



Speed Concern Report

B5246 Holmeswood Rd, Rufford

31st March 2022 to 5th May 2022

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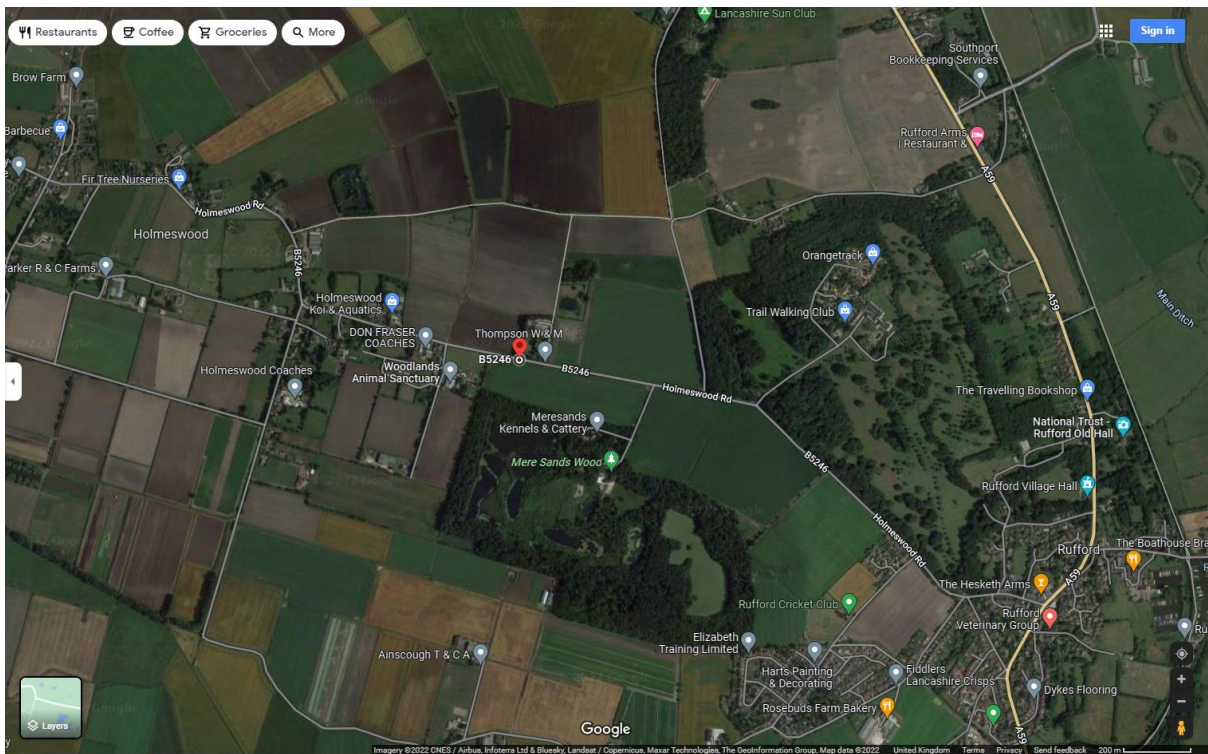
Safer Roads Unit

Speed Concern

Residents from Rufford, Holmeswood and Mere Brow have reported concerns with vehicles speeding through the villages and using the roads “as a personal racetrack”. Inspector John Bent forwarded their concerns to Sgt Lavin for further investigation. The narrow nature of these roads prevent the deployment of an SRU mobile enforcement van so a radar device was installed to gather data for several weeks to get a clearer understanding of the scale of the problem

Location of Radar Site

The radar was fitted to a street light on long stretch of road in the 60mph (National Speed Limit) zone. This site was approximately 150m away from where the speed limit changes to 30mph. The radar was facing East, towards Rufford. All traffic travelling east would be classed as “Outgoing” and all traffic travelling West would be classed as “Incoming”



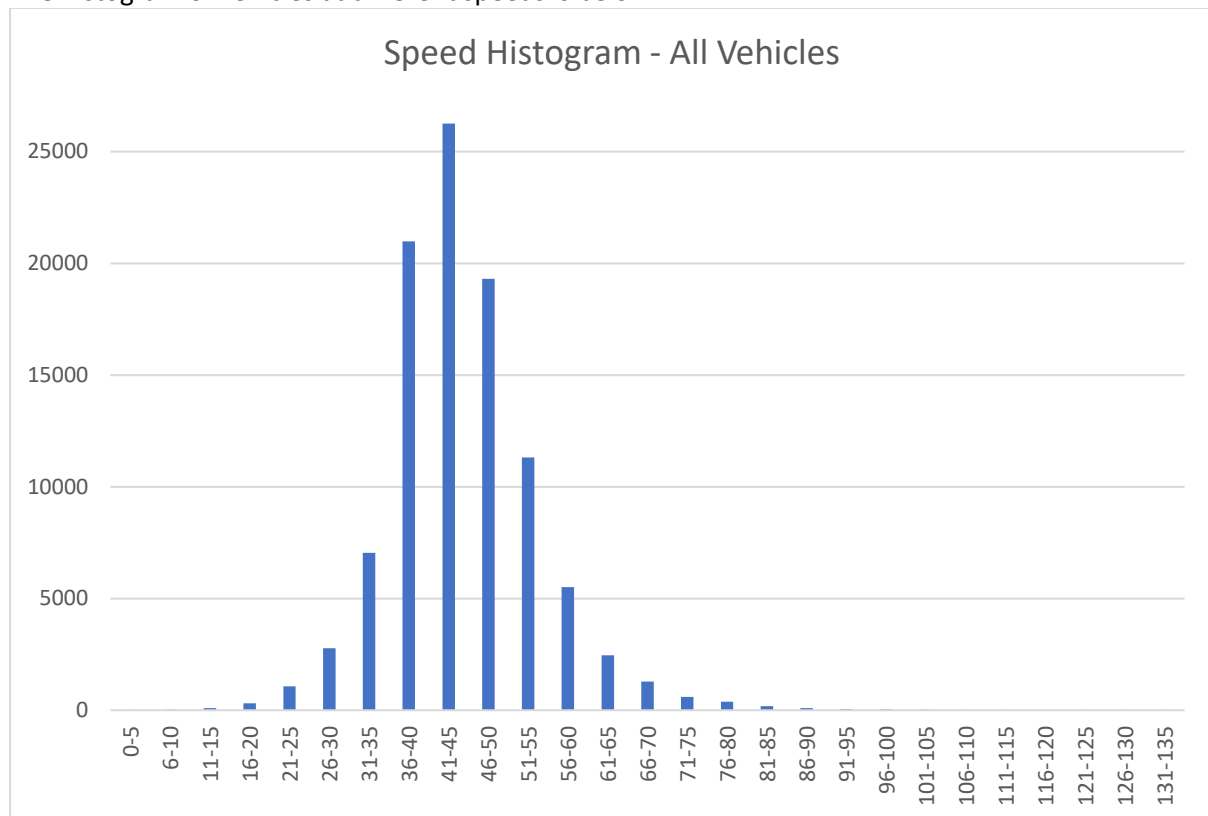
Data Collection Period

The radar device was installed just after midday on 31st March 2022 and collected data until it was removed just before midday on 5th May 2022.

Data

During the 6 weeks the radar was installed, it measured 102,142 different vehicles. The radar captured speed, length, direction, date and time of each vehicle. 52,955 vehicles (52%) were detected travelling west (towards the 30mph zone) and 49,187 (48%) were detected travelling east (further into the NSL zone).

The histogram of vehicles at different speeds is below:



85th Percentile

The trigger speed for any activity to be carried out in terms of Speed Enforcement is the 85th percentile and this is a level set by the Department of Transport (DFT). The 85th percentile for this site was 53mph which means that the vast majority of traffic is under the road limit of 60mph and as such it would not qualify for any additional speed enforcement.

Specific Speed Concerns

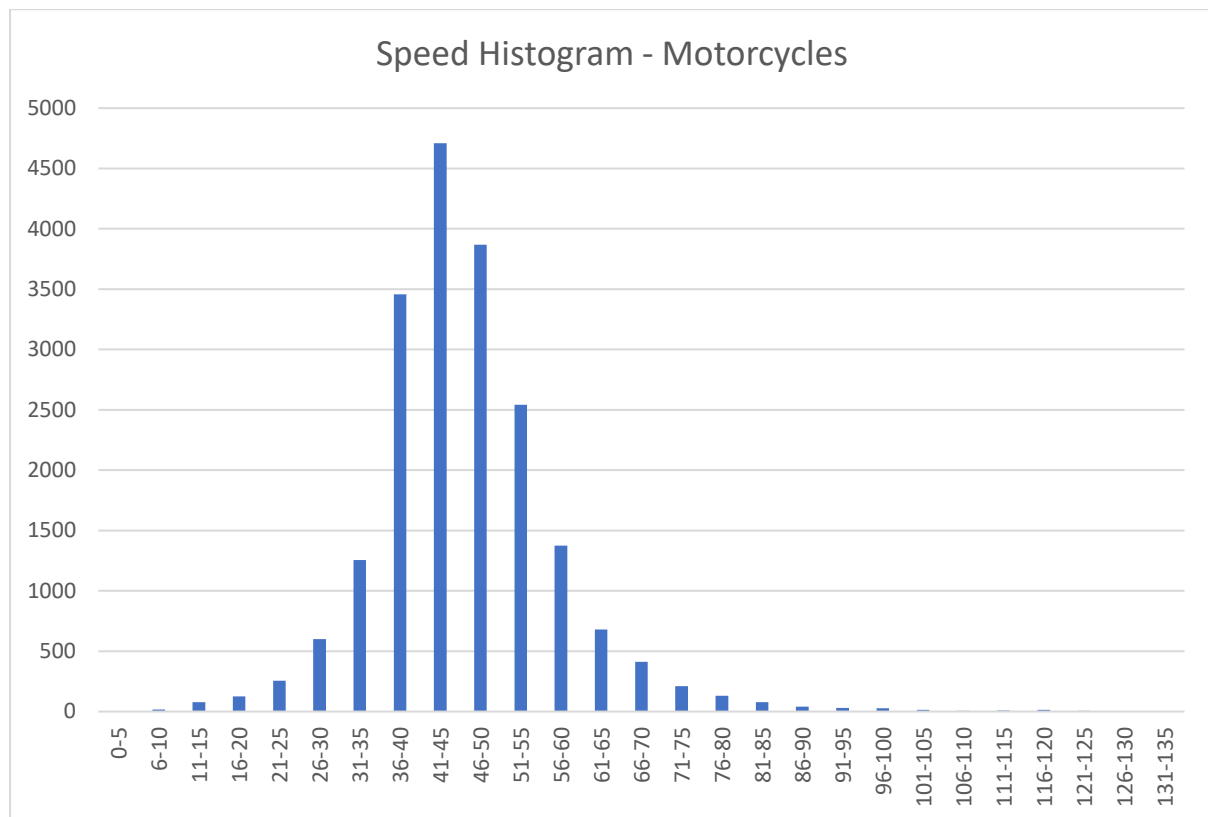
The speed concerns specifically mentions “motorcycles” and it is possible to focus closer on these vehicles. The radar captures vehicle length so we can analyse the data for vehicles less than 2.5metres.

There were 20271 vehicles under 2.5 metres in length and while some of these might be pedal cycles, the speeds of the majority of smaller vehicles would suggest that most were motorcycles (only 223 vehicle were travelling under 20mph, which is the above the usual speed of a pedal cyclist).

For the purpose of this report, any vehicle under 2.5 metres will be referred to as a motorcycle.

2648 (13%) motorcycles were detected travelling west (towards the 30mph zone) and 17,622 (87%) were detected travelling east (further into the NSL zone) so there is a clear preference for motorcyclist travelling towards Rufford.

The spread of motorcycles at different speeds is below



The 85th percentile for motorcycles was 55mph, slightly higher than all vehicles, which again does not qualify for additional speed enforcement however the high speeds some motorcycles were detected at are a concern. The highest recorded speed is 135mph.

Further analysis of the motorcycle traffic shows the busiest times for traffic, the busiest times being 1pm to 2pm and 2pm and 3pm with the quieter periods being midnight to 6am and 8pm to midnight. The busiest day for traffic is Wednesday (3101) and the quietest day is Saturday (2575).

Row Labels	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	(blank)	Grand Total
0	21.00	3.00	7.00	3.00	8.00	10.00	9.00		61.00
1	7.00	5.00	4.00	4.00	3.00	3.00	5.00		31.00
2	12.00	6.00	1.00	1.00	4.00	1.00			25.00
3	15.00	2.00	44.00	4.00	1.00		10.00		76.00
4	5.00	9.00	6.00	25.00	2.00	2.00	2.00		51.00
5	29.00	17.00	23.00	22.00	17.00	6.00	8.00		122.00
6	62.00	92.00	65.00	73.00	56.00	32.00	36.00		416.00
7	157.00	230.00	205.00	220.00	159.00	56.00	42.00		1069.00
8	177.00	278.00	278.00	267.00	240.00	113.00	92.00		1445.00
9	172.00	188.00	222.00	182.00	154.00	139.00	159.00		1216.00
10	188.00	163.00	200.00	186.00	167.00	199.00	180.00		1283.00
11	212.00	158.00	200.00	170.00	234.00	244.00	245.00		1463.00
12	235.00	253.00	189.00	178.00	236.00	249.00	314.00		1654.00
13	280.00	243.00	231.00	246.00	257.00	244.00	306.00		1807.00
14	275.00	233.00	255.00	230.00	269.00	260.00	328.00		1850.00
15	265.00	212.00	238.00	214.00	263.00	244.00	333.00		1769.00
16	260.00	237.00	251.00	272.00	226.00	210.00	257.00		1713.00
17	223.00	251.00	251.00	220.00	211.00	171.00	170.00		1497.00
18	130.00	132.00	135.00	146.00	133.00	145.00	124.00		945.00
19	105.00	113.00	131.00	111.00	101.00	104.00	80.00		745.00
20	44.00	75.00	95.00	65.00	82.00	58.00	63.00		482.00
21	26.00	37.00	37.00	38.00	48.00	30.00	83.00		299.00
22	23.00	25.00	22.00	14.00	33.00	29.00	19.00		165.00
23	8.00	5.00	11.00	7.00	8.00	26.00	21.00		86.00
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Grand Total	2931.00	2967.00	3101.00	2898.00	2912.00	2575.00	2886.00		20270.00

When looking at the data in terms of Average Speed per hour, the heatmap below shows some periods where speeding is a concern.

Row Labels	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	(blank)	Grand Total
0	41.38	63.67	51.71	57.00	46.13	49.00	41.22		46.28
1	32.14	45.80	36.00	40.25	50.33	44.00	45.60		40.97
2	22.75	48.33	49.00	36.00	44.25	39.00			34.56
3	33.93	49.50	15.93	31.25	43.00		34.90		24.03
4	46.20	45.11	34.50	33.44	45.50	40.00	53.00		38.37
5	50.52	48.71	51.30	48.41	44.53	47.00	48.00		48.86
6	47.60	48.98	51.82	45.82	50.66	47.94	44.03		48.38
7	48.17	48.56	47.36	49.89	48.09	45.66	45.12		48.19
8	46.20	47.05	46.80	47.57	46.81	47.49	47.12		46.99
9	44.26	42.30	43.57	44.70	44.64	45.56	47.13		44.47
10	43.55	44.74	42.35	42.95	44.02	44.03	45.46		43.83
11	45.46	44.27	43.12	41.56	42.05	43.14	45.12		43.57
12	43.78	44.12	44.37	45.33	43.99	44.67	44.65		44.40
13	45.28	43.26	44.42	46.68	44.79	45.62	49.45		45.77
14	44.93	44.08	42.38	44.14	45.05	44.59	46.63		44.65
15	46.83	44.66	45.86	45.75	45.71	47.58	45.56		46.01
16	46.36	46.85	45.10	46.71	47.21	48.08	47.09		46.73
17	47.80	47.91	47.62	49.55	48.28	50.01	49.27		48.53
18	46.82	48.47	50.88	47.80	51.08	51.34	49.10		49.37
19	50.78	48.50	52.49	49.61	50.74	47.31	50.21		50.01
20	51.55	46.67	53.66	48.11	47.56	50.67	45.59		49.18
21	43.08	43.59	45.73	43.95	47.96	45.17	33.16		41.82
22	46.96	40.68	44.91	48.36	43.58	40.79	39.95		43.28
23	37.88	51.60	51.55	48.86	48.25	39.46	47.38		45.08
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Grand Total	45.83	45.78	45.54	46.24	46.09	46.24	46.28		45.99

Tuesdays and Thursday between midnight and 1am appear to be time when the Average Speed is highest (63.67 and 57.00), however traffic numbers at these times are very low so the speeds are skewed much more than when traffic numbers are much higher.

The highest average speed appears to be from 7pm to 9pm on Wednesday (52.49 mph and 53.66mph) however this period is also high across the week. The day with the highest average speed is Sunday (46.28mph) followed by Thursday and Saturday (both with 46.24mph)

The above figures are for all motorcycle traffic, however 694 motorcycles (3%) were travelling at speeds in the threshold for speed enforcement (69mph +).

Row Labels	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	72.50	75.50	77.00	77.00		79.50		76.13
1					75.00			75.00
4	82.00							82.00
5	77.80	81.00	83.00	72.00				79.27
6	72.00	78.00	78.00	70.00	71.67	78.33	73.00	75.36
7	73.40	73.50	71.67	73.82	77.60	70.00	78.00	74.06
8	72.67	77.40	81.44	78.30	74.50	75.50	81.33	77.23
9	75.67	75.00	75.40	79.60	77.60		74.50	76.65
10		78.00	70.00	73.75	83.50	73.17	72.50	75.05
11	80.75	79.40	77.67	72.00	72.00	78.00	78.67	78.13
12	82.00	76.00	79.00	76.00	75.50	79.57	73.40	77.00
13	75.67	73.33	76.25	77.13	81.56	80.45	88.33	81.77
14	76.83	73.67	77.50	81.60	76.50	72.50	84.88	79.48
15	78.93	76.00	75.88	82.71	77.89	79.00	77.78	78.53
16	78.17	87.33	84.50	77.63	90.50	78.82	84.90	83.35
17	75.22	76.89	77.08	81.40	83.33	84.67	82.73	79.89
18	77.60	74.50	80.43	73.00	81.50	86.69	72.00	79.52
19	76.63	82.29	88.87	85.17	83.50	74.75	91.60	84.14
20	90.33	81.25	85.53	83.80	98.00	76.00	74.00	83.98
21		73.00	75.50	83.00	90.50	71.00	75.00	79.25
22			81.00	92.00	70.00			81.00
23		81.00	69.00				78.00	76.50
Grand Total	77.40	78.15	80.67	78.16	81.20	79.19	81.90	79.64

The highest average speed was 98mph on Friday between 8pm and 9pm, followed by 92mph on Thursdays between 10pm and 11pm and 91.6mph on Sunday between 7pm and 8pm.

Looking across the entire week, the period with the highest average speed is 7pm to 9pm (84.14mph and 83.98mph) and the day with the highest average speed is Sunday (81.90) followed Friday (81.20) and Wednesday (80.67).

Row Labels	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
0	75.00	81.00	77.00	77.00		81.00	
1					75.00		
4	82.00						
5	83.00	92.00	86.00	72.00			
6	72.00	80.00	87.00	70.00	75.00	92.00	73.00
7	80.00	85.00	72.00	78.00	83.00	70.00	78.00
8	76.00	96.00	89.00	103.00	83.00	82.00	97.00
9	79.00	75.00	82.00	91.00	88.00		88.00
10		97.00	70.00	78.00	87.00	78.00	78.00
11	93.00	86.00	99.00	76.00	73.00	86.00	106.00
12	95.00	78.00	89.00	100.00	76.00	102.00	76.00
13	92.00	77.00	84.00	87.00	117.00	103.00	127.00
14	85.00	78.00	84.00	113.00	84.00	76.00	129.00
15	99.00	81.00	86.00	97.00	103.00	105.00	93.00
16	99.00	115.00	99.00	92.00	130.00	109.00	99.00
17	92.00	96.00	85.00	94.00	99.00	119.00	112.00
18	81.00	91.00	101.00	83.00	119.00	111.00	75.00
19	98.00	129.00	135.00	100.00	133.00	89.00	124.00
20	120.00	101.00	111.00	121.00	124.00	82.00	78.00
21		73.00	79.00	83.00	100.00	71.00	75.00
22			81.00	92.00	70.00		
23		81.00	69.00				84.00

It is also interesting to look at the highest speeds for each hour and day across the 6 week period. The highest speed was recorded at 19:30 on a Wednesday evening (135mph) and there were similar speeds recorded Friday night (133mph), Tuesday night (129mph) and Sunday night (124mph) all between 7pm and 8pm. These are the extreme cases but there appears to be a pattern when motorcyclists achieve these speeds.

There were also high speeds recorded on Sunday afternoon between 1pm and 2pm (127mph) and between 2pm and 3pm (129mph).

Conclusions

The data gathered by the radar device confirms the complaints from residents that motorcycles are speeding and often travelling at very high speeds.

The high speeds detected by motorcycles are very concerning but they also suggest a pattern of behaviour linked to 7pm to 9pm at night (usually a Wednesday but also Tuesday, Friday and Sunday) and Sunday afternoons.

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