



Traffic Speed in Sandyhurst Lane

Report on SLRA Analysis of Two Recent Surveys (Western part)

October 2018

Introduction

1. In June 2018, the SLRA issued a report describing the analysis of two one-week traffic surveys which had been carried out in the eastern part of Sandyhurst Lane (i.e. the part which lies in the parish of Boughton Aluph & Eastwell). The raw data for these surveys had been published in the Transport Statements submitted in support of the planning applications for proposed developments (land at Lenacre Hall Farm and the former Sandpit, Sandyhurst Lane).
2. The speed limit at both sites was 40 mph and the results showed that the proportion of vehicles travelling in excess of the speed limit was significantly influenced by the location of the test site and its distance from road hazards such as bends.
3. In one case, on a site near the entrance to Sandyacres, the proportion of vehicles exceeding the speed limit was 17.0% eastbound and 17.6% westbound whilst on the other site, on the hill in the Lane, the proportion of vehicles exceeding the speed limit was 12.1% eastbound and 8.2% westbound.
4. Our report concluded that it seemed likely that traffic speeds may be higher in those parts of the Lane which have long, almost straight sections without intersections or appreciable gradients (eg between the entrance to Sandyhurst Farm and the entrance to the Golf Club, a distance of 600 metres).
5. We therefore decided to commission further tests ourselves.

Surveys commissioned by the SLRA

6. To complement the above surveys, the SLRA commissioned traffic surveys in the western part of Sandyhurst Lane (i.e. the part which currently lies half in the parish of Westwell and half in the non-parished ward of Bockhanger and which will lie entirely in the parish of Westwell from 2 May 2019 onwards).
7. The surveys were conducted by the same company which had undertaken the previous surveys in the eastern part of the Lane, using Automatic Traffic Counters (ATCs). The volume, type and speed of traffic in each direction were recorded at two locations over a one week period, from 11 to 17 September 2018. During this period, the weather was dry and fine, the local schools were all fully operational and there were no road works or diversions in operation that would be likely to distort the normal traffic patterns.

ATC locations

8. Two locations were chosen in the western part of the Lane, one in the 30 mph speed limit zone and one in the 40 mph speed limit zone.

9. The location of the ATC equipment for the 40 mph speed limit zone is shown in Appendix 1. It was sited outside 136 Sandyhurst Lane, next to a 40 mph repeater sign. This was approximately 170 m inside the 40 mph zone.
10. The location of the ATC equipment for the 30 mph speed limit zone is shown in Appendix 2. It was sited outside 85 & 90 Sandyhurst Lane. This was approximately 160 m inside the 30 mph zone.

Analysis of survey results

11. In both surveys, results were recorded for each direction on each day of the week. Vehicle speeds were recorded in 12 bands: <11 mph, then 10 bands of 5 mph increments, then =>61 mph.
12. For the purposes of the SLRA analysis, the data for the days of the week were aggregated to produce data for Monday to Friday, for the weekend, and for the whole week. This was done for each direction at each site, producing four tables of results:

Results for 40 mph speed limit zone survey

13. The aggregated results for the survey for the 40 mph speed limit zone are summarised in the following two tables, one for each direction. Results for vehicles travelling in excess of the speed limit are shown against a red background.

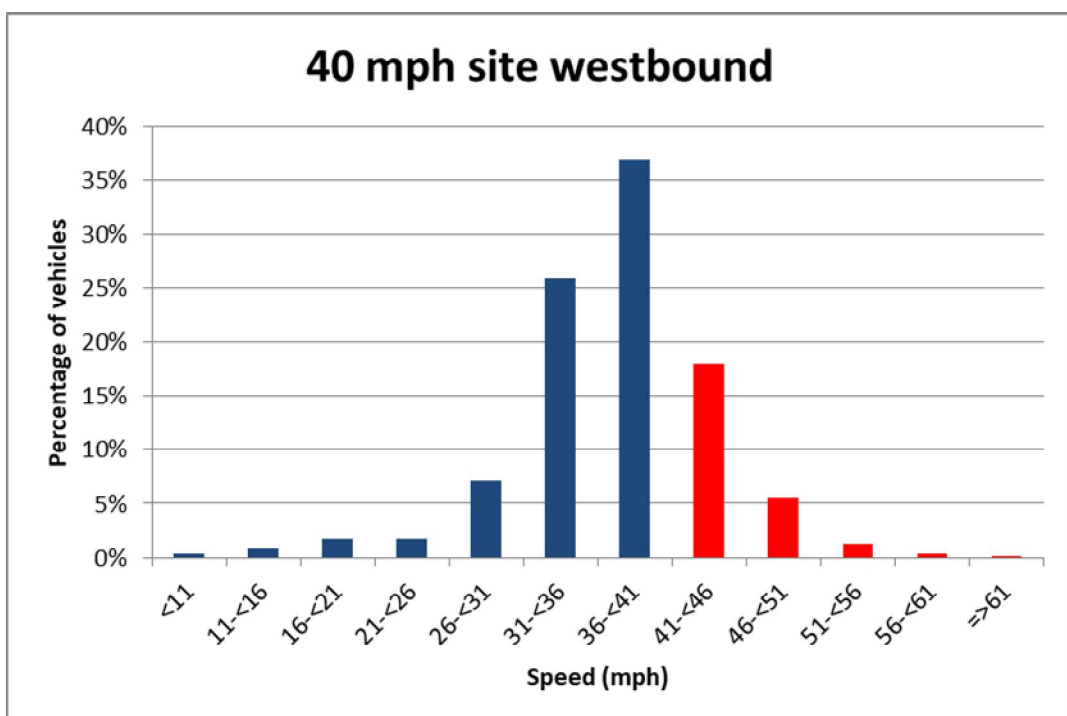
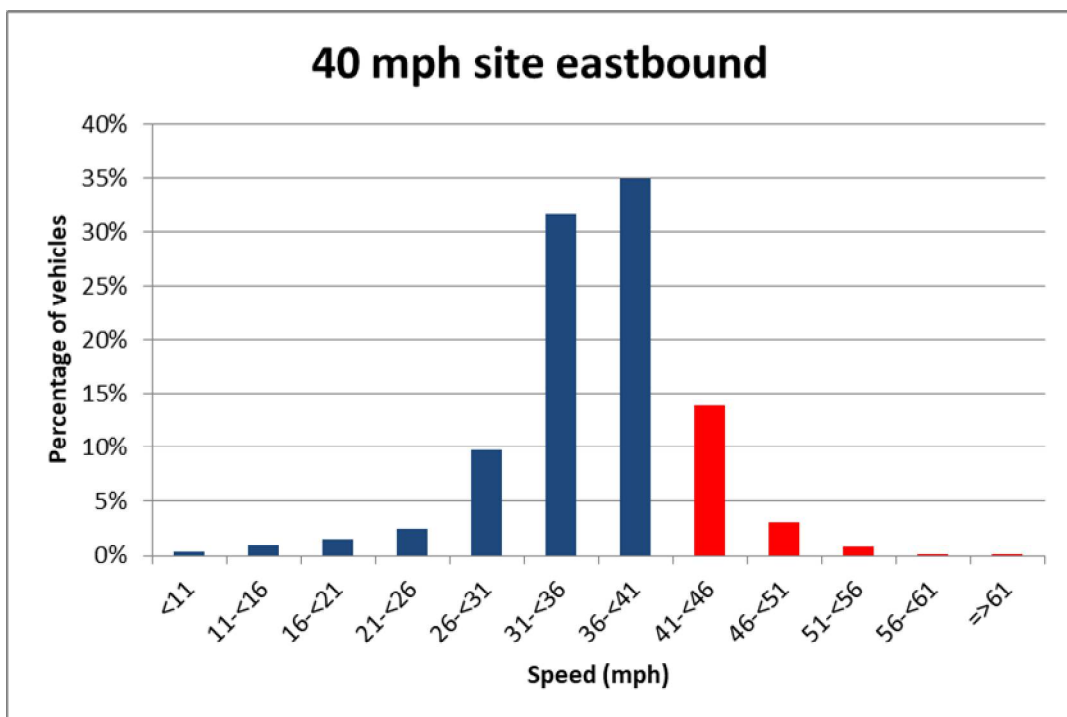
SLRA ATC Survey 40 mph site - Vehicle numbers for eastbound traffic speeds														
Day	Date	Speed mph												TOTAL
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	=>61	
Mon	17/09/2018	4	12	14	18	83	309	403	176	52	13	2	1	1087
Tue	11/09/2018	4	8	13	20	103	364	386	153	32	8	2	0	1093
Wed	12/09/2018	2	14	11	31	128	402	400	148	35	7	1	2	1181
Thu	13/09/2018	11	17	40	48	123	397	418	169	30	5	2	3	1263
Fri	14/09/2018	2	13	13	18	116	340	428	165	37	15	3	1	1151
Sat	15/09/2018	2	3	14	26	90	292	309	111	22	10	1	2	882
Sun	16/09/2018	2	1	11	24	78	237	241	107	20	7	1	0	729
Total M-F		23	64	91	135	553	1812	2035	811	186	48	10	7	5775
Percentage M-F		0.40%	1.11%	1.58%	2.34%	9.58%	31.38%	35.24%	14.04%	3.22%	0.83%	0.17%	0.12%	100.0%
Total Weekend		4	4	25	50	168	529	550	218	42	17	2	2	1611
Percentage Weekend		0.25%	0.25%	1.55%	3.10%	10.43%	32.84%	34.14%	13.53%	2.61%	1.06%	0.12%	0.12%	100.0%
TOTAL all week		27	68	116	185	721	2341	2585	1029	228	65	12	9	7386
Percentage all week		0.37%	0.92%	1.57%	2.50%	9.76%	31.70%	35.00%	13.93%	3.09%	0.88%	0.16%	0.12%	100.0%
Overall TOTAL		6043						1343						7386
Overall Percentage		81.8%						18.2%						100.0%

SLRA ATC Survey 40 mph site - Vehicle numbers for westbound traffic speeds														
Day	Date	Speed mph												TOTAL
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61	=>61	
Mon	17/09/2018	6	9	17	23	56	288	445	206	66	15	6	2	1139
Tue	11/09/2018	4	8	35	28	95	355	442	237	51	13	4	0	1272
Wed	12/09/2018	4	9	23	27	108	342	468	216	65	11	5	1	1279
Thu	13/09/2018	7	9	18	22	95	347	531	222	77	21	5	0	1354
Fri	14/09/2018	4	9	22	18	91	317	452	234	71	19	3	2	1242
Sat	15/09/2018	3	10	15	19	64	221	332	185	71	16	5	2	943
Sun	16/09/2018	4	12	12	3	62	211	284	144	46	13	0	1	792
Total M-F		25	44	115	118	445	1649	2338	1115	330	79	23	5	6286
Percentage M-F		0.40%	0.70%	1.83%	1.88%	7.08%	26.23%	37.19%	17.74%	5.25%	1.26%	0.37%	0.08%	100.0%
Total Weekend		7	22	27	22	126	432	616	329	117	29	5	3	1735
Percentage Weekend		0.40%	1.27%	1.56%	1.27%	7.26%	24.90%	35.50%	18.96%	6.74%	1.67%	0.29%	0.17%	100.0%
TOTAL all week		32	66	142	140	571	2081	2954	1444	447	108	28	8	8021
Percentage all week		0.40%	0.82%	1.77%	1.75%	7.12%	25.94%	36.83%	18.00%	5.57%	1.35%	0.35%	0.10%	100.0%
Overall TOTAL		5986						2035						8021
Overall Percentage		74.6%						25.4%						100.0%

14. The tables show that:

- Over the weekday period, 5,775 vehicles travelled eastbound (avg 1,155/day) and 6,286 westbound (avg 1,257/day).
- Over the weekend, 1,611 vehicles travelled eastbound (avg 806/day) and 1,735 westbound (avg 868/day).
- The distribution of speeds was not significantly different between weekdays and weekends
- Overall, 18.2% of traffic eastbound and 25.4% of traffic westbound was travelling in excess of the speed limit.
- Of the traffic travelling in excess of the speed limit, 77% eastbound and 71% westbound was travelling at between 41 and 46 mph.

15. The following charts show the distribution of traffic speeds in each direction:



Results for 30 mph speed limit zone survey

16. The aggregated results for the 30 mph speed limit zone are summarised in the following two tables, one for each direction. Results for vehicles travelling in excess of the speed limit are shown against a red background.

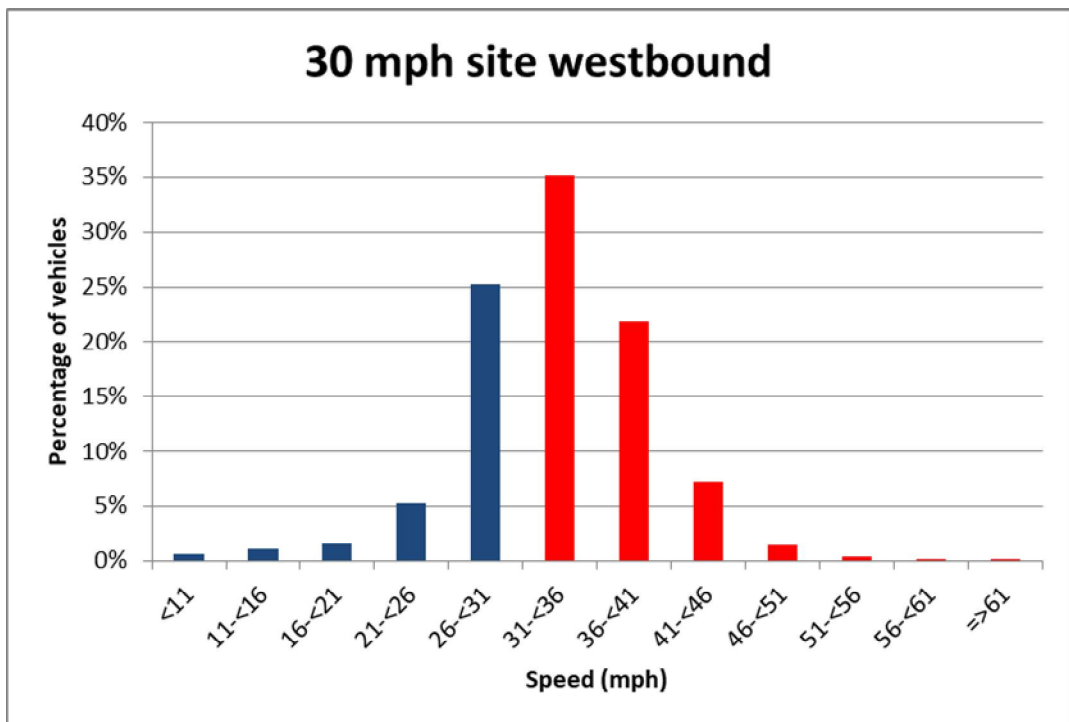
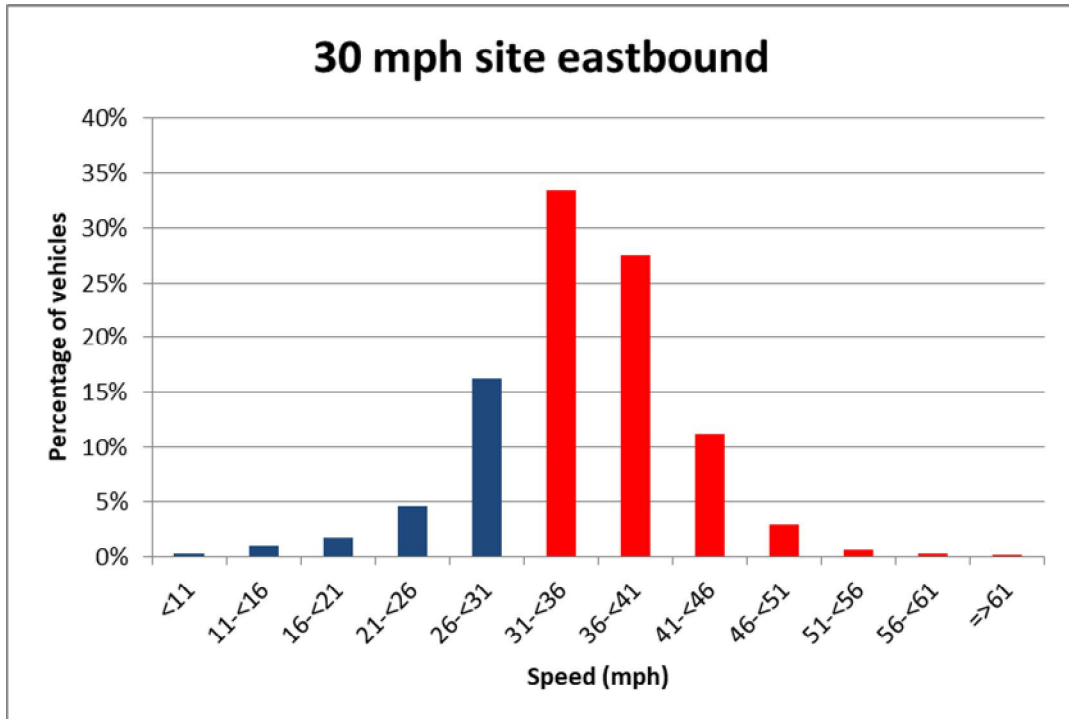
SLRA ATC Survey 30 mph site - Vehicle numbers for eastbound traffic speeds														
Day	Date	Speed mph											TOTAL	
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61		=>61
Mon	17/09/2018	2	10	15	44	158	352	338	152	45	7	4	0	1127
Tue	11/09/2018	3	13	16	52	184	368	308	139	31	12	5	0	1131
Wed	12/09/2018	5	17	14	44	205	413	346	129	34	7	2	2	1218
Thu	13/09/2018	6	10	47	93	223	450	332	103	24	4	4	4	1300
Fri	14/09/2018	2	15	22	43	205	373	321	139	40	10	4	2	1176
Sat	15/09/2018	3	5	11	29	139	347	250	105	29	4	2	2	926
Sun	16/09/2018	1	6	15	48	125	252	200	89	22	4	0	1	763
Total M-F		18	65	114	276	975	1956	1645	662	174	40	19	8	5952
Percentage M-F		0.30%	1.09%	1.92%	4.64%	16.38%	32.86%	27.64%	11.12%	2.92%	0.67%	0.32%	0.13%	100.0%
Total Weekend		4	11	26	77	264	599	450	194	51	8	2	3	1689
Percentage Weekend		0.24%	0.65%	1.54%	4.56%	15.63%	35.46%	26.64%	11.49%	3.02%	0.47%	0.12%	0.18%	100.0%
TOTAL all week		22	76	140	353	1239	2555	2095	856	225	48	21	11	7641
Percentage all week		0.29%	0.99%	1.83%	4.62%	16.22%	33.44%	27.42%	11.20%	2.94%	0.63%	0.27%	0.14%	100.0%
Overall TOTAL		1830					5811						7641	
Overall Percentage		23.9%					76.1%						100.0%	

SLRA ATC Survey 30 mph site - Vehicle numbers for westbound traffic speeds														
Day	Date	Speed mph											TOTAL	
		<11	11-<16	16-<21	21-<26	26-<31	31-<36	36-<41	41-<46	46-<51	51-<56	56-<61		=>61
Mon	17/09/2018	6	13	13	41	253	422	307	95	17	6	1	0	1174
Tue	11/09/2018	4	14	18	75	323	442	302	87	12	7	1	1	1286
Wed	12/09/2018	5	12	22	78	350	472	290	80	13	2	1	0	1325
Thu	13/09/2018	7	11	28	87	361	460	298	92	30	4	2	0	1380
Fri	14/09/2018	7	13	24	70	320	481	247	95	18	3	1	1	1280
Sat	15/09/2018	8	8	11	46	238	328	208	96	12	8	1	0	964
Sun	16/09/2018	10	14	16	42	229	293	150	53	13	2	1	0	823
Total M-F		29	63	105	351	1607	2277	1444	449	90	22	6	2	6445
Percentage M-F		0.45%	0.98%	1.63%	5.45%	24.93%	35.33%	22.40%	6.97%	1.40%	0.34%	0.09%	0.03%	100.0%
Total Weekend		18	22	27	88	467	621	358	149	25	10	2	0	1787
Percentage Weekend		1.01%	1.23%	1.51%	4.92%	26.13%	34.75%	20.03%	8.34%	1.40%	0.56%	0.11%	0.00%	100.0%
TOTAL all week		47	85	132	439	2074	2898	1802	598	115	32	8	2	8232
Percentage all week		0.57%	1.03%	1.60%	5.33%	25.19%	35.20%	21.89%	7.26%	1.40%	0.39%	0.10%	0.02%	100.0%
Overall TOTAL		2777					5455						8232	
Overall Percentage		33.7%					66.3%						100.0%	

17. The tables show that:

- Over the weekday period, 5,952 vehicles travelled eastbound (avg 1,190/day) and 6,445 westbound (avg 1,289/day).
- Over the weekend, 1,689 vehicles travelled eastbound (avg 845/day) and 1,787 westbound (avg 894/day).
- The distribution of speeds was not significantly different between weekdays and weekends
- Overall, 76.1% of traffic eastbound and 66.3% of traffic westbound was travelling in excess of the speed limit.
- Of the traffic travelling in excess of the speed limit, 44% eastbound and 53% westbound was travelling at between 31 and 36 mph.
- This means that, of the traffic exceeding the speed limit, 56% eastbound and 47% westbound did so by more than 5 mph.
- Of the traffic exceeding the speed limit, 20% eastbound and 14% westbound did so by more than 10 mph.

18. The following charts show the distribution of traffic speeds in each direction:



Discussion

19. The results show that, in the 40 mph speed limit zone, most traffic (75% – 82%) obeyed the speed limit and 93% - 96% of traffic travelled within 5 mph over the speed limit.

20. These results are similar to those previously found for the two sites in the eastern part of the Lane, where most traffic (82% – 92%) obeyed the speed limit and 96% - 98% of traffic travelled within 5 mph over the speed limit.

21. However, the results for the 30 mph speed limit zone are very different. They show that only a minority of traffic (24% - 34%) obeyed the speed limit. 66% - 76% of traffic exceeded the speed limit and a large proportion of traffic (31% - 43%) travelled at more than 5 mph over the speed limit.

Conclusion

22. Whilst most traffic in the 40 mph zone of Sandyhurst Lane observes the speed limit, the opposite is true in the 30 mph zone; most traffic exceeds the speed limit and a significant proportion does so by more than 5 mph.

23. This suggests that speed control measures are desirable in the western part of Sandyhurst Lane. The SLRA Committee will consider how to take this issue forward, in consultation with SLRA members, local councillors and parish councils.

Appendix 1: Location of Automatic Traffic Counter used in 40 mph speed limit zone (outside 136 Sandhurst Lane).
Grid Reference: TQ 99976 45529.
Blue line indicates location.



Link:
https://gridreferencefinder.com/bing.php?gr=TQ9997645529%7CTQ_s_99976_s_45529%7C0&v=h&t=TQ_s_99976_s_45529

Appendix 2: Location of Automatic Traffic Counter used in 30 mph speed limit zone (outside 85 & 90 Sandyhurst Lane).

Grid Reference: TQ 9975245300.

Red line indicates location.



Link:

https://gridreferencefinder.com/bing.php?gr=TQ9975245300%7CTQ_s_99752_s_45300%7C0&v=h&t=TQ_s_99752_s_45300