

# ALLIANT ENGINEERING, INC.

733 S Marquette Ave #700, Minneapolis, MN 55402

MN 51 & CSAH 30  
 City: Falcon Heights  
 data by: Spack Solutions  
 TURN MOVEMENT COUNT

File Name : MN 51 (Snelling Ave) & CSAH 30 (Larpenteur Ave)\_2021  
 Site Code : 1735340  
 Start Date : 10/19/2021  
 Page No : 1

Groups Printed- Cars - Trucks

Start Time	MN 51 (Snelling Ave) Southbound					CSAH 30 (Larpenteur Ave) Westbound					MN 51 (Snelling Ave) Northbound					CSAH 30 (Larpenteur Ave) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
06:00 AM	2	105	4	2	113	9	19	9	0	37	12	75	1	0	88	2	7	6	0	15	253
06:15 AM	6	142	12	3	163	13	36	6	0	55	14	69	4	0	87	2	11	17	0	30	335
06:30 AM	2	167	10	0	179	25	46	6	0	77	15	114	10	0	139	6	12	24	0	42	437
06:45 AM	7	233	11	1	252	27	59	7	0	93	15	97	15	0	127	4	6	28	0	38	510
<b>Total</b>	<b>17</b>	<b>647</b>	<b>37</b>	<b>6</b>	<b>707</b>	<b>74</b>	<b>160</b>	<b>28</b>	<b>0</b>	<b>262</b>	<b>56</b>	<b>355</b>	<b>30</b>	<b>0</b>	<b>441</b>	<b>14</b>	<b>36</b>	<b>75</b>	<b>0</b>	<b>125</b>	<b>1535</b>
07:00 AM	7	186	16	0	209	24	60	11	0	95	21	108	14	0	143	3	14	14	0	31	478
07:15 AM	10	257	10	4	281	26	57	11	0	94	32	174	17	0	223	7	25	28	0	60	658
07:30 AM	7	249	20	0	276	31	61	16	0	108	33	202	20	1	256	4	19	29	0	52	692
07:45 AM	7	245	23	0	275	36	105	16	0	157	38	206	23	0	267	14	35	41	0	90	789
<b>Total</b>	<b>31</b>	<b>937</b>	<b>69</b>	<b>4</b>	<b>1041</b>	<b>117</b>	<b>283</b>	<b>54</b>	<b>0</b>	<b>454</b>	<b>124</b>	<b>690</b>	<b>74</b>	<b>1</b>	<b>889</b>	<b>28</b>	<b>93</b>	<b>112</b>	<b>0</b>	<b>233</b>	<b>2617</b>
08:00 AM	10	214	15	1	240	33	87	16	1	137	38	166	11	1	216	7	26	28	0	61	654
08:15 AM	17	249	21	1	288	26	101	16	0	143	37	169	12	1	219	11	31	31	0	73	723
08:30 AM	23	180	15	0	218	23	94	16	0	133	39	190	7	1	237	7	40	23	0	70	658
08:45 AM	12	230	17	3	262	38	80	20	0	138	35	179	13	0	227	14	43	36	2	95	722
<b>Total</b>	<b>62</b>	<b>873</b>	<b>68</b>	<b>5</b>	<b>1008</b>	<b>120</b>	<b>362</b>	<b>68</b>	<b>1</b>	<b>551</b>	<b>149</b>	<b>704</b>	<b>43</b>	<b>3</b>	<b>899</b>	<b>39</b>	<b>140</b>	<b>118</b>	<b>2</b>	<b>299</b>	<b>2757</b>
09:00 AM	8	169	11	0	188	29	57	8	0	94	23	168	9	0	200	16	44	38	0	98	580
09:15 AM	13	190	16	0	219	27	58	19	0	104	27	140	10	0	177	26	43	41	0	110	610
09:30 AM	18	165	11	1	195	18	53	11	1	83	29	177	2	2	210	15	41	29	0	85	573
09:45 AM	11	211	19	0	241	16	48	20	0	84	30	182	4	1	217	14	37	40	0	91	633
<b>Total</b>	<b>50</b>	<b>735</b>	<b>57</b>	<b>1</b>	<b>843</b>	<b>90</b>	<b>216</b>	<b>58</b>	<b>1</b>	<b>365</b>	<b>109</b>	<b>667</b>	<b>25</b>	<b>3</b>	<b>804</b>	<b>71</b>	<b>165</b>	<b>148</b>	<b>0</b>	<b>384</b>	<b>2396</b>
10:00 AM	10	157	17	3	187	21	48	24	1	94	27	141	7	3	178	13	38	36	0	87	546
10:15 AM	31	136	13	1	181	20	51	16	0	87	18	163	11	1	193	15	35	24	0	74	535
10:30 AM	25	167	10	2	204	23	40	14	0	77	20	180	12	3	215	13	41	26	0	80	576
10:45 AM	20	148	15	0	183	25	44	21	0	90	20	182	20	1	223	14	55	32	1	102	598
<b>Total</b>	<b>86</b>	<b>608</b>	<b>55</b>	<b>6</b>	<b>755</b>	<b>89</b>	<b>183</b>	<b>75</b>	<b>1</b>	<b>348</b>	<b>85</b>	<b>666</b>	<b>50</b>	<b>8</b>	<b>809</b>	<b>55</b>	<b>169</b>	<b>118</b>	<b>1</b>	<b>343</b>	<b>2255</b>
11:00 AM	18	164	10	1	193	21	45	22	0	88	28	202	18	0	248	25	37	32	0	94	623
11:15 AM	25	173	18	0	216	27	53	23	0	103	32	240	28	0	300	20	55	46	0	121	740
11:30 AM	18	203	13	0	234	23	62	25	0	110	28	245	27	0	300	20	59	43	0	122	766
11:45 AM	28	169	22	1	220	30	54	24	0	108	35	240	29	0	304	40	52	34	0	126	758
<b>Total</b>	<b>89</b>	<b>709</b>	<b>63</b>	<b>2</b>	<b>863</b>	<b>101</b>	<b>214</b>	<b>94</b>	<b>0</b>	<b>409</b>	<b>123</b>	<b>927</b>	<b>102</b>	<b>0</b>	<b>1152</b>	<b>105</b>	<b>203</b>	<b>155</b>	<b>0</b>	<b>463</b>	<b>2887</b>
12:00 PM	22	203	21	4	250	30	55	30	0	115	25	259	27	0	311	27	40	36	0	103	779
12:15 PM	26	228	21	1	276	30	42	30	2	104	26	224	26	1	277	25	44	26	0	95	752
12:30 PM	24	251	34	0	309	26	50	19	0	95	36	230	27	0	293	27	63	38	1	129	826
12:45 PM	27	220	20	0	267	43	54	21	1	119	26	228	25	3	282	23	61	34	0	118	786
<b>Total</b>	<b>99</b>	<b>902</b>	<b>96</b>	<b>5</b>	<b>1102</b>	<b>129</b>	<b>201</b>	<b>100</b>	<b>3</b>	<b>433</b>	<b>113</b>	<b>941</b>	<b>105</b>	<b>4</b>	<b>1163</b>	<b>102</b>	<b>208</b>	<b>134</b>	<b>1</b>	<b>445</b>	<b>3143</b>
01:00 PM	19	210	16	0	245	34	53	20	0	107	20	204	20	4	248	19	54	31	0	104	704
01:15 PM	18	224	20	2	264	24	59	23	0	106	24	208	31	0	263	23	48	44	0	115	748
01:30 PM	23	200	11	0	234	23	62	20	0	105	29	239	22	3	293	21	50	36	0	107	739
01:45 PM	22	199	15	2	238	25	51	24	2	102	36	236	18	2	292	23	46	27	0	96	728
<b>Total</b>	<b>82</b>	<b>833</b>	<b>62</b>	<b>4</b>	<b>981</b>	<b>106</b>	<b>225</b>	<b>87</b>	<b>2</b>	<b>420</b>	<b>109</b>	<b>887</b>	<b>91</b>	<b>9</b>	<b>1096</b>	<b>86</b>	<b>198</b>	<b>138</b>	<b>0</b>	<b>422</b>	<b>2919</b>
02:00 PM	18	200	20	1	239	28	37	29	0	94	22	273	39	2	336	44	45	35	0	124	793
02:15 PM	26	198	11	0	235	23	68	33	0	124	26	238	36	0	300	22	82	37	0	141	800
02:30 PM	15	228	20	1	264	28	52	16	0	96	31	338	46	1	416	24	64	39	0	127	903
02:45 PM	32	205	14	0	251	34	59	24	1	118	30	237	31	2	300	24	73	32	0	129	798
<b>Total</b>	<b>91</b>	<b>831</b>	<b>65</b>	<b>2</b>	<b>989</b>	<b>113</b>	<b>216</b>	<b>102</b>	<b>1</b>	<b>432</b>	<b>109</b>	<b>1086</b>	<b>152</b>	<b>5</b>	<b>1352</b>	<b>114</b>	<b>264</b>	<b>143</b>	<b>0</b>	<b>521</b>	<b>3294</b>
03:00 PM	33	220	15	4	272	23	52	28	2	105	23	366	37	3	429	30	66	46	0	142	948

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MN 51 & CSAH 30  
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 Site Code : 1735340  
 Start Date : 10/19/2021  
 Page No : 2

Groups Printed- Cars - Trucks

Start Time	MN 51 (Snelling Ave) Southbound					CSAH 30 (Larpenteur Ave) Westbound					MN 51 (Snelling Ave) Northbound					CSAH 30 (Larpenteur Ave) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
03:15 PM	21	229	16	2	268	27	58	28	0	113	28	351	38	0	417	39	106	50	0	195	993
03:30 PM	26	207	8	1	242	35	55	16	1	107	33	367	48	2	450	24	94	40	0	158	957
03:45 PM	32	155	12	4	203	33	68	32	0	133	30	327	38	0	395	40	82	42	0	164	895
Total	112	811	51	11	985	118	233	104	3	458	114	1411	161	5	1691	133	348	178	0	659	3793
04:00 PM	25	259	11	2	297	24	52	28	2	106	35	407	40	4	486	45	111	43	0	199	1088
04:15 PM	30	210	21	10	271	27	70	28	3	128	31	381	41	2	455	23	140	50	0	213	1067
04:30 PM	51	240	10	4	305	31	65	22	4	122	39	324	40	2	405	38	147	68	0	253	1085
04:45 PM	24	231	10	5	270	30	80	20	2	132	32	393	41	4	470	42	173	71	0	286	1158
Total	130	940	52	21	1143	112	267	98	11	488	137	1505	162	12	1816	148	571	232	0	951	4398
05:00 PM	41	296	17	1	355	31	46	30	2	109	47	401	53	1	502	59	127	51	0	237	1203
05:15 PM	42	248	17	2	309	20	76	35	2	133	31	333	38	0	402	44	149	51	0	244	1088
05:30 PM	37	231	14	1	283	32	55	30	0	117	27	248	33	0	308	39	106	52	0	197	905
05:45 PM	27	201	9	2	239	17	72	24	0	113	30	277	30	1	338	23	97	54	0	174	864
Total	147	976	57	6	1186	100	249	119	4	472	135	1259	154	2	1550	165	479	208	0	852	4060
06:00 PM	30	206	17	3	256	23	48	22	2	95	23	254	23	2	302	28	59	36	0	123	776
06:15 PM	35	197	12	2	246	39	64	29	1	133	27	240	31	3	301	38	62	33	1	134	814
06:30 PM	27	197	21	3	248	31	38	20	2	91	24	224	25	0	273	22	51	28	0	101	713
06:45 PM	25	188	17	3	233	28	47	27	0	102	22	181	17	0	220	17	52	32	0	101	656
Total	117	788	67	11	983	121	197	98	5	421	96	899	96	5	1096	105	224	129	1	459	2959
Grand Total	1113	10590	799	84	12586	1390	3006	1085	32	5513	1459	11997	1245	57	14758	1165	3098	1888	5	6156	39013
Apprch %	8.8	84.1	6.3	0.7		25.2	54.5	19.7	0.6		9.9	81.3	8.4	0.4		18.9	50.3	30.7	0.1		
Total %	2.9	27.1	2	0.2	32.3	3.6	7.7	2.8	0.1	14.1	3.7	30.8	3.2	0.1	37.8	3	7.9	4.8	0	15.8	
Cars	1080	10111	788	76	12055	1358	2915	1054	31	5358	1395	11565	1210	53	14223	1135	3014	1788	5	5942	37578
% Cars	97	95.5	98.6	90.5	95.8	97.7	97	97.1	96.9	97.2	95.6	96.4	97.2	93	96.4	97.4	97.3	94.7	100	96.5	96.3
Trucks	33	479	11	8	531	32	91	31	1	155	64	432	35	4	535	30	84	100	0	214	1435
% Trucks	3	4.5	1.4	9.5	4.2	2.3	3	2.9	3.1	2.8	4.4	3.6	2.8	7	3.6	2.6	2.7	5.3	0	3.5	3.7

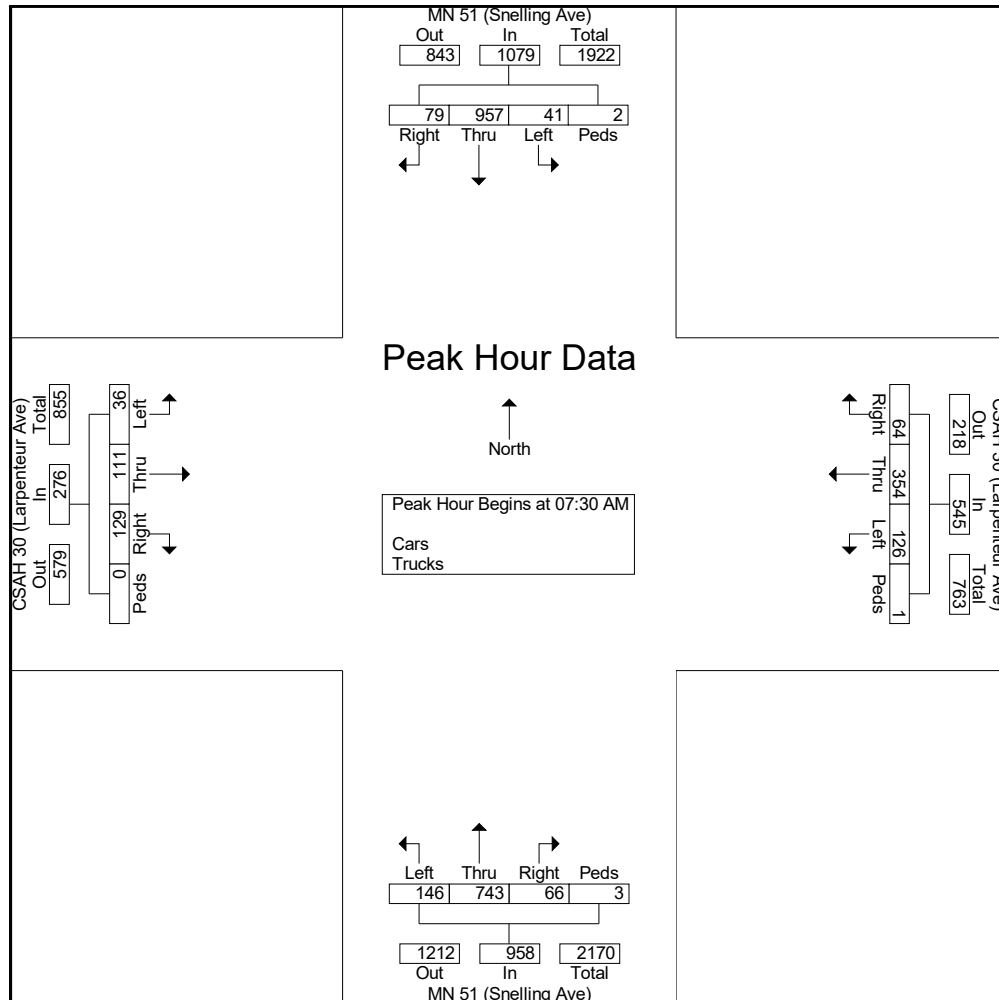
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733 S Marquette Ave #700, Minneapolis, MN 55402

MN 51 & CSAH 30  
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Start Time	MN 51 (Snelling Ave) Southbound					CSAH 30 (Larpenteur Ave) Westbound					MN 51 (Snelling Ave) Northbound					CSAH 30 (Larpenteur Ave) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 07:30 AM																					
07:30 AM	7	249	20	0	276	31	61	16	0	108	33	202	20	1	256	4	19	29	0	52	692
07:45 AM	7	245	23	0	275	36	105	16	0	157	38	206	23	0	267	14	35	41	0	90	789
08:00 AM	10	214	15	1	240	33	87	16	1	137	38	166	11	1	216	7	26	28	0	61	654
08:15 AM	17	249	21	1	288	26	101	16	0	143	37	169	12	1	219	11	31	31	0	73	723
Total Volume	41	957	79	2	1079	126	354	64	1	545	146	743	66	3	958	36	111	129	0	276	2858
% App. Total	3.8	88.7	7.3	0.2		23.1	65	11.7	0.2		15.2	77.6	6.9	0.3		13	40.2	46.7	0		
PHF	.603	.961	.859	.500	.937	.875	.843	1.00	.250	.868	.961	.902	.717	.750	.897	.643	.793	.787	.000	.767	.906



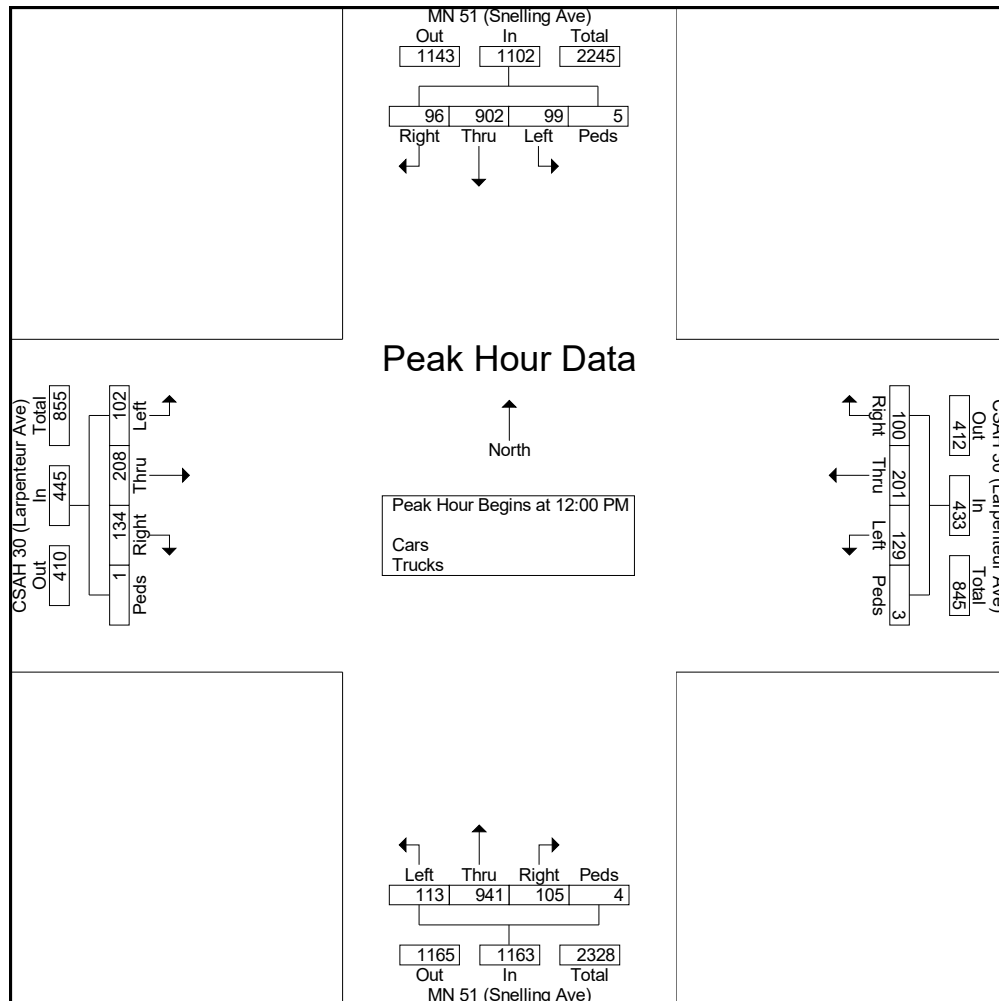
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 Page No : 4

Start Time	MN 51 (Snelling Ave) Southbound					CSAH 30 (Larpenteur Ave) Westbound					MN 51 (Snelling Ave) Northbound					CSAH 30 (Larpenteur Ave) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	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 12:00 PM																					
12:00 PM	22	203	21	4	250	30	55	30	0	115	25	259	27	0	311	27	40	36	0	103	779
12:15 PM	26	228	21	1	276	30	42	30	2	104	26	224	26	1	277	25	44	26	0	95	752
12:30 PM	24	251	34	0	309	26	50	19	0	95	36	230	27	0	293	27	63	38	1	129	826
12:45 PM	27	220	20	0	267	43	54	21	1	119	26	228	25	3	282	23	61	34	0	118	786
Total Volume	99	902	96	5	1102	129	201	100	3	433	113	941	105	4	1163	102	208	134	1	445	3143
% App. Total	9	81.9	8.7	0.5		29.8	46.4	23.1	0.7		9.7	80.9	9	0.3		22.9	46.7	30.1	0.2		
PHF	.917	.898	.706	.313	.892	.750	.914	.833	.375	.910	.785	.908	.972	.333	.935	.944	.825	.882	.250	.862	.951



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Start Time	MN 51 (Snelling Ave) Southbound					CSAH 30 (Larpenteur Ave) Westbound					MN 51 (Snelling Ave) Northbound					CSAH 30 (Larpenteur Ave) Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	51	240	10	4	305	31	65	22	4	122	39	324	40	2	405	38	147	68	0	253	1085
04:45 PM	24	231	10	5	270	30	80	20	2	132	32	393	41	4	470	42	173	71	0	286	1158
05:00 PM	41	296	17	1	355	31	46	30	2	109	47	401	53	1	502	59	127	51	0	237	1203
05:15 PM	42	248	17	2	309	20	76	35	2	133	31	333	38	0	402	44	149	51	0	244	1088
Total Volume	158	1015	54	12	1239	112	267	107	10	496	149	1451	172	7	1779	183	596	241	0	1020	4534
% App. Total	12.8	81.9	4.4	1		22.6	53.8	21.6	2		8.4	81.6	9.7	0.4		17.9	58.4	23.6	0		
PHF	.775	.857	.794	.600	.873	.903	.834	.764	.625	.932	.793	.905	.811	.438	.886	.775	.861	.849	.000	.892	.942

