0	0	0	13	0	30	30
21:15	0	0	0	0	0	0	1	13	0	0	0	14	0	0	0	0	0	0	0	17	1	0	0	18	0	32	32
21:30	3	0	3	0	0	6	2	14	0	0	0	16	0	0	0	0	0	0	0	11	1	0	0	12	0	34	34
21:45	0	0	0	0	0	0	0	17	0	0	0	17	0	0	0	0	0	0	0	13	0	0	0	13	0	30	30
Total	3	0	3	0	0	6	3	61	0	0	0	64	0	0	0	0	0	0	0	54	2	0	0	56	0	126	126
22:00	1	0	0	0	0	1	1	19	0	0	0	20	0	0	0	0	0	0	0	14	1	0	0	15	0	36	36
22:15	0	0	0	0	0	0	0	12	0	0	0	12	0	0	0	0	0	0	0	8	1	0	0	9	0	21	21
22:30	1	0	0	0	0	1	0	14	1	0	0	15	0	0	0	0	0	0	0	9	0	0	0	9	0	25	25
22:45	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	6	1	0	0	7	0	17	17
Total	2	0	0	0	0	2	1	55	1	0	0	57	0	0	0	0	0	0	0	37	3	0	0	40	0	99	99
23:00	0	0	1	0	0	1	0	8	0	0	0	8	0	0	0	0	0	0	0	6	0	0	0	6	0	15	15
23:15	0	0	0	0	0	0	0	12	0	0	0	12	0	0	0	0	0	0	0	5	1	0	0	6	0	18	18
23:30	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	4	0	8	8
23:45	0	0	0	0	0	0	0	9	0	0	0	9	0	0	0	0	0	0	0	2	1	0	0	3	0	12	12
Total	0	0	1	0	0	1	0	33	0	0	0	33	0	0	0	0	0	0	0	17	2	0	0	19	0	53	53
Grand Total	161	0	120	0	8	281	107	2603	7	2	14	2719	247	9	102	0	135	358	1	2678	165	0	67	2844	224	6202	6426
Apprch %	57.3	0	42.7	0			3.9	95.7	0.3	0.1			69	2.5	28.5	0			0	94.2	5.8	0					
Total %	2.6	0	1.9	0		4.5	1.7	42	0.1	0		43.8	4	0.1	1.6	0		5.8	0	43.2	2.7	0		45.9	3.5	96.5	
Cars +	155	0	113	0		276	104	2534	7	2		2661	245	9	101	0		490	1	2602	164	0		2834	0	0	6261
% Cars +	96.3	0	94.2	0	100	95.5	97.2	97.3	100	100	100	97.4	99.2	100	99	0	100	99.4	100	97.2	99.4	0	100	97.4	0	0	97.4
Trucks	6	0	7	0		13	3	69	0	0		72	2	0	1	0		3	0	76	1	0		77	0	0	165
% Trucks	3.7	0	5.8	0	0	4.5	2.8	2.7	0	0	0	2.6	0.8	0	1	0	0	0.6	0	2.8	0.6	0	0	2.6	0	0	2.6



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 5

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Start Time	Jackson St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Columbia Academy Lot Northbound					CSAH 4 (49th Ave NE) 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 07:30																					
07:30	5	0	0	0	5	0	57	0	0	57	6	0	2	0	8	0	61	7	0	68	138
07:45	5	0	2	0	7	2	62	0	0	64	24	0	7	0	31	0	80	4	0	84	186
08:00	5	0	1	0	6	2	84	0	0	86	51	3	18	0	72	0	61	4	0	65	229
08:15	2	0	3	0	5	2	73	0	0	75	35	3	15	0	53	0	44	2	0	46	179
Total Volume	17	0	6	0	23	6	276	0	0	282	116	6	42	0	164	0	246	17	0	263	732
% App. Total	73.9	0	26.1	0		2.1	97.9	0	0		70.7	3.7	25.6	0		0	93.5	6.5	0		
PHF	.850	.000	.500	.000	.821	.750	.821	.000	.000	.820	.569	.500	.583	.000	.569	.000	.769	.607	.000	.783	.799

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	5	0	1	0	6	2	40	0	0	42	1	0	1	0	2	0	54	3	0	57	107
12:15	2	0	2	0	4	2	39	0	0	41	2	0	0	0	2	0	38	6	0	44	91
12:30	4	0	5	0	9	3	42	0	0	45	1	0	1	0	2	1	43	1	0	45	101
12:45	1	0	4	0	5	2	38	0	0	40	1	0	1	0	2	0	54	2	0	56	103
Total Volume	12	0	12	0	24	9	159	0	0	168	5	0	3	0	8	1	189	12	0	202	402
% App. Total	50	0	50	0		5.4	94.6	0	0		62.5	0	37.5	0		0.5	93.6	5.9	0		
PHF	.600	.000	.600	.000	.667	.750	.946	.000	.000	.933	.625	.000	.750	.000	1.00	.250	.875	.500	.000	.886	.939

Peak Hour Analysis From 14:00 to 23:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 14:30																					
14:30	4	0	4	0	8	3	59	0	0	62	6	0	1	0	7	0	64	1	0	65	142
14:45	3	0	1	0	4	2	50	0	0	52	3	0	0	0	3	0	59	4	0	63	122
15:00	0	0	2	0	2	3	69	0	0	72	6	0	2	0	8	0	65	3	0	68	150
15:15	7	0	3	0	10	6	81	0	0	87	33	0	18	0	51	0	81	2	0	83	231
Total Volume	14	0	10	0	24	14	259	0	0	273	48	0	21	0	69	0	269	10	0	279	645
% App. Total	58.3	0	41.7	0		5.1	94.9	0	0		69.6	0	30.4	0		0	96.4	3.6	0		
PHF	.500	.000	.625	.000	.600	.583	.799	.000	.000	.784	.364	.000	.292	.000	.338	.000	.830	.625	.000	.840	.698



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 1

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Trucks

Start Time	Jackson St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Columbia Academy Lot Northbound					CSAH 4 (49th Ave NE) 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	0	0	0	0	0	0	1	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	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	1	0	0	0	0	1
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	1	0	0	0	0	1
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	1	0	0	0	0	1
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	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:45	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
06:30	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	0	0	4
06:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	0	0	3
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	5	0	0	0	0	9
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:15	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	7	0	0	0	0	11
07:30	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	0	0	5
07:45	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	0	0	5
Total	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	0	12	1	0	0	0	22
08:00	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	0	0	6
08:15	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	0	0	8
08:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
08:45	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	5	0	0	5	1	0	0	0	1	0	9	0	0	0	0	15
09:00	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	0	0	3



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 2

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Trucks

Start Time	Jackson St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Columbia Academy Lot Northbound					CSAH 4 (49th Ave NE) 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	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
09:45	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	6	0	0	6	0	0	0	0	0	0	2	0	0	2	8
10:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
10:15	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
10:45	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	1	0	1	1	4	0	0	5	0	0	0	0	0	0	4	0	0	4	10
11:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	6
12:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
12:30	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	8
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
13:45	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	5
Total	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	0	7	0	0	7	10
14:00	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	7
14:15	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	11
14:30	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	6
14:45	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	6
Total	2	0	2	0	4	0	16	0	0	16	0	0	0	0	0	0	10	0	0	10	30
15:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	8	0	0	8	9
15:15	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	13
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	0	11	0	0	11	23
16:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
16:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	3
Total	0	0	1	0	1	0	3	0	0	3	1	0	0	0	1	0	2	0	0	2	7
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
17:30	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
17:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	7
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
18:45	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	0	0	0	0	0	2	0	0	2	2



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2272-t
 Site Code :
 Start Date : 11/01/2022
 Page No : 3

Weather: Cold & Sunny
 CountCam 3
 Study conducted by: Kevin

Groups Printed- Trucks

Start Time	Jackson St NE Southbound					CSAH 4 (49th Ave NE) Westbound					Columbia Academy Lot Northbound					CSAH 4 (49th Ave NE) 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	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
20:45	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	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	0	0	0	0	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	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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
Grand Total	6	0	7	0	13	3	69	0	0	72	2	0	1	0	3	0	76	1	0	77	165
Apprch %	46.2	0	53.8	0		4.2	95.8	0	0		66.7	0	33.3	0		0	98.7	1.3	0		
Total %	3.6	0	4.2	0	7.9	1.8	41.8	0	0	43.6	1.2	0	0.6	0	1.8	0	46.1	0.6	0	46.7	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/01/2022

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 4 (49th Ave NE)

Number of Lanes : 1

Total Approach Volume: 2,844

Westbound: CSAH 4 (49th Ave NE)

Number of Lanes : 1

Total Approach Volume: 2,719

Minor Street Approaches

Northbound: Columbia Academy Lot

Number of Lanes : 1

Total Approach Volume: 358

Southbound: Jackson St NE

Number of Lanes : 1

Total Approach Volume: 281

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....**Not Satisfied**

Warrant 1A - Minimum Vehicular Volume.....**Not Satisfied**

Required volumes reached for 1 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....**Not Satisfied**

Required volumes reached for 0 hours, 8 are needed

Warrant 1C - Combination of Warrants.....**Not Satisfied**

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

Required 1B volumes reached for 0 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....**Not Satisfied**

Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour.....**Not Satisfied**

Warrant 3A - Peak Hour Delay.....**Not Satisfied**

Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....**Not Satisfied**

Volumes do not exceed minimums for any 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 : 11/01/2022

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

Only 1 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 4 (49th Ave NE)					Columbia Academy Lot		
07:30 - 08:30	263	+	282	=	545	164	23	Yes
14:30 - 15:30	279	+	273	=	552	69	24	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
16:00 - 17:00	268	+	222	=	490	12	38	No
17:00 - 18:00	246	+	244	=	490	19	31	No
15:45 - 16:45	250	+	218	=	468	13	33	No
15:30 - 16:30	244	+	218	=	462	26	29	No
17:15 - 18:15	227	+	227	=	454	17	27	No
07:00 - 08:00	241	+	209	=	450	42	17	No
13:45 - 14:45	230	+	216	=	446	16	27	No
17:30 - 18:30	204	+	208	=	412	5	22	No
13:30 - 14:30	206	+	194	=	400	10	20	No
17:45 - 18:45	191	+	182	=	373	5	15	No
12:00 - 13:00	202	+	168	=	370	8	24	No
12:15 - 13:15	193	+	168	=	361	6	22	No
11:45 - 12:45	185	+	174	=	359	8	22	No
06:45 - 07:45	175		171		346	11	11	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/01/2022

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

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 4 (49th Ave NE)					Columbia Academy Lot		
14:30 - 15:30	279	+	273	=	552	69	24	No
07:30 - 08:30	263	+	282	=	545	164	23	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
16:00 - 17:00	268	+	222	=	490	12	38	No
17:00 - 18:00	246	+	244	=	490	19	31	No
15:45 - 16:45	250	+	218	=	468	13	33	No
07:45 - 08:45	214	+	253	=	467	169	18	No
15:30 - 16:30	244	+	218	=	462	26	29	No
17:15 - 18:15	227	+	227	=	454	17	27	No
07:00 - 08:00	241	+	209	=	450	42	17	No
13:45 - 14:45	230	+	216	=	446	16	27	No
17:30 - 18:30	204	+	208	=	412	5	22	No
13:30 - 14:30	206	+	194	=	400	10	20	No
17:45 - 18:45	191	+	182	=	373	5	15	No
12:00 - 13:00	202	+	168	=	370	8	24	No
08:00 - 09:00	155	+	208	=	363	141	13	No
12:15 - 13:15	193		168		361	6	22	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/01/2022

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

Only 1 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road CSAH 4 (49th Ave NE)

Minor Road Columbia Academy Lot

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
07:30 - 08:30	263	+	282	=	545	164	23	Yes
14:30 - 15:30	279	+	273	=	552	69	24	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
17:00 - 18:00	246		244		490	19	31	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
14:30 - 15:30	279	+	273	=	552	69	24	No
07:30 - 08:30	263	+	282	=	545	164	23	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
17:00 - 18:00	246		244		490	19	31	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/01/2022

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.

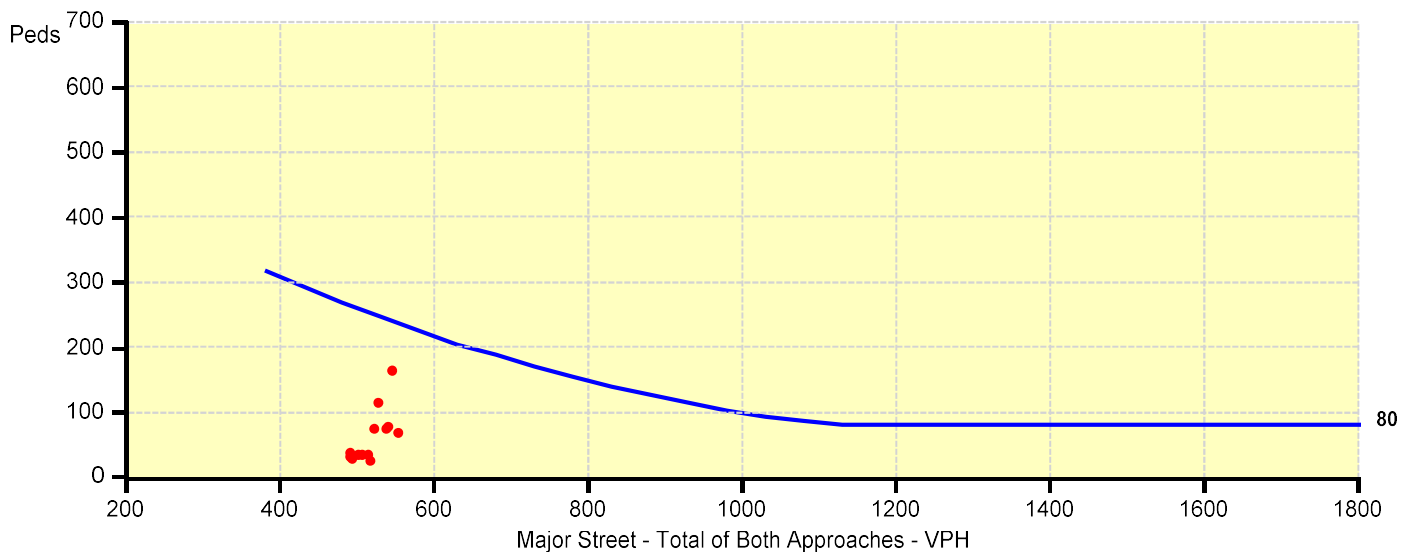
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 4 (49th Ave NE)					Columbia Academy Lot		
14:30 - 15:30	279	+	273	=	552	69	24	No
07:30 - 08:30	263	+	282	=	545	164	23	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
16:00 - 17:00	268		222		490	12	38	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 11/01/2022

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

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 4 (49th Ave NE)				Total	Minor Road Columbia Academy Lot		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
14:30 - 15:30	279	+	273	=	552	69	24	No
07:30 - 08:30	263	+	282	=	545	164	23	No
15:00 - 16:00	270	+	269	=	539	78	19	No
14:45 - 15:45	272	+	266	=	538	75	20	No
07:15 - 08:15	271	+	256	=	527	113	21	No
15:15 - 16:15	268	+	253	=	521	74	29	No
14:15 - 15:15	276	+	241	=	517	24	20	No
16:30 - 17:30	272	+	243	=	515	23	33	No
16:45 - 17:45	261	+	245	=	506	23	35	No
16:15 - 17:15	269	+	232	=	501	12	35	No
14:00 - 15:00	258	+	235	=	493	16	27	No
16:00 - 17:00	268	+	222	=	490	12	38	No

