

CRANFORD POLICE DEPARTMENT

OFFICER'S REPORT



DATE: 9/25/24

TO: D/Sgt. Luedecker 

CC: _____

FROM: Det. James Knight

SUBJECT: Speed Study Walnut/Chester Lang NB

D/Sgt. Luedecker,

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 nine (9) days from 09/17-09/25 on traffic heading northbound on Walnut Ave.

The study determined the average speed on Walnut Ave was 26 mph. The 85% speed was 34 mph and the 50% speed was 27 mph.

The study measured the speeds of 53,505 vehicles, of which 1851 (3%) were traveling above 40 mph.

The results of this study are attached for your review.

Respectfully,



Det. James Knight



Extended Speed Summary

Walnut/Chester Lang, NB

Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

Violation Threshold: Speed Limit + 10
Speed Range: 1 to 150

Overall Summary

Total Days of Data: 9

Speed Limit: 25

Average Speed: 26.17

50th Percentile Speed: 26.67

85th Percentile Speed: 34.02

Pace Speed Range: 23-33

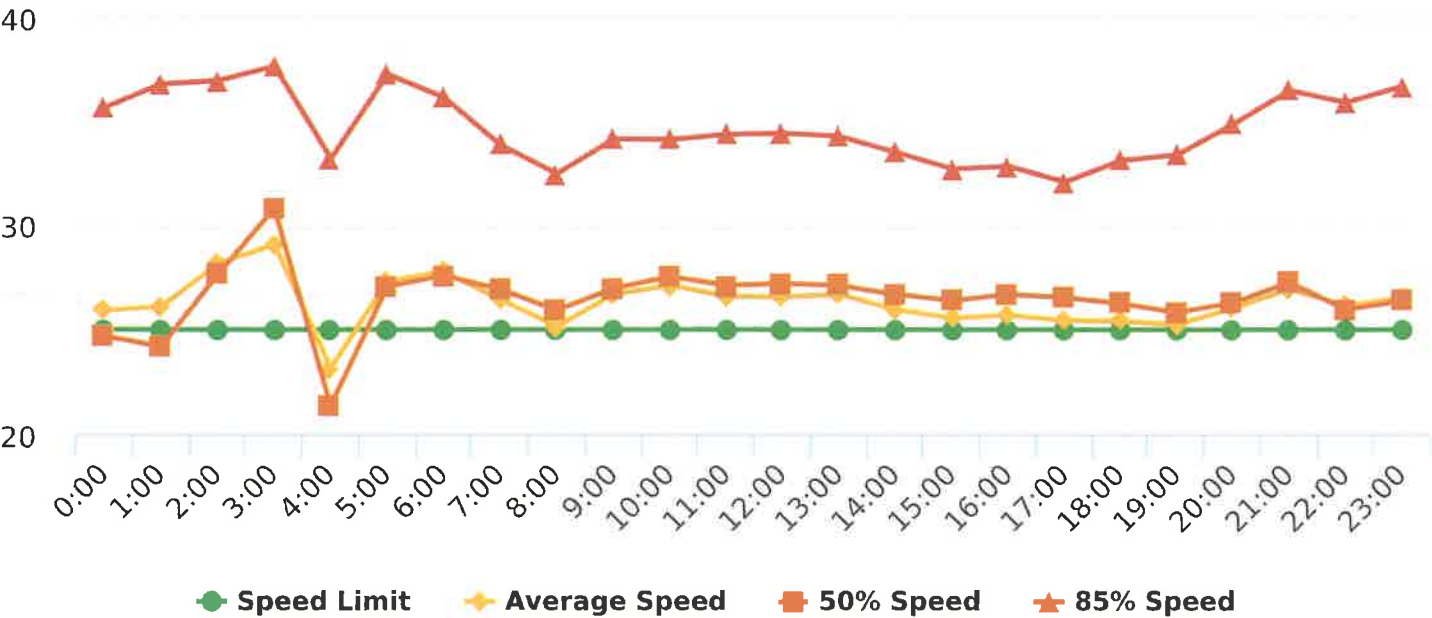
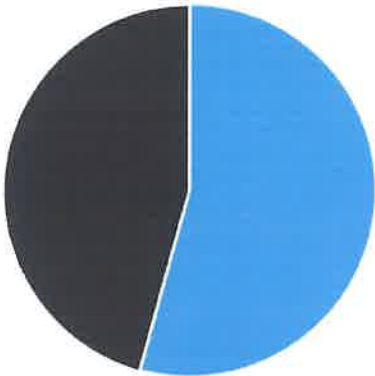
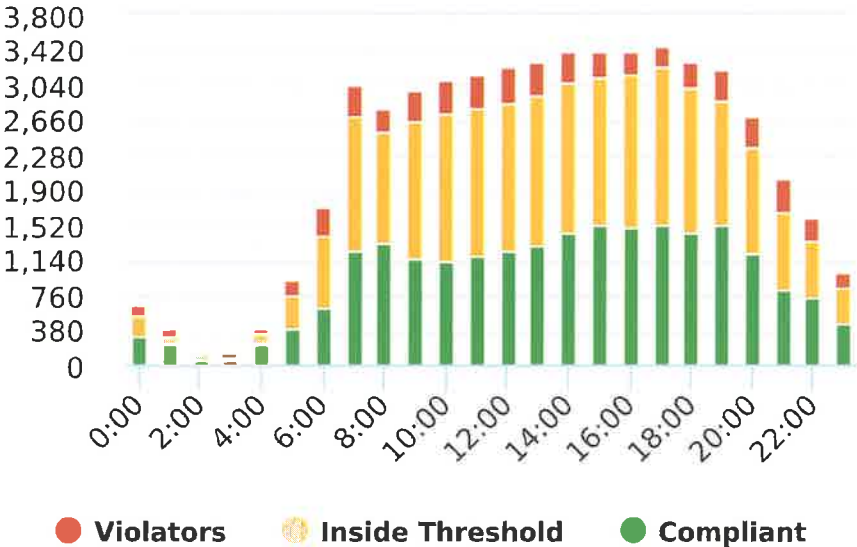
Minimum Speed: 10

Maximum Speed: 67

Display Mode: Speed Limit Sign, Dependent

Average Volume per Day: 5945.0

Total Volume: 53505





Extended Speed Summary

Walnut/Chester Lang, NB

Start: 2024-09-17

End: 2024-09-25

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	653	122	18.7%	93.3	17.4	10	53	25.9	24.7	35.7	55.8%
1:00	Dependent Messages	25	393	75	19.1%	56.1	10.7	10	66	26.1	24.2	36.8	52.8%
2:00	Dependent Messages	25	135	29	21.5%	19.3	4.1	10	50	28.2	27.7	36.9	67.4%
3:00	Dependent Messages	25	139	41	29.5%	19.9	5.9	10	60	29.1	30.8	37.6	67.0%
4:00	Dependent Messages	25	390	61	15.6%	55.7	8.7	10	56	23.2	21.4	33.2	53.4%
5:00	Dependent Messages	25	940	194	20.6%	134.3	27.7	10	59	27.4	27.1	37.3	57.1%
6:00	Dependent Messages	25	1703	288	16.9%	243.3	41.1	10	59	27.8	27.6	36.1	60.5%
7:00	Dependent Messages	25	3044	347	11.4%	434.9	49.6	10	55	26.5	26.9	33.9	54.1%
8:00	Dependent Messages, Speed Limit Sign	25	2781	244	8.8%	397.3	34.9	10	51	25.2	25.9	32.5	54.7%
9:00	Dependent Messages	25	2985	330	11.1%	426.4	47.1	10	51	26.7	27.0	34.1	55.9%
10:00	Dependent Messages	25	3103	367	11.8%	443.3	52.4	10	61	27.1	27.6	34.1	56.9%
11:00	Dependent Messages	25	3155	361	11.4%	450.7	51.6	10	57	26.6	27.1	34.4	56.3%
12:00	Dependent Messages, Speed Limit Sign	25	3232	377	11.7%	404.0	47.1	10	55	26.6	27.2	34.4	54.0%
13:00	Speed Limit Sign, Dependent Messages	25	3306	372	11.3%	413.3	46.5	10	58	26.7	27.1	34.3	54.2%
14:00	Dependent Messages, Speed Limit Sign	25	3418	348	10.2%	427.3	43.5	10	49	26.0	26.7	33.5	54.6%
15:00	Speed Limit Sign, Dependent Messages	25	3398	272	8.0%	424.8	34.0	10	52	25.6	26.4	32.7	49.2%
16:00	Dependent Messages	25	3419	265	7.8%	488.4	37.9	10	55	25.7	26.7	32.9	50.4%
17:00	Dependent Messages	25	3454	230	6.7%	493.4	32.9	10	51	25.5	26.6	32.1	49.1%
18:00	Dependent Messages	25	3306	289	8.7%	472.3	41.3	10	49	25.4	26.3	33.1	50.2%
19:00	Dependent Messages	25	3199	319	10.0%	457.0	45.6	10	61	25.3	25.9	33.4	53.7%
20:00	Dependent Messages	25	2704	353	13.1%	386.3	50.4	10	50	26.1	26.3	34.9	57.4%
21:00	Dependent Messages	25	2014	352	17.5%	287.7	50.3	10	59	27.0	27.3	36.5	59.2%
22:00	Dependent Messages	25	1615	264	16.3%	230.7	37.7	10	52	26.2	26.0	35.9	55.3%
23:00	Dependent Messages	25	1019	188	18.4%	145.6	26.9	10	67	26.5	26.4	36.7	60.0%



Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

Violation Threshold: Speed Limit + 10
Speed Range: 1 to 150

Total Volumes/ Avg	53505	6088	11.4%	7405.1	845.3	10	67	26.3	26.5	34.7	55.8%
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	53505	6088	11.4%	7405.1	845.3	10	67	26.3	26.5	34.7	55.8%



Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

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
09-17	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	3	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	18
09-18	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	109	446	455	440	447	476	490	439	503	486	498	463	390	236	244	132	6254
09-19	65	22	16	15	53	186	278	485	485	433	416	443	446	479	485	507	509	510	464	473	366	270	215	171	7792
09-20	96	84	22	24	34	158	289	501	465	430	464	440	425	490	512	493	500	496	524	470	442	329	315	227	8230
09-21	146	88	25	33	24	100	169	316	380	450	472	489	477	465	476	472	477	484	447	492	379	325	294	214	7694
09-22	129	105	33	15	24	62	97	253	348	418	454	496	468	483	514	511	482	466	473	422	329	191	158	77	7008
09-23	69	32	15	26	60	163	288	492	476	392	419	435	484	461	484	470	484	503	459	421	396	343	210	97	7679
09-24	44	30	8	12	126	158	278	507	518	416	423	412	485	452	454	491	464	509	441	458	402	320	179	101	7688
09-25	104	32	16	14	69	113	304	490	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	1142
Total	653	393	135	139	390	940	1703	3044	2781	2985	3103	3155	3232	3306	3418	3398	3419	3454	3306	3199	2704	2014	1615	1019	53505

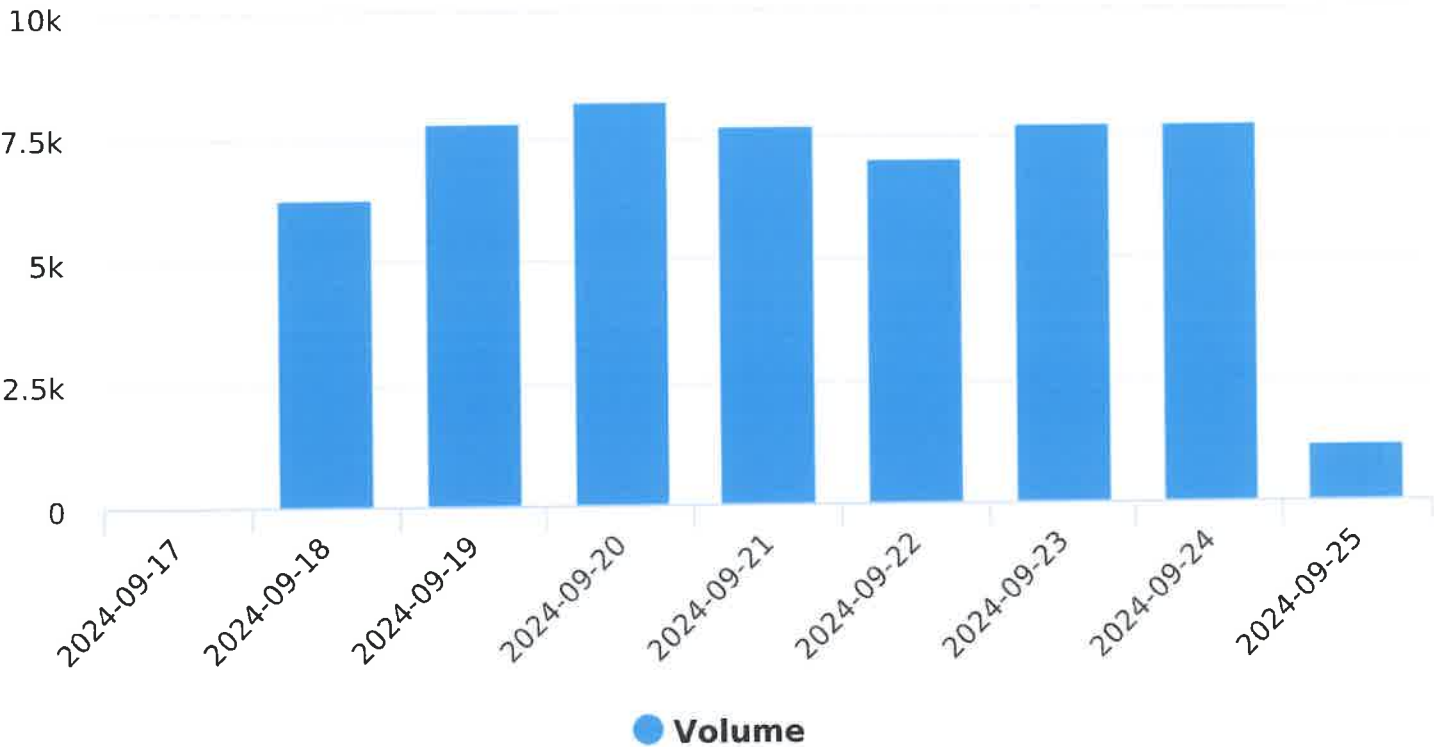


Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

Volume by Time
Walnut/Chester Lang, NB

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

Daily Total Volume





Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

Volume by Speed
Walnut/Chester Lang, NB

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

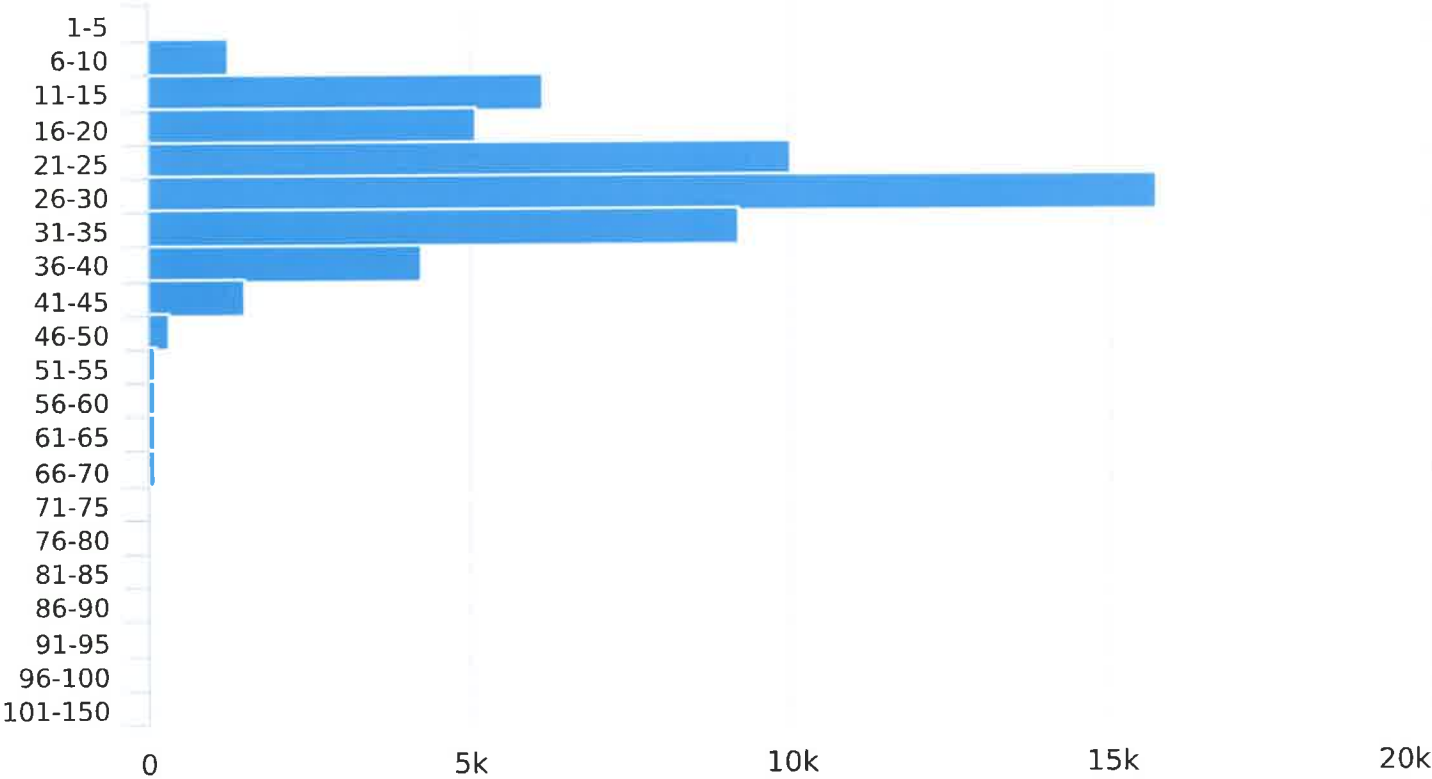
Time	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	71 to 75	76 to 80	81 to 85	86 to 90	91 to 95	96 to 100	101 to 150	Avg Speed	Total
0:00	0	24	132	60	80	134	101	70	37	14	1	0	0	0	0	0	0	0	0	0	0	25.8	653
1:00	0	11	45	78	85	53	46	37	21	13	2	1	0	1	0	0	0	0	0	0	0	26.0	393
2:00	0	4	15	13	20	29	25	15	11	3	0	0	0	0	0	0	0	0	0	0	0	28.0	135
3:00	0	2	18	10	13	28	27	27	7	5	1	1	0	0	0	0	0	0	0	0	0	29.4	139
4:00	0	24	110	49	46	64	36	35	17	4	4	1	0	0	0	0	0	0	0	0	0	23.3	390
5:00	0	15	111	115	144	205	156	121	52	16	4	1	0	0	0	0	0	0	0	0	0	27.3	940
6:00	0	25	147	119	327	489	308	174	94	19	0	1	0	0	0	0	0	0	0	0	0	27.8	1703
7:00	0	47	361	276	559	955	499	225	98	21	3	0	0	0	0	0	0	0	0	0	0	26.3	3044
8:00	0	69	352	303	604	801	408	191	40	12	1	0	0	0	0	0	0	0	0	0	0	25.2	2781
9:00	0	53	306	265	541	907	583	226	93	10	1	0	0	0	0	0	0	0	0	0	0	26.6	2985
10:00	0	60	295	238	529	994	620	255	85	21	4	1	1	0	0	0	0	0	0	0	0	27.0	3103
11:00	0	57	309	256	560	975	637	260	84	15	1	1	0	0	0	0	0	0	0	0	0	26.8	3155
12:00	0	80	337	289	544	1007	598	282	72	21	2	0	0	0	0	0	0	0	0	0	0	26.5	3232
13:00	0	71	343	273	597	1000	650	258	99	12	2	1	0	0	0	0	0	0	0	0	0	26.7	3306
14:00	0	82	381	323	636	1028	620	259	76	13	0	0	0	0	0	0	0	0	0	0	0	26.0	3418
15:00	0	93	409	330	680	1025	589	197	65	8	2	0	0	0	0	0	0	0	0	0	0	25.5	3398
16:00	0	87	400	331	671	1082	583	195	60	8	2	0	0	0	0	0	0	0	0	0	0	25.5	3419
17:00	0	90	413	348	659	1164	550	166	52	10	2	0	0	0	0	0	0	0	0	0	0	25.3	3454
18:00	0	78	376	342	651	1040	530	218	61	10	0	0	0	0	0	0	0	0	0	0	0	25.6	3306
19:00	0	86	416	328	693	893	464	235	73	10	0	0	1	0	0	0	0	0	0	0	0	25.3	3199
20:00	0	65	340	267	541	700	438	240	101	12	0	0	0	0	0	0	0	0	0	0	0	26.0	2704
21:00	0	58	221	192	335	522	334	237	89	20	3	3	0	0	0	0	0	0	0	0	0	27.0	2014
22:00	0	39	200	201	305	365	241	188	54	20	2	0	0	0	0	0	0	0	0	0	0	26.2	1615
23:00	0	33	133	106	172	230	157	126	45	13	2	1	0	1	0	0	0	0	0	0	0	26.6	1019
Total	0	1253	6170	5112	9992	15690	9200	4237	1486	310	39	12	2	2	0	0	0	0	0	0	0	26.1	53505



Start: 2024-09-17
End: 2024-09-25
Times: 0:00:00-23:59:59

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

Total Volume by Speed Distribution



Volume over Time

