

Alliant Engineering, Inc.  
733 S Marquette Ave #700, Minneapolis, MN 55402

714 TH 120 & CR D/Long Lake Rd    File Name : 714\_TH 120 & CSAH 19-County Road D-Long Lake Road  
 Ref.Pt: 008+00.280                      Site Code : 1735677  
 data by: Alliant Inc                      Start Date : 5/7/2019  
 TURN MOVEMENT COUNT                Page No : 1

Groups Printed- Class 1 - Class 2

Start Time	TH 120 From North					Long Lake Rd From East					TH 120 From South					County Rd D From West					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	4	76	0	0	80	1	4	19	0	24	29	17	12	0	58	18	5	2	0	25	187
06:15 AM	5	102	3	0	110	3	2	32	0	37	43	35	14	0	92	32	3	4	0	39	278
06:30 AM	6	131	3	0	140	1	4	34	0	39	40	50	16	0	106	37	6	5	0	48	333
06:45 AM	6	122	3	0	131	3	1	41	0	45	26	90	23	0	139	46	2	1	0	49	364
<b>Total</b>	<b>21</b>	<b>431</b>	<b>9</b>	<b>0</b>	<b>461</b>	<b>8</b>	<b>11</b>	<b>126</b>	<b>0</b>	<b>145</b>	<b>138</b>	<b>192</b>	<b>65</b>	<b>0</b>	<b>395</b>	<b>133</b>	<b>16</b>	<b>12</b>	<b>0</b>	<b>161</b>	<b>1162</b>
07:00 AM	9	126	2	0	137	3	5	47	0	55	48	107	21	0	176	40	1	3	0	44	412
07:15 AM	9	133	3	0	145	3	2	42	0	47	26	177	27	0	230	42	1	5	0	48	470
07:30 AM	7	152	2	1	162	3	10	45	0	58	30	224	45	0	299	53	1	9	0	63	582
07:45 AM	5	135	6	0	146	10	9	44	0	63	35	191	39	0	265	41	5	6	0	52	526
<b>Total</b>	<b>30</b>	<b>546</b>	<b>13</b>	<b>1</b>	<b>590</b>	<b>19</b>	<b>26</b>	<b>178</b>	<b>0</b>	<b>223</b>	<b>139</b>	<b>699</b>	<b>132</b>	<b>0</b>	<b>970</b>	<b>176</b>	<b>8</b>	<b>23</b>	<b>0</b>	<b>207</b>	<b>1990</b>
08:00 AM	14	124	2	0	140	3	4	45	0	52	40	180	30	0	250	42	6	9	0	57	499
08:15 AM	5	106	1	0	112	5	5	38	0	48	25	187	28	0	240	44	1	5	0	50	450
08:30 AM	7	160	3	0	170	10	32	49	0	91	20	189	28	0	237	48	2	2	0	52	550
08:45 AM	7	136	3	1	147	9	30	52	0	91	21	209	23	0	253	43	5	7	0	55	546
<b>Total</b>	<b>33</b>	<b>526</b>	<b>9</b>	<b>1</b>	<b>569</b>	<b>27</b>	<b>71</b>	<b>184</b>	<b>0</b>	<b>282</b>	<b>106</b>	<b>765</b>	<b>109</b>	<b>0</b>	<b>980</b>	<b>177</b>	<b>14</b>	<b>23</b>	<b>0</b>	<b>214</b>	<b>2045</b>
09:00 AM	9	135	4	0	148	11	22	46	0	79	16	200	29	0	245	37	2	5	0	44	516
09:15 AM	6	110	7	0	123	4	9	39	0	52	20	224	30	0	274	29	3	9	0	41	490
*** BREAK ***																					
<b>Total</b>	<b>15</b>	<b>245</b>	<b>11</b>	<b>0</b>	<b>271</b>	<b>15</b>	<b>31</b>	<b>85</b>	<b>0</b>	<b>131</b>	<b>36</b>	<b>424</b>	<b>59</b>	<b>0</b>	<b>519</b>	<b>66</b>	<b>5</b>	<b>14</b>	<b>0</b>	<b>85</b>	<b>1006</b>
*** BREAK ***																					
10:30 AM	9	118	2	0	129	4	5	42	0	51	51	223	23	6	303	27	2	7	0	36	519
10:45 AM	10	238	8	0	256	9	4	34	1	48	55	276	24	1	356	22	5	7	0	34	694
<b>Total</b>	<b>19</b>	<b>356</b>	<b>10</b>	<b>0</b>	<b>385</b>	<b>13</b>	<b>9</b>	<b>76</b>	<b>1</b>	<b>99</b>	<b>106</b>	<b>499</b>	<b>47</b>	<b>7</b>	<b>659</b>	<b>49</b>	<b>7</b>	<b>14</b>	<b>0</b>	<b>70</b>	<b>1213</b>
11:00 AM	5	172	4	0	181	8	4	36	0	48	30	135	24	1	190	26	3	2	0	31	450
11:15 AM	9	138	6	1	154	9	9	27	0	45	34	146	30	0	210	19	6	3	0	28	437
11:30 AM	8	153	6	0	167	7	3	36	0	46	23	146	21	0	190	20	4	7	0	31	434
11:45 AM	11	178	4	0	193	12	4	33	0	49	26	166	30	1	223	27	7	7	0	41	506
<b>Total</b>	<b>33</b>	<b>641</b>	<b>20</b>	<b>1</b>	<b>695</b>	<b>36</b>	<b>20</b>	<b>132</b>	<b>0</b>	<b>188</b>	<b>113</b>	<b>593</b>	<b>105</b>	<b>2</b>	<b>813</b>	<b>92</b>	<b>20</b>	<b>19</b>	<b>0</b>	<b>131</b>	<b>1827</b>
12:00 PM	9	195	8	0	212	7	5	21	0	33	24	190	20	0	234	24	3	8	1	36	515
12:15 PM	18	222	13	0	253	15	3	37	0	55	24	208	33	1	266	19	6	6	0	31	605
12:30 PM	13	170	6	0	189	5	2	27	0	34	34	212	25	0	271	23	2	13	0	38	532
12:45 PM	16	163	6	1	186	11	4	33	0	48	44	185	30	0	259	37	3	8	0	48	541
<b>Total</b>	<b>56</b>	<b>750</b>	<b>33</b>	<b>1</b>	<b>840</b>	<b>38</b>	<b>14</b>	<b>118</b>	<b>0</b>	<b>170</b>	<b>126</b>	<b>795</b>	<b>108</b>	<b>1</b>	<b>1030</b>	<b>103</b>	<b>14</b>	<b>35</b>	<b>1</b>	<b>153</b>	<b>2193</b>
01:00 PM	11	159	5	0	175	3	2	35	0	40	33	141	24	0	198	27	3	5	0	35	448
01:15 PM	6	140	7	0	153	5	5	33	0	43	27	113	35	0	175	34	4	7	0	45	416
*** BREAK ***																					
<b>Total</b>	<b>17</b>	<b>299</b>	<b>12</b>	<b>0</b>	<b>328</b>	<b>8</b>	<b>7</b>	<b>68</b>	<b>0</b>	<b>83</b>	<b>60</b>	<b>254</b>	<b>59</b>	<b>0</b>	<b>373</b>	<b>61</b>	<b>7</b>	<b>12</b>	<b>0</b>	<b>80</b>	<b>864</b>
*** BREAK ***																					
02:30 PM	19	209	9	0	237	17	23	48	1	89	55	135	26	0	216	26	13	5	1	45	587
02:45 PM	8	170	10	0	188	14	14	51	1	80	48	159	37	3	247	28	5	7	0	40	555
<b>Total</b>	<b>27</b>	<b>379</b>	<b>19</b>	<b>0</b>	<b>425</b>	<b>31</b>	<b>37</b>	<b>99</b>	<b>2</b>	<b>169</b>	<b>103</b>	<b>294</b>	<b>63</b>	<b>3</b>	<b>463</b>	<b>54</b>	<b>18</b>	<b>12</b>	<b>1</b>	<b>85</b>	<b>1142</b>
03:00 PM	5	164	4	0	173	2	7	71	0	80	48	154	35	0	237	28	2	8	0	38	528
03:15 PM	10	189	6	0	205	8	6	48	0	62	41	173	48	0	262	25	0	6	0	31	560
03:30 PM	12	213	3	1	229	7	10	51	0	68	39	183	48	0	270	32	5	9	0	46	613
03:45 PM	13	162	5	0	180	9	10	44	0	63	53	163	46	0	262	43	2	7	0	52	557
<b>Total</b>	<b>40</b>	<b>728</b>	<b>18</b>	<b>1</b>	<b>787</b>	<b>26</b>	<b>33</b>	<b>214</b>	<b>0</b>	<b>273</b>	<b>181</b>	<b>673</b>	<b>177</b>	<b>0</b>	<b>1031</b>	<b>128</b>	<b>9</b>	<b>30</b>	<b>0</b>	<b>167</b>	<b>2258</b>

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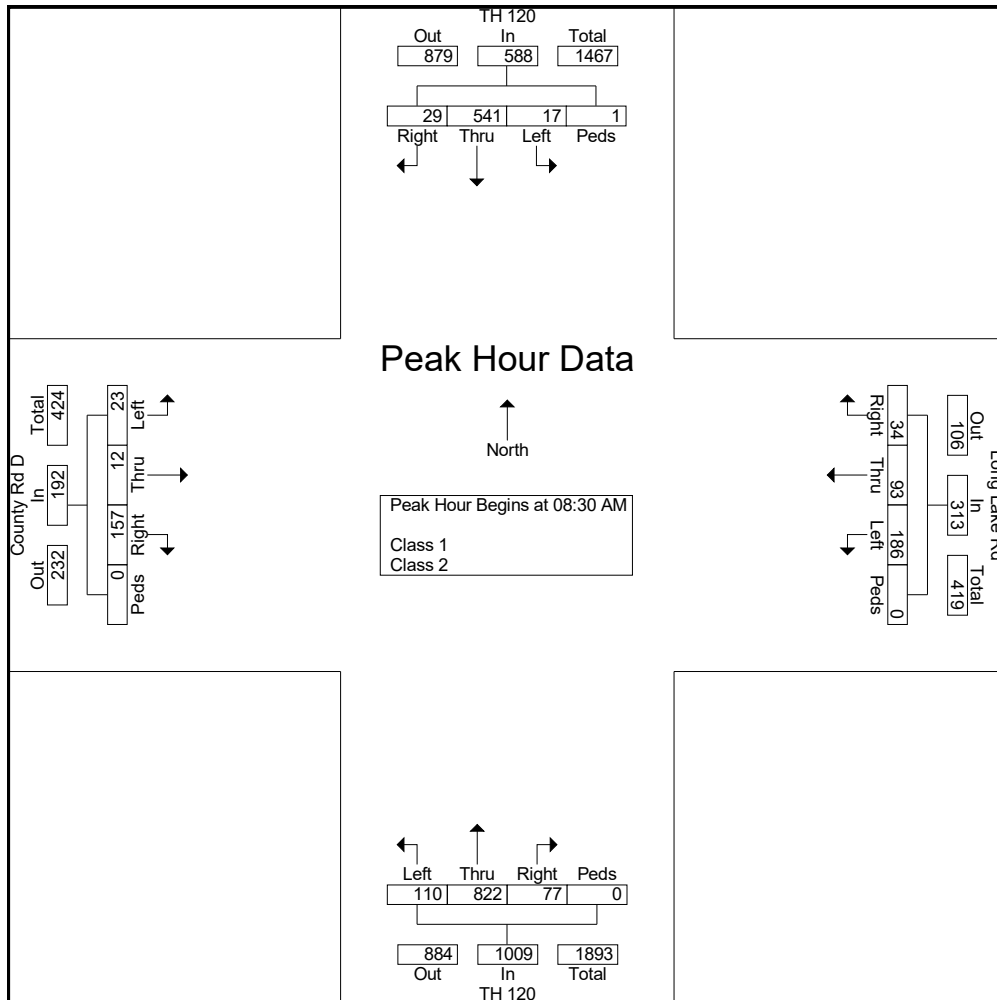
Groups Printed- Class 1 - Class 2

Start Time	TH 120 From North					Long Lake Rd From East					TH 120 From South					County Rd D From West					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	
04:00 PM	4	164	6	0	174	10	7	51	0	68	52	179	54	2	287	33	8	5	0	46	575
04:15 PM	16	165	3	0	184	6	10	41	0	57	45	186	48	1	280	22	6	5	0	33	554
04:30 PM	7	151	11	0	169	12	5	61	0	78	44	163	47	0	254	43	3	10	1	57	558
04:45 PM	18	169	4	0	191	12	10	54	0	76	47	162	51	0	260	38	5	4	0	47	574
Total	45	649	24	0	718	40	32	207	0	279	188	690	200	3	1081	136	22	24	1	183	2261
05:00 PM	13	162	7	0	182	4	12	44	0	60	59	185	56	1	301	25	6	9	0	40	583
05:15 PM	10	155	7	0	172	11	3	49	0	63	67	218	52	0	337	26	7	15	0	48	620
05:30 PM	17	159	8	0	184	13	7	41	0	61	59	225	41	1	326	29	9	7	1	46	617
05:45 PM	15	132	7	0	154	9	11	49	1	70	81	252	36	0	369	25	4	10	0	39	632
Total	55	608	29	0	692	37	33	183	1	254	266	880	185	2	1333	105	26	41	1	173	2452
Grand Total	391	6158	207	5	6761	298	324	1670	4	2296	1562	6758	1309	18	9647	1280	166	259	4	1709	20413
Apprch %	5.8	91.1	3.1	0.1		13	14.1	72.7	0.2		16.2	70.1	13.6	0.2		74.9	9.7	15.2	0.2		
Total %	1.9	30.2	1	0	33.1	1.5	1.6	8.2	0	11.2	7.7	33.1	6.4	0.1	47.3	6.3	0.8	1.3	0	8.4	
Class 1	368	6016	199	4	6587	293	321	1580	4	2198	1483	6706	1295	12	9496	1252	156	253	2	1663	19944
% Class 1	94.1	97.7	96.1	80	97.4	98.3	99.1	94.6	100	95.7	94.9	99.2	98.9	66.7	98.4	97.8	94	97.7	50	97.3	97.7
Class 2	23	142	8	1	174	5	3	90	0	98	79	52	14	6	151	28	10	6	2	46	469
% Class 2	5.9	2.3	3.9	20	2.6	1.7	0.9	5.4	0	4.3	5.1	0.8	1.1	33.3	1.6	2.2	6	2.3	50	2.7	2.3

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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 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:30 AM																					
08:30 AM	7	160	3	0	170	10	32	49	0	91	20	189	28	0	237	48	2	2	0	52	550
08:45 AM	7	136	3	1	147	9	30	52	0	91	21	209	23	0	253	43	5	7	0	55	546
09:00 AM	9	135	4	0	148	11	22	46	0	79	16	200	29	0	245	37	2	5	0	44	516
09:15 AM	6	110	7	0	123	4	9	39	0	52	20	224	30	0	274	29	3	9	0	41	490
Total Volume	29	541	17	1	588	34	93	186	0	313	77	822	110	0	1009	157	12	23	0	192	2102
% App. Total	4.9	92	2.9	0.2		10.9	29.7	59.4	0		7.6	81.5	10.9	0		81.8	6.2	12	0		
PHF	.806	.845	.607	.250	.865	.773	.727	.894	.000	.860	.917	.917	.917	.000	.921	.818	.600	.639	.000	.873	.955



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 TURN MOVEMENT COUNT                Page No : 4

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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 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	13	<b>162</b>	7	0	182	4	<b>12</b>	44	0	60	59	185	<b>56</b>	<b>1</b>	301	25	6	9	0	40	583
05:15 PM	10	155	7	0	172	11	3	<b>49</b>	0	63	67	218	52	0	337	26	7	<b>15</b>	0	<b>48</b>	620
05:30 PM	<b>17</b>	159	<b>8</b>	0	<b>184</b>	<b>13</b>	7	41	0	61	59	225	41	1	326	<b>29</b>	<b>9</b>	7	<b>1</b>	46	617
05:45 PM	15	132	7	0	154	9	11	49	<b>1</b>	<b>70</b>	<b>81</b>	<b>252</b>	36	0	<b>369</b>	25	4	10	0	39	<b>632</b>
Total Volume	55	608	29	0	692	37	33	183	1	254	266	880	185	2	1333	105	26	41	1	173	2452
% App. Total	7.9	87.9	4.2	0		14.6	13	72	0.4		20	66	13.9	0.2		60.7	15	23.7	0.6		
PHF	.809	.938	.906	.000	.940	.712	.688	.934	.250	.907	.821	.873	.826	.500	.903	.905	.722	.683	.250	.901	.970

