

**Alliant Engineering, Inc**

233 Park Ave Suite 300

Minneapolis, MN 55415

--TRAFFIC DATA --

CSAH-17 at Vierling Drive  
 Ref.Pt.: Not Available  
 data by : Alliant Inc.  
 TURN MOVEMENT COUNT

File Name : 334\_CSAH 17 & Vierling Dr  
 Site Code : 334  
 Start Date : 11/8/2017  
 Page No : 1

Groups Printed- Vehicles - Trucks

Start Time	CSAH 17 From North				Vierling Dr From East				CSAH 17 From South				Vierling Dr From West				Int. Total
	Other	Left	Thru	Rght	Other	Left	Thru	Rght	Other	Left	Thru	Rght	Other	Left	Thru	Rght	
05:00 AM	0	3	9	2	0	8	3	2	0	5	13	2	0	3	1	23	74
05:15 AM	0	3	28	4	0	13	4	4	0	13	16	16	0	2	8	25	136
05:30 AM	0	4	36	7	0	12	4	11	0	13	37	6	0	2	12	29	173
05:45 AM	0	3	42	9	0	18	3	3	0	9	32	8	0	10	4	32	173
Total	0	13	115	22	0	51	14	20	0	40	98	32	0	17	25	109	556
06:00 AM	0	7	42	1	0	15	10	7	0	17	40	10	0	6	6	39	200
06:15 AM	0	2	65	2	0	29	5	11	0	13	52	15	0	5	10	47	256
06:30 AM	0	7	69	11	0	25	4	15	0	26	73	10	0	7	12	45	304
06:45 AM	0	15	76	10	0	26	9	23	0	39	137	20	0	10	5	41	411
Total	0	31	252	24	0	95	28	56	0	95	302	55	0	28	33	172	1171
07:00 AM	0	6	90	20	0	31	14	17	0	27	152	24	0	11	20	66	478
07:15 AM	1	21	82	12	0	34	21	26	0	37	169	14	0	30	19	59	525
07:30 AM	1	21	118	28	0	28	15	32	0	44	148	26	0	27	26	56	570
07:45 AM	0	11	79	12	0	28	17	12	0	47	113	21	0	16	24	46	426
Total	2	59	369	72	0	121	67	87	0	155	582	85	0	84	89	227	1999
08:00 AM	0	10	87	17	0	24	11	17	0	44	104	20	0	11	23	36	404
08:15 AM	0	11	69	18	0	27	19	14	0	50	106	16	0	21	22	47	420
08:30 AM	0	5	89	15	0	27	9	17	0	42	75	31	0	18	29	49	406
08:45 AM	0	8	65	19	0	27	15	9	0	48	85	28	0	13	17	49	383
Total	0	34	310	69	0	105	54	57	0	184	370	95	0	63	91	181	1613
09:00 AM	0	13	77	19	0	21	17	13	0	53	47	35	0	13	23	44	375
09:15 AM	0	5	62	23	1	26	13	7	0	60	50	19	0	17	19	54	356
09:30 AM	0	9	52	17	0	21	10	9	0	42	64	25	0	19	21	54	343
09:45 AM	0	8	74	13	0	27	17	15	0	60	61	21	0	9	18	57	380
Total	0	35	265	72	1	95	57	44	0	215	222	100	0	58	81	209	1454
10:00 AM	0	4	52	29	0	26	16	11	0	37	61	31	0	10	10	68	355
10:15 AM	0	5	60	23	0	15	16	14	2	55	59	20	0	13	14	66	362
10:30 AM	0	8	44	23	0	18	15	7	0	70	60	17	0	26	18	53	359
10:45 AM	0	13	66	24	0	24	27	8	0	71	67	22	1	31	26	53	433
Total	0	30	222	99	0	83	74	40	2	233	247	90	1	80	68	240	1509
11:00 AM	0	20	54	27	0	21	30	8	0	70	57	26	1	20	27	68	429
11:15 AM	0	6	71	25	0	23	29	8	2	60	54	29	1	32	31	57	428
11:30 AM	0	7	52	25	0	19	24	6	1	88	61	38	0	20	21	84	446
11:45 AM	0	19	77	39	0	29	35	10	1	92	81	29	1	28	24	55	520
Total	0	52	254	116	0	92	118	32	4	310	253	122	3	100	103	264	1823
12:00 PM	0	17	67	43	1	28	46	17	2	76	56	20	0	36	35	72	516
12:15 PM	0	17	79	48	0	36	38	10	0	98	75	26	0	36	34	84	581
12:30 PM	0	18	61	31	0	32	18	14	0	72	73	28	1	35	30	85	498
12:45 PM	1	23	59	33	0	44	31	15	0	54	62	29	0	38	29	77	495
Total	1	75	266	155	1	140	133	56	2	300	266	103	1	145	128	318	2090
01:00 PM	0	9	66	27	0	39	22	9	0	82	59	29	0	37	23	75	477
01:15 PM	0	11	81	22	0	28	25	10	0	67	75	22	1	28	26	72	468
01:30 PM	0	17	81	35	0	22	22	10	2	89	64	25	0	26	23	80	496
01:45 PM	0	15	69	32	0	28	17	14	0	91	77	22	2	33	34	57	491
Total	0	52	297	116	0	117	86	43	2	329	275	98	3	124	106	284	1932
02:00 PM	0	10	81	39	0	25	26	11	0	74	89	23	0	39	31	93	541
02:15 PM	0	12	73	30	0	24	35	15	1	75	80	33	0	38	22	76	514
02:30 PM	0	22	114	43	0	31	29	20	0	80	78	36	0	24	27	83	587
02:45 PM	0	22	102	35	0	36	29	18	1	67	84	18	0	28	21	85	546
Total	0	66	370	147	0	116	119	64	2	296	331	110	0	129	101	337	2188

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 TURN MOVEMENT COUNT

File Name : 334\_CSAH 17 & Vierling Dr  
 Site Code : 334  
 Start Date : 11/8/2017  
 Page No : 2

Groups Printed- Vehicles - Trucks

Start Time	CSAH 17 From North				Vierling Dr From East				CSAH 17 From South				Vierling Dr From West				Int. Total
	Other	Left	Thru	Rght	Other	Left	Thru	Rght	Other	Left	Thru	Rght	Other	Left	Thru	Rght	
03:00 PM	0	16	106	47	0	31	35	13	0	92	95	24	0	35	27	89	610
03:15 PM	0	24	109	34	0	33	27	6	1	83	88	48	0	43	39	89	624
03:30 PM	0	16	139	29	0	31	27	9	0	89	96	55	0	38	23	78	630
03:45 PM	0	29	116	29	0	64	39	13	0	96	121	47	0	21	39	88	702
Total	0	85	470	139	0	159	128	41	1	360	400	174	0	137	128	344	2566
04:00 PM	0	26	105	47	0	49	38	14	0	125	85	57	0	28	20	119	713
04:15 PM	0	24	127	49	0	34	38	10	0	171	134	46	0	35	30	113	811
04:30 PM	0	26	140	46	0	28	51	22	0	110	116	49	0	47	36	107	778
04:45 PM	0	14	113	49	0	42	44	24	0	126	116	70	0	42	45	119	804
Total	0	90	485	191	0	153	171	70	0	532	451	222	0	152	131	458	3106
05:00 PM	0	26	119	47	0	51	52	23	0	139	132	34	0	49	33	112	817
05:15 PM	0	16	105	49	0	43	37	14	0	135	130	93	0	37	40	116	815
05:30 PM	0	19	100	26	0	31	33	12	0	97	85	62	0	32	38	90	625
05:45 PM	0	19	97	25	0	38	40	12	0	101	99	83	1	37	35	90	677
Total	0	80	421	147	0	163	162	61	0	472	446	272	1	155	146	408	2934
06:00 PM	0	15	83	30	0	65	45	14	0	93	78	43	0	38	32	103	639
06:15 PM	0	20	63	24	0	23	36	16	0	55	103	32	0	41	33	76	522
06:30 PM	0	23	35	36	0	18	31	13	0	99	96	37	0	34	57	25	504
06:45 PM	0	20	73	26	0	24	27	14	0	75	97	47	1	31	38	49	522
Total	0	78	254	116	0	130	139	57	0	322	374	159	1	144	160	253	2187
07:00 PM	2	21	58	11	1	54	30	21	0	65	61	42	0	22	33	56	477
07:15 PM	0	17	53	12	0	69	28	18	1	52	84	31	0	25	28	76	494
07:30 PM	1	12	47	28	0	28	14	12	0	47	56	29	0	24	20	68	386
07:45 PM	0	8	49	28	0	24	15	8	1	55	28	28	0	19	11	51	325
Total	3	58	207	79	1	175	87	59	2	219	229	130	0	90	92	251	1682
08:00 PM	0	11	38	19	0	27	19	6	0	62	59	14	0	20	10	73	358
08:15 PM	0	5	53	17	1	30	14	5	0	43	51	21	2	20	12	52	326
08:30 PM	0	9	52	18	0	16	13	8	0	40	48	19	1	17	13	33	287
08:45 PM	0	10	55	14	0	20	14	7	0	45	38	16	0	12	14	43	288
Total	0	35	198	68	1	93	60	26	0	190	196	70	3	69	49	201	1259
09:00 PM	0	6	61	12	0	11	8	6	1	44	27	18	0	10	18	35	257
09:15 PM	0	4	44	14	0	44	14	10	0	37	36	17	0	9	21	46	296
09:30 PM	0	4	27	9	1	23	7	1	0	36	32	9	0	13	10	32	204
09:45 PM	0	8	27	18	0	12	7	9	0	17	32	12	1	17	10	23	193
Total	0	22	159	53	1	90	36	26	1	134	127	56	1	49	59	136	950
Grand Total	6	895	4914	1685	5	1978	1533	839	16	4386	5169	1973	14	1624	1590	4392	31019
Apprch %	0.1	11.9	65.5	22.5	0.1	45.4	35.2	19.3	0.1	38	44.8	17.1	0.2	21.3	20.9	57.6	
Total %	0	2.9	15.8	5.4	0	6.4	4.9	2.7	0.1	14.1	16.7	6.4	0	5.2	5.1	14.2	
Vehicles	6	873	4772	1657	5	1907	1519	821	16	4285	5003	1885	14	1584	1559	4301	30207
% Vehicles	100	97.5	97.1	98.3	100	96.4	99.1	97.9	100	97.7	96.8	95.5	100	97.5	98.1	97.9	97.4
Trucks	0	22	142	28	0	71	14	18	0	101	166	88	0	40	31	91	812
% Trucks	0	2.5	2.9	1.7	0	3.6	0.9	2.1	0	2.3	3.2	4.5	0	2.5	1.9	2.1	2.6

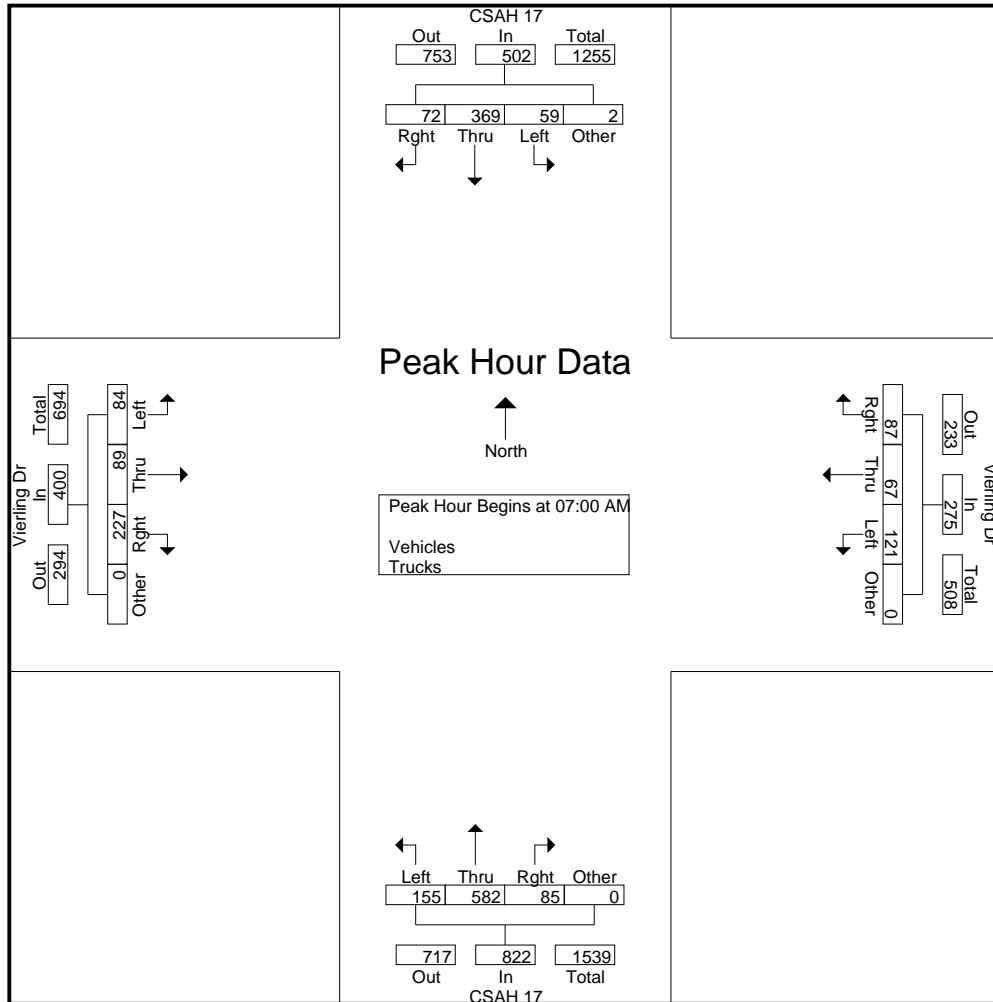
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File Name : 334\_CSAH 17 & Vierling Dr  
 Site Code : 334  
 Start Date : 11/8/2017  
 Page No : 3

Start Time	CSAH 17 From North					Vierling Dr From East					CSAH 17 From South					Vierling Dr From West					Int. Total
	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	
Peak Hour Analysis From 05:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	6	90	20	116	0	31	14	17	62	0	27	152	24	203	0	11	20	66	97	478
07:15 AM	1	21	82	12	116	0	34	21	26	81	0	37	169	14	220	0	30	19	59	108	525
07:30 AM	1	21	118	28	168	0	28	15	32	75	0	44	148	26	218	0	27	26	56	109	570
07:45 AM	0	11	79	12	102	0	28	17	12	57	0	47	113	21	181	0	16	24	46	86	426
Total Volume	2	59	369	72	502	0	121	67	87	275	0	155	582	85	822	0	84	89	227	400	1999
% App. Total	0.4	11.8	73.5	14.3		0	44	24.4	31.6		0	18.9	70.8	10.3		0	21	22.2	56.8		
PHF	.500	.702	.782	.643	.747	.000	.890	.798	.680	.849	.000	.824	.861	.817	.934	.000	.700	.856	.860	.917	.877



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 TURN MOVEMENT COUNT

File Name : 334\_CSAH 17 & Vierling Dr  
 Site Code : 334  
 Start Date : 11/8/2017  
 Page No : 4

Start Time	CSAH 17 From North					Vierling Dr From East					CSAH 17 From South					Vierling Dr From West					Int. Total
	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	Other	Left	Thru	Rght	App. Total	
Peak Hour Analysis From 12:00 PM to 09:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	26	140	46	212	0	28	51	22	101	0	110	116	49	275	0	47	36	107	190	778
04:45 PM	0	14	113	49	176	0	42	44	24	110	0	126	116	70	312	0	42	45	119	206	804
05:00 PM	0	26	119	47	192	0	51	52	23	126	0	139	132	34	305	0	49	33	112	194	817
05:15 PM	0	16	105	49	170	0	43	37	14	94	0	135	130	93	358	0	37	40	116	193	815
Total Volume	0	82	477	191	750	0	164	184	83	431	0	510	494	246	1250	0	175	154	454	783	3214
% App. Total	0	10.9	63.6	25.5		0	38.1	42.7	19.3		0	40.8	39.5	19.7		0	22.3	19.7	58		
PHF	.000	.788	.852	.974	.884	.000	.804	.885	.865	.855	.000	.917	.936	.661	.873	.000	.893	.856	.954	.950	.983

