

CRANFORD POLICE DEPARTMENT

OFFICER'S REPORT

DATE: 10/21/2024

TO: Capt. Christopher Polito *P*

CC: Ludecker *(R)*

FROM: Det. James Knight

SUBJECT: Speed Study Walnut/Lexington 10/9-10/21/2024



Captain Polito,

Per your orders, a speed study was conducted on Walnut Ave utilizing one of our Bureau's Speed Alert 24 RADAR message signs. Said study was conducted over the course of thirteen (13) days from 10/09-10/21 on traffic heading southbound on Walnut Ave.

The study determined the average speed on Walnut Ave was 29 mph. The 85% speed was 35 mph and the 50% speed was 30 mph.

The study measured the speeds of 85,421 vehicles, of which 2627 (3.1%) were traveling above 40 mph.

The results of this study are attached for your review.

Respectfully,

A handwritten signature in black ink, appearing to read "Jim Knight", written over a horizontal line.

Det. James Knight



Extended Speed Summary

Walnut/Lexington SB, SB

Start: 2024-10-09

End: 2024-10-21

Times: 0:00:00-23:59:59

Violation Threshold: Speed Limit + 10

Speed Range: 1 to 150

Overall Summary

Total Days of Data: 13

Speed Limit: 25

Average Speed: 29.29

50th Percentile Speed: 29.74

85th Percentile Speed: 35.48

Pace Speed Range: 25-35

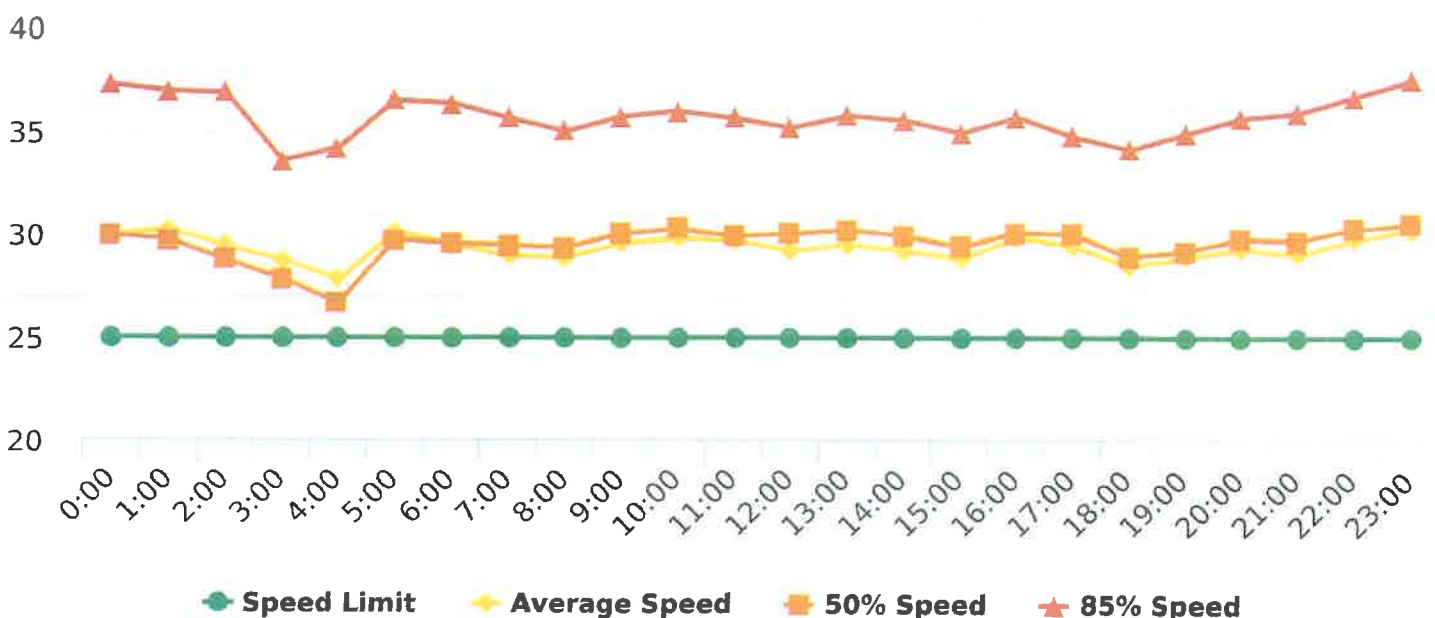
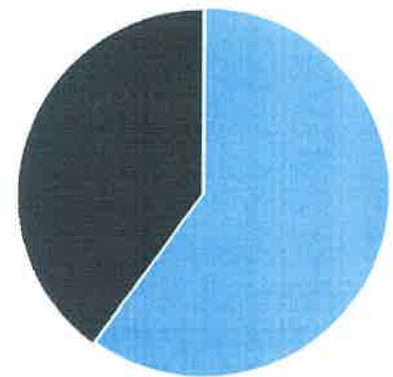
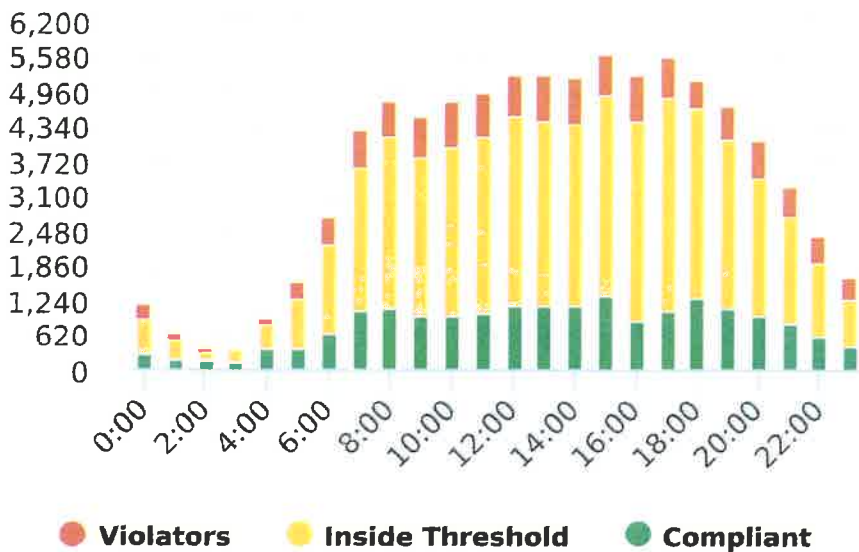
Minimum Speed: 10

Maximum Speed: 77

Display Mode: Dependent Messages

Average Volume per Day: 6570.8

Total Volume: 85421





Extended Speed Summary

Walnut/Lexington SB, SB

Start: 2024-10-09

End: 2024-10-21

Times: 0:00:00-23:59:59

Violation Threshold: Speed Limit + 10

Speed Range: 1 to 150

Time	Sign Mode	Speed Limit	Total # Vehicles	Total # Violator	% Violator	Avg # Vehicles	Avg # Violators	Min Speed	Max Speed	Avg Speed	50% Speed	85% Speed	Sign Effectiveness
0:00	Dependent Messages	25	1200	281	23.4%	100.0	23.4	10	77	29.9	29.9	37.2	43.1%
1:00	Dependent Messages	25	695	165	23.7%	57.9	13.8	10	54	30.2	29.7	36.9	39.5%
2:00	Dependent Messages	25	434	109	25.1%	36.2	9.1	10	52	29.4	28.8	36.8	36.7%
3:00	Dependent Messages	25	423	53	12.5%	35.3	4.4	10	56	28.7	27.9	33.6	33.3%
4:00	Dependent Messages	25	946	115	12.2%	78.8	9.6	10	55	27.8	26.7	34.2	34.5%
5:00	Dependent Messages	25	1609	323	20.1%	134.1	26.9	10	59	30.1	29.7	36.5	43.3%
6:00	Dependent Messages	25	2775	509	18.3%	231.3	42.4	10	57	29.5	29.6	36.3	51.9%
7:00	Dependent Messages	25	4333	690	15.9%	333.3	53.1	10	53	28.9	29.5	35.6	59.5%
8:00	Dependent Messages	25	4824	645	13.4%	402.0	53.8	10	49	28.9	29.4	35.0	62.0%
9:00	Dependent Messages	25	4542	718	15.8%	378.5	59.8	10	52	29.5	30.0	35.7	64.3%
10:00	Dependent Messages	25	4829	839	17.4%	402.4	69.9	10	77	29.8	30.3	36.0	65.0%
11:00	Dependent Messages	25	4960	777	15.7%	413.3	64.8	10	50	29.7	29.9	35.6	67.0%
12:00	Dependent Messages	25	5290	744	14.1%	440.8	62.0	10	49	29.2	30.0	35.2	63.2%
13:00	Dependent Messages	25	5302	863	16.3%	441.8	71.9	10	59	29.5	30.2	35.7	64.1%
14:00	Dependent Messages	25	5215	809	15.5%	434.6	67.4	10	50	29.2	29.9	35.5	63.3%
15:00	Dependent Messages	25	5636	718	12.7%	469.7	59.8	10	61	28.8	29.4	34.9	61.7%
16:00	Dependent Messages	25	5265	801	15.2%	438.8	66.8	10	54	29.9	30.1	35.7	63.4%
17:00	Dependent Messages	25	5615	737	13.1%	467.9	61.4	10	51	29.4	30.0	34.8	61.3%
18:00	Dependent Messages	25	5203	503	9.7%	433.6	41.9	10	52	28.5	28.9	34.1	60.4%
19:00	Dependent Messages	25	4742	620	13.1%	395.2	51.7	10	66	28.9	29.2	34.9	61.5%
20:00	Dependent Messages	25	4127	690	16.7%	343.9	57.5	10	58	29.3	29.8	35.7	58.5%
21:00	Dependent Messages	25	3328	571	17.2%	277.3	47.6	10	50	29.0	29.7	35.9	55.7%
22:00	Dependent Messages	25	2446	523	21.4%	203.8	43.6	10	60	29.8	30.3	36.7	51.5%
23:00	Dependent Messages	25	1682	410	24.4%	140.2	34.2	10	55	30.2	30.5	37.5	47.3%
Total Volumes/ Avg			85421	13213	15.5%	7090.6	1096.8	10	77	29.3	29.6	35.7	54.7%
Total/Avg w/o Feedback			0	0	0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	n/a
Total/Avg w/ Feedback			85421	13213	15.5%	7090.6	1096.8	10	77	29.3	29.6	35.7	54.7%

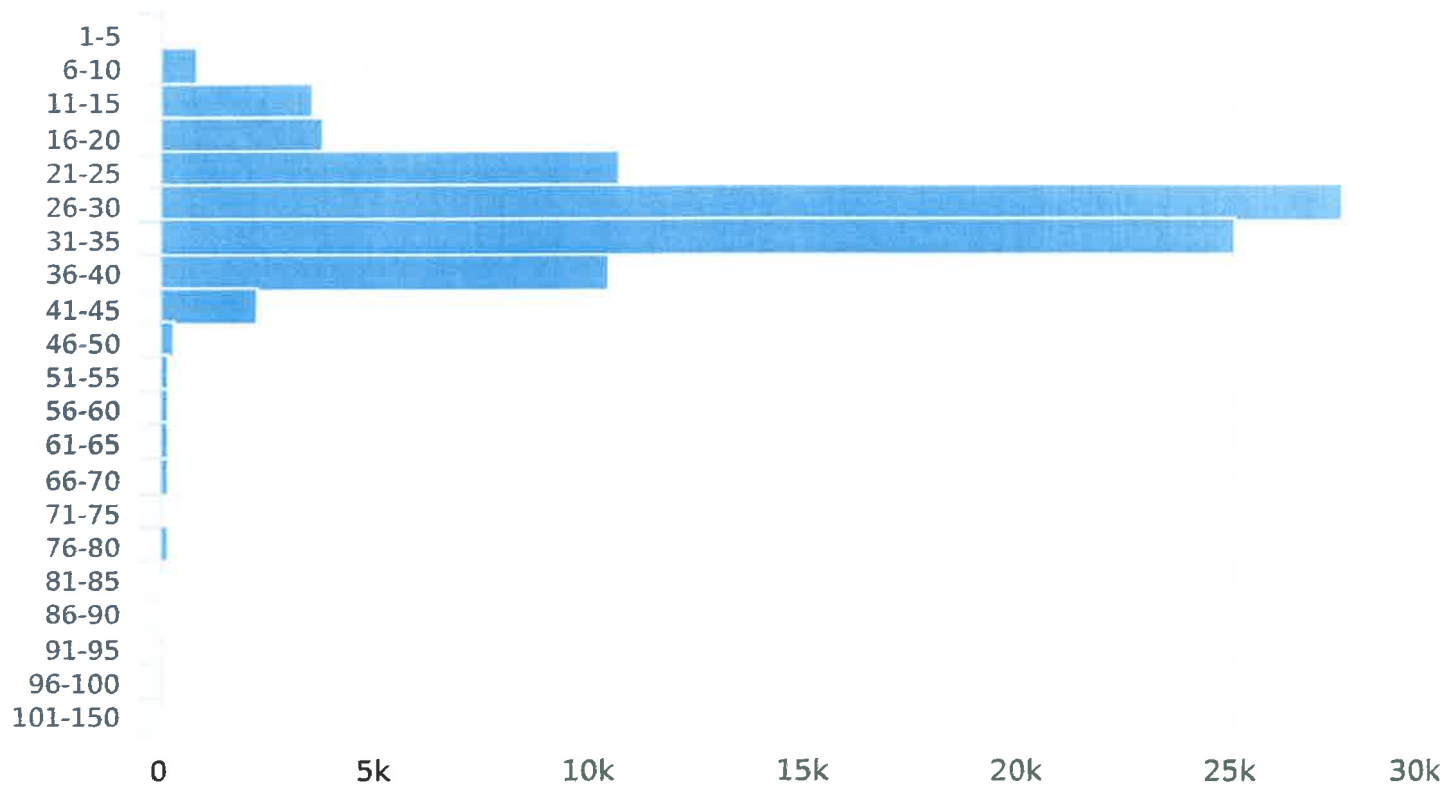


Start: 2024-10-09
End: 2024-10-21
Times: 0:00:00-23:59:59

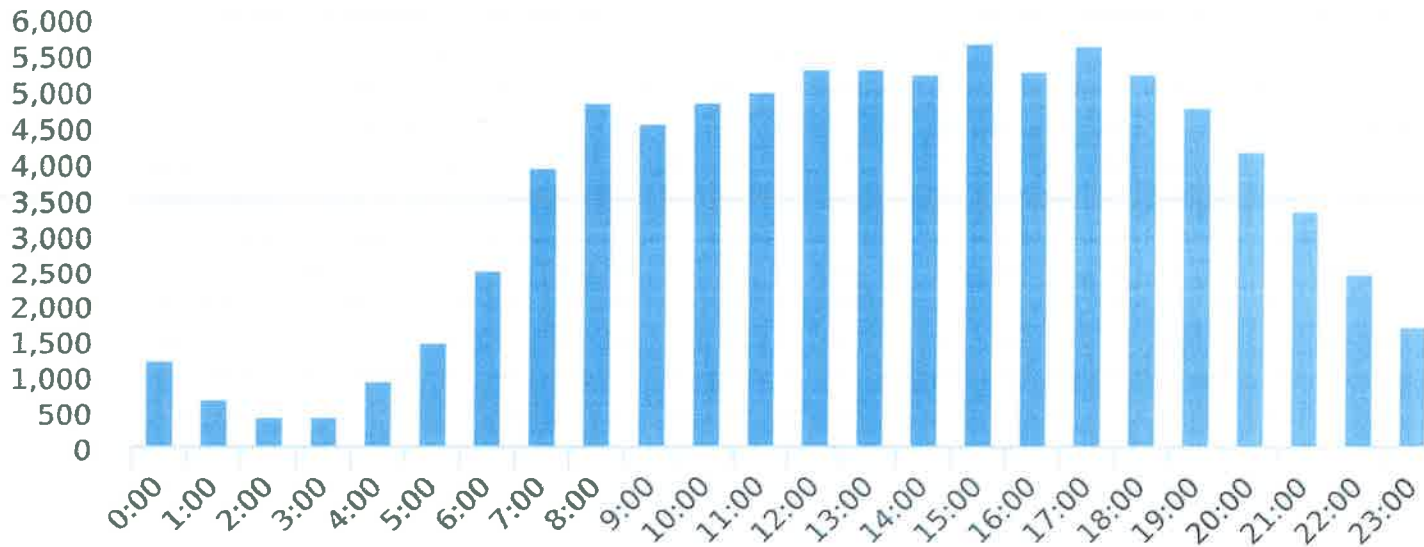
Volume by Speed
Walnut/Lexington SB, SB

Speed Bins: Size 5, Range 1 to 150
Time View: By Hour (Total Volumes)

Total Volume by Speed Distribution



Volume over Time





Start: 2024-10-09

End: 2024-10-21

Times: 0:00:00-23:59:59

Volume by Time

Walnut/Lexington SB, SB

Speed Bins: Size 10, Range 1 to 150

Time View: By Day (Total Volumes)

Date	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Total
10-09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	253	444	363	397	368	441	424	455	486	468	495	449	416	400	264	192	91	6406
10-10	104	38	11	56	68	163	323	418	391	380	367	377	426	416	413	485	458	504	474	412	343	336	229	108	7300
10-11	98	38	49	28	82	159	280	384	432	407	394	417	458	445	466	477	478	486	461	421	372	307	278	198	7615
10-12	142	113	50	36	83	98	142	258	374	357	439	463	449	456	446	445	430	429	389	354	318	227	255	184	6937
10-13	169	68	62	39	55	40	121	178	308	330	389	426	448	408	426	415	360	449	388	327	289	223	169	118	6205
10-14	76	37	22	38	44	147	244	358	402	356	404	404	462	462	424	454	440	479	427	390	332	258	143	95	6898
10-15	81	38	11	19	103	210	279	397	439	438	406	400	425	447	418	517	473	506	480	402	322	267	178	122	7378
10-16	51	57	17	37	104	173	280	406	487	375	374	400	385	480	445	480	456	507	433	427	392	270	163	103	7302
10-17	72	30	55	41	136	158	287	417	458	400	392	392	424	422	436	514	457	469	450	442	389	328	173	95	7437
10-18	68	26	38	24	103	171	258	391	448	409	417	438	455	435	435	555	466	505	483	408	364	345	264	205	7711
10-19	132	98	67	37	66	61	158	269	355	393	418	454	468	460	445	422	396	397	404	383	355	302	276	235	7051
10-20	162	93	35	41	43	86	127	202	286	334	432	421	449	447	406	386	383	389	365	360	251	201	126	128	6153
10-21	45	59	17	27	59	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	207
Total	1200	695	434	423	946	1466	2499	3931	4824	4542	4829	4960	5290	5302	5215	5636	5265	5615	5203	4742	4127	3328	2446	1682	84600

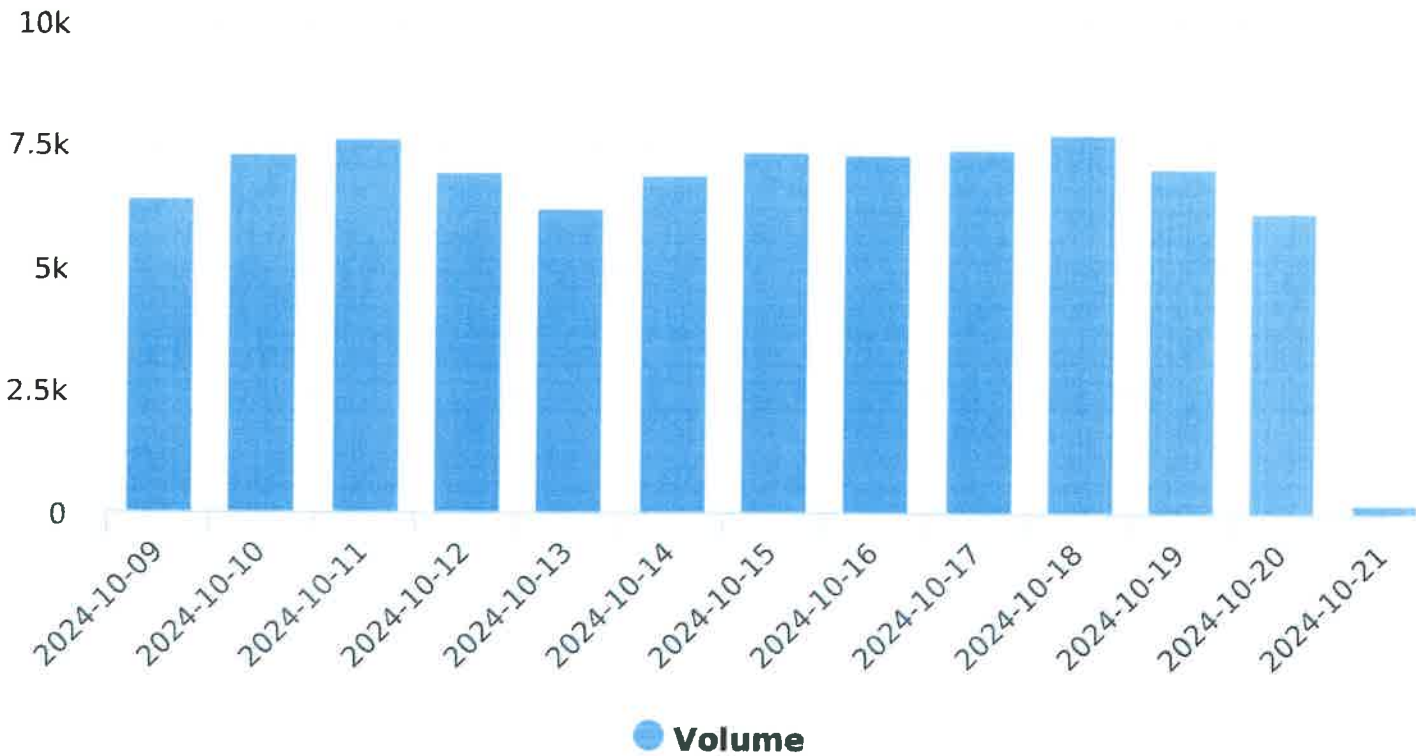


Start: 2024-10-09
End: 2024-10-21
Times: 0:00:00-23:59:59

Volume by Time
Walnut/Lexington SB, SB

Speed Bins: Size 10, Range 1 to 150
Time View: By Day (Total Volumes)

Daily Total Volume





Start: 2024-10-09
End: 2024-10-21
Times: 0:00:00-23:59:59

Speed Bins: Size 5, Range 1 to 150
Time View: By Hour (Total Volumes)

Time	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	71 to 75	76 to 80	81 to 85	86 to 90	91 to 95	96 to 100	101 to 150	Avg Speed	Total
0:00	0	16	48	80	141	335	299	196	62	14	6	1	0	1	0	1	0	0	0	0	0	29.9	1200
1:00	0	5	15	38	116	190	166	105	46	10	4	0	0	0	0	0	0	0	0	0	0	30.3	695
2:00	0	2	23	57	85	68	90	58	38	12	1	0	0	0	0	0	0	0	0	0	0	29.3	434
3:00	0	2	5	27	101	155	80	28	18	6	0	1	0	0	0	0	0	0	0	0	0	28.8	423
4:00	0	7	25	51	294	303	151	78	22	9	6	0	0	0	0	0	0	0	0	0	0	27.8	946
5:00	0	9	37	93	189	446	412	200	61	14	4	1	0	0	0	0	0	0	0	0	0	29.9	1466
6:00	0	23	107	105	327	801	676	339	106	10	4	1	0	0	0	0	0	0	0	0	0	29.6	2499
7:00	0	49	176	213	485	1264	1086	524	116	17	1	0	0	0	0	0	0	0	0	0	0	29.2	3931
8:00	0	49	218	224	634	1682	1372	528	107	10	0	0	0	0	0	0	0	0	0	0	0	28.9	4824
9:00	0	41	170	170	566	1464	1413	593	114	10	1	0	0	0	0	0	0	0	0	0	0	29.6	4542
10:00	0	49	208	183	543	1442	1565	662	152	23	1	0	0	0	0	1	0	0	0	0	0	29.8	4829
11:00	0	45	167	191	594	1674	1512	631	132	14	0	0	0	0	0	0	0	0	0	0	0	29.6	4960
12:00	0	59	219	247	618	1710	1693	609	123	12	0	0	0	0	0	0	0	0	0	0	0	29.2	5290
13:00	0	59	256	213	602	1629	1680	707	132	17	6	1	0	0	0	0	0	0	0	0	0	29.4	5302
14:00	0	56	276	243	560	1652	1619	659	137	13	0	0	0	0	0	0	0	0	0	0	0	29.2	5215
15:00	0	61	288	240	723	1901	1705	606	97	11	2	1	1	0	0	0	0	0	0	0	0	28.9	5636
16:00	0	30	157	156	521	1857	1743	674	117	9	1	0	0	0	0	0	0	0	0	0	0	30.0	5265
17:00	0	52	174	190	651	1999	1812	644	80	11	2	0	0	0	0	0	0	0	0	0	0	29.4	5615
18:00	0	48	221	261	746	1966	1458	429	67	6	1	0	0	0	0	0	0	0	0	0	0	28.4	5203
19:00	0	46	186	223	657	1681	1329	506	92	12	5	4	0	1	0	0	0	0	0	0	0	28.9	4742
20:00	0	42	183	200	527	1287	1198	560	114	14	1	1	0	0	0	0	0	0	0	0	0	29.3	4127
21:00	0	41	172	179	424	1007	934	457	101	13	0	0	0	0	0	0	0	0	0	0	0	29.1	3328
22:00	0	23	97	121	356	659	667	384	115	18	4	2	0	0	0	0	0	0	0	0	0	29.8	2446
23:00	0	14	78	90	224	431	435	285	95	23	7	0	0	0	0	0	0	0	0	0	0	30.2	1682
Total	0	828	3506	3795	10684	27603	25095	10462	2244	308	57	13	1	2	0	2	0	0	0	0	0	29.3	84600