Oakley Traffic Information Survey

Sponsored by Bakers Recovery

Report number 7

Survey location - Deane Gate Crossroads

December 2019

Revision number 1

Contents

Copies of this report can be downloaded from Oakley and Deane's Parish Council website.

http://www.oakleydeane-pc.gov.uk/community/oakley-deane-parish-council-6507/speed-monitoring/

Alternatively, e-mail hwp.odpc@gmx.com

1 Survey methodology

This survey was made using an MSID Counter device, known as OTIS (Oakley Traffic Information Surveyor), mounted on the bus stop post non the north side of the B3400 at the Deane Gate Crossroads: see figure 1 (GPS 51° 14.771' N, 001° 10.558' W).

At this point, the B3400 is the main link road between Andover and Basingstoke serving many rural communities. The speed limit on this section is 50mph, and because of the crossroads and limited sight lines, is considered by many to be too high with 40mph being a more realistic limit. On the south western corner of the crossroads is the former Deane Gate Inn, now the Palm Brasserie which is likely to attract a noticeable volume of traffic. The survey point is in the bottom of the dip as shown in figure 2 which shows the view looking to the west towards Overton.. There are bus stops on both sides of the road for the 76 bus which runs 3 services per hour in each direction.

Figure 1: location of OTIS in the bus stop pole at the Deanegate Crossroads

Figure 2: view looking towards Overton with the survey point on the right and the Palm Brasserie on the left

The survey point is in the bottom of the dip as shown in figure 2 which shows the view looking to the west towards Overton. The Palm Brasserie can be seen on the left. Figure 3 shows the view from the survey point looking east towards Basingstoke.

The sight line looking west from the junction is very poor and approximately 69m when viewed from the north side of the junction. When viewed from the south side of the junction the distance is greater. The sight line looking to the east is better and is around 120m. Vehicles travelling at 50 miles an hour cover 74 feet every second. This means that a vehicle waiting at the junction will see a vehicle approaching from the west 2 to 3 seconds before it reaches the crossroads and 5 to 6 seconds for a vehicle travelling from the east. Making a turn onto the main road or crossing the main road is therefore a hazardous operation. If vehicles are exceeding the speed limit, the times are reduced in proportion to the increase in speed.

Figure 3: view from the survey point looking east towards Basingstoke

The MSID Counter uses a radar beam to detect and measure the vehicle's speed, length (which is used to determine vehicle type), direction of travel and separation gap between vehicles. A date/time stamp is added to each vehicle record. Every vehicle passing the survey point is recorded.

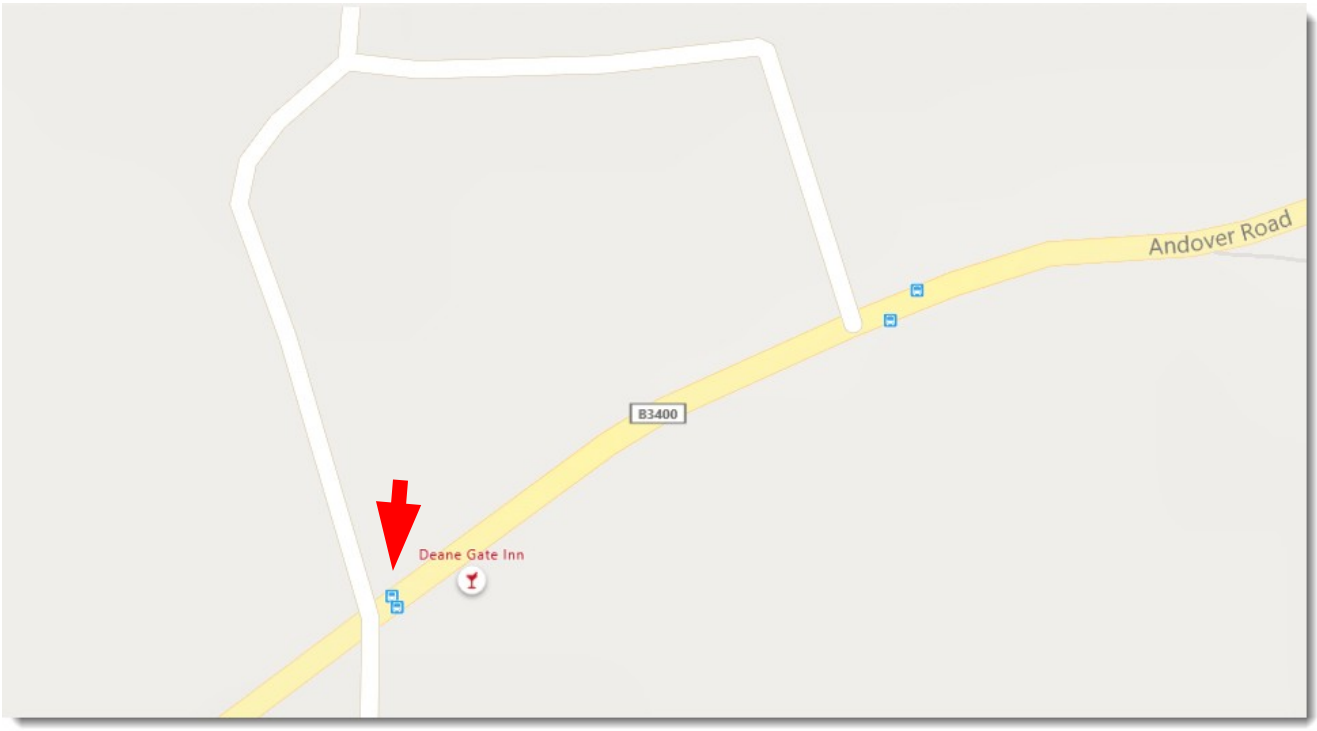

Figure 4: showing OTIS's position on the B3400 at the Deanegate Crossroads

2 Survey results

2.1 85th percentile data

Data for the 85th percentile has been included in the results because it is on this data that speed limits are frequently set. The 85th percentile speed is what the majority of drivers will drive at and assumes that only 15% of drivers will exceed the speed limit. In Oakley and Deane this is clearly not the case.

The 85th percentile speed is based on the assisted clear distance ahead concept (ACDA) which is the distance ahead of the vehicle within which the driver would be able to bring it safely to a halt. It assumes the majority of drivers are reasonable and prudent, do not want to have a crash and wish to reach their destination in the shortest possible time. It also assumes weather and road conditions are good. Therefore, the 85th percentile can be considered as the maximum safe speed for the location where and when the data was collected.

2.2 Summary

The number of vehicles passing the survey point was roughly the same each week with a total of 126503 vehicles passing the survey point in the three weeks (see table 1 below).

	Week 1			Week 2			Week 3		
	Count	Max speed mph	85th percentile	Count	Max speed mph	85th percentile	Count	Max speed mph	85th percentile
2 wheelers	313	61	42	196	59	42	326	59	40
Cars	29691	91	44	29308	80	43	30013	77	43
Vans	7538	62	43	9788	64	43	8382	66	43
Rigid HGV	2446	69	43	2956	62	43	2818	62	43
Artic HGV	883	62	40	926	56	40	919	48	40
Total	**40871**			**43174**			**42458**		

Total survey count **126503**

Table 1: summary of vehicle numbers, their maximum speed and 85th percentile speed

As expected, the majority of the vehicles travelling past the survey point were cars and vans with a combined total of just over 90% of the total volume as shown in figure 4.

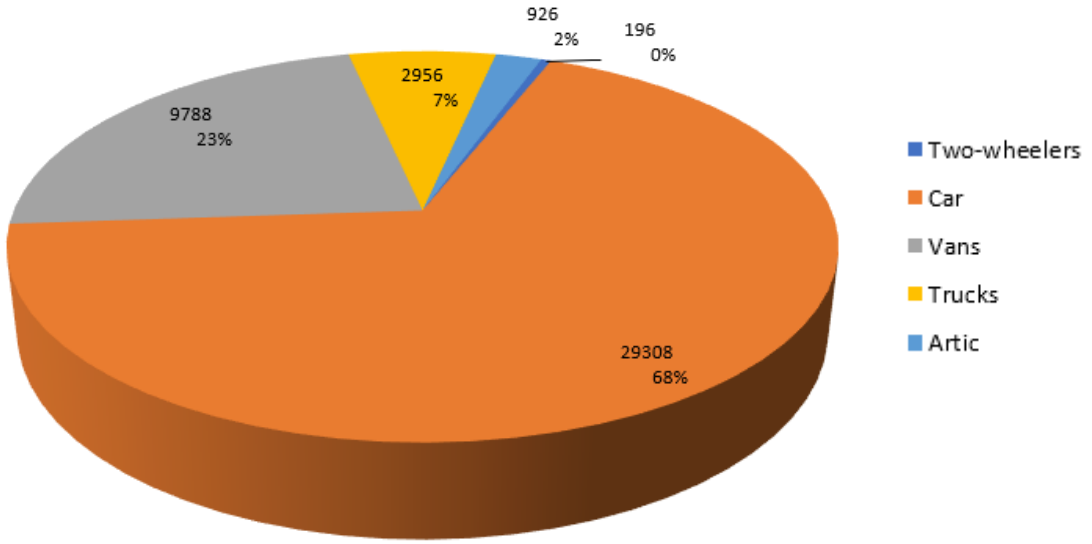

Figure 4: typical vehicle distribution by type

Speeding traffic is clearly an issue, but not to the extent local residents had indicated. The number of speeding vehicles is quite low, with cars and vans being the worst offenders. What is of concern is the high speeds recorded, with the maximum being 91mph! Only three injury accidents have

been recorded in the area as shown in figure 5. Local residents claim there have been many minor collisions at the crossroads but as there was no injury to any persons involved in the accident, these are not recorded. Full details of the three accidents are given in section 10 on page 23.

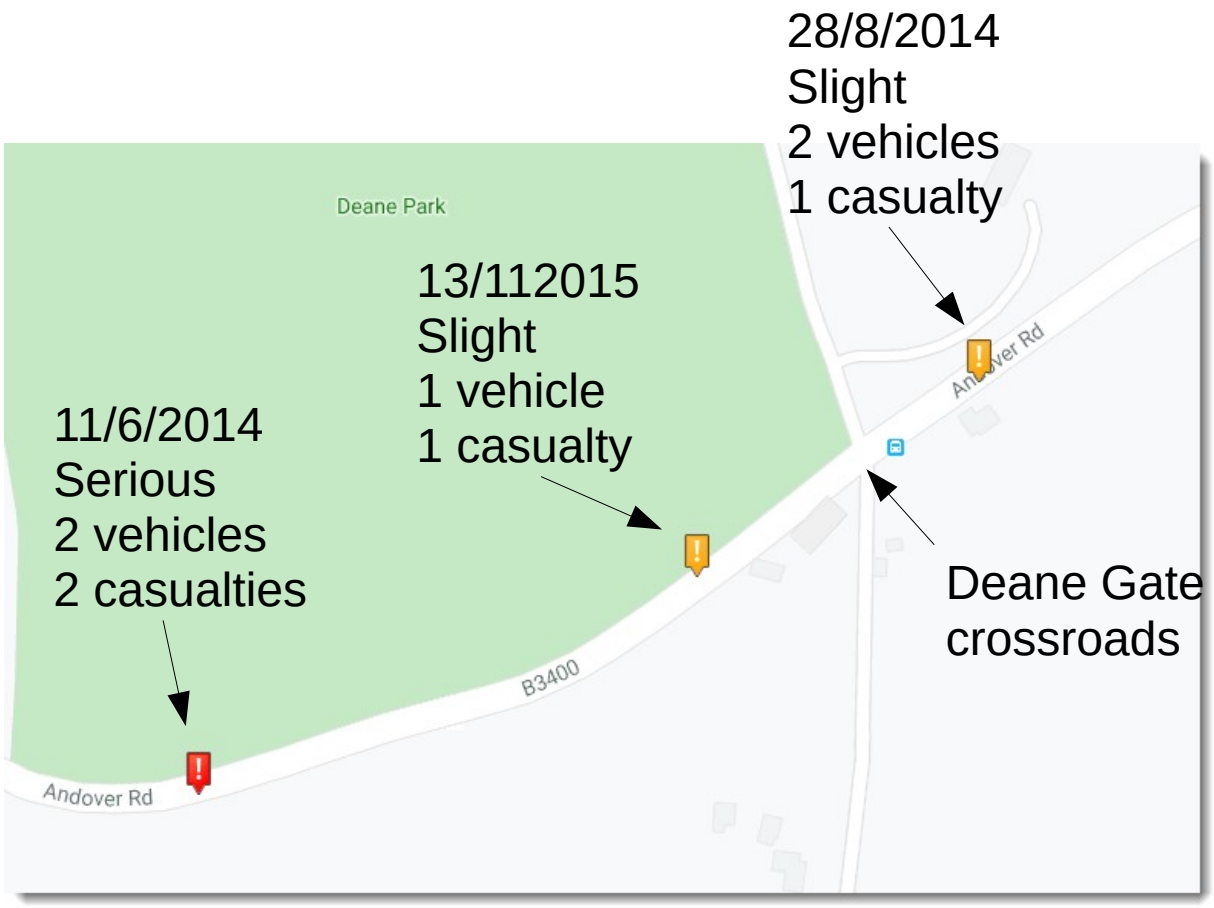

Figure 5: injury accidents in the vicinity of the crossroads

A study of the maximum vehicle speeds by timeslots shows that speeding is consistent throughout the day. Speeds of 60 and 70 miles an hour are common with some vehicles exceeding 70 miles an hour. Not surprisingly, the higher speeds are recorded in the earliest part of the day and late in the evening when traffic densities tend to be much lower. During the peak hours, speeds are lower probably reflecting the much denser traffic flows. However, looking at the percentages shows a relatively low number of speeding vehicles in relation to the totals. Table 2 shows the breakdown of the day into 14 timeslots, the vehicles' maximum speed and the percentage of speeding vehicles.

Time	Week 1 % speeding	Week 1 Max speed mph	Week 2 % speeding	Week 2 Max speed mph	Week 3 % speeding	Week 3 Max speed mph
00:00 to 07:00	10.12	80	9.2	77	9.02	71
07:01 to 08:00	5.93	63	5.12	65	7.37	76
08:01 to 09:00	1.46	61	1.34	64	2.03	64
09:01 to 10:00	1.27	60	1.25	62	1.81	67
10:01 to 11:00	1.07	67	0.9	65	1.15	59
11:10 to 12:00	0.94	60	1.16	68	1.16	61
12:01 to 13:00	0.87	63	1.56	69	0.97	66
13:01 to 14:00	1.37	91	1.08	72	0.99	68
14:01 to 15:00	1.5	68	1	71	1.09	60
15:01 to 16:00	1.36	69	1.27	64	0.78	61
16:01 to 17:00	0.81	58	1.22	64	1.03	70
17:01 to 18:00	0.69	64	0.65	58	0.39	63
18:01 to 19:00	0.86	59	0.57	58	0.63	60
19:01 to 23:59	2.38	68	2.21	75	1.91	77

Table 2: percentage of speeding vehicles and their maximum speed by time slot

2.3 Week 1 – 24th November to 1st December

The daily traffic flows for traffic travelling from Basingstoke towards Andover are shown in table 3 below. As can be seen by looking at the figures, the numbers from day-to-day do not vary significantly. The weekend traffic flows are lower than during the week but with current work patterns, this is to be expected. Private cars make up the bulk of the traffic.

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers		24	55	67	38	27	22	233	12	41.8
Cars		1280	1875	2015	2345	2492	2635	12642	640	2272
Vans		153	142	233	286	462	665	1941	76.5	357.6
Rigid HGV/Van		20	81	84	107	134	154	580	10	112
Artic HGV		12	34	38	56	58	74	272	6	52
							Total	**15668**		

Table 3: daily traffic flows for traffic travelling from Basingstoke towards Andover

Figure 4 shows the traffic flows in the opposite direction for traffic travelling from Andover towards Basingstoke. Again cars make up the bulk of the traffic and the daily numbers do not show any

significant variation. The volume of traffic travelling towards Basingstoke is slightly greater than that travelling towards Andover.

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers		6	7	11	4	5	9	42	3	7.2
Cars		1099	2291	2280	2279	2218	2267	12434	549.5	2267
Vans		374	546	626	794	902	945	4187	187	762.6
Rigid HGV/Van		78	263	273	293	319	357	1583	39	301
Artic HGV		11	100	94	95	100	119	519	5.5	80
							Total	**18765**		

Table 4: daily traffic flows for traffic travelling from the west towards Basingstoke

Looking at the breakdown of vehicle speeds, it can be seen that the vast majority of the traffic is travelling below the speed limit of 50 miles an hour as shown in tables 5and 6.

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	76	989	173	72	16	1326
21 – 30	20	1478	264	70	61	1893
31 – 40	114	8958	1453	373	205	11103
41 – 50	44	3524	532	119	32	4251
51 – 60	2	140	25	10	0	177
61 – 70	0	9	3	0	0	12
71 – 80	0	0	0	0	0	0
81 – 90	0	0	0	0	0	0
Over 90	0	0	0	0	0	0
Total	256	15098	2450	644	314	18762

Table 5: breakdown of vehicle speeds by type travelling towards Overton

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	14	414	395	204	54	1081
21 – 30	6	977	464	167	86	1700
31 – 40	13	7165	2531	895	346	10950
41 – 50	15	5647	1620	504	82	7868
51 – 60	8	373	80	29	0	490
61 – 70	1	22	1	3	1	28
71 – 80	0	3	0	0	0	3
81 – 90	0	0	0	0	0	0
Over 90	0	1	0	0	0	1
Total	57	14602	5091	1802	569	22121

Table 6: breakdown of vehicle speeds by type travelling towards Basingstoke

Looking at the maximum speeds shows that cars, vans and rigid heavy goods vehicles all exceed the speed limit by significant amounts as shown in table 17. Articulated heavy goods vehicles are the least likely to offend probably because of the difficult road layout at this point.

	Sat	Sun	Mon	Tues	Wed	Thur	Fri
2 wheelers		42	48	53	46	58	60
Cars		59	70	71	69	69	67
Vans		61	62	58	61	59	59
Rigid HGV/Van		69	55	58	58	54	53
Artic HGV		43	48	44	47	48	62

Table 7: maximum speeds by vehicle type

2.4 Week 2 – 1st to 8th December

Week two showed a slight increase in traffic flows in both directions compared with week one. However the overall pattern is very similar as shown in tables 7 and 8. As expected, cars again make up the bulk of the traffic closely followed by light vans.

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers	21	13	22	18	11	21	31	137	17	20.6
Cars	2141	1632	2215	2411	2353	2425	2522	15699	1692	2385
Vans	446	427	731	715	707	458	311	4323	700.5	584.4
Rigid HGV/Van	54	25	121	165	144	143	109	761	173.5	136.4
Artic HGV	39	18	66	72	63	55	53	366	32	61.8
							total	**21286**		

Table 7: daily traffic flows for traffic travelling towards Overton

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers	12	22	6	6	5	2	15	68	17	6.8
Cars	1880	1504	1888	1908	1950	2088	2392	13610	1692	2045
Vans	813	588	981	1004	986	918	750	6040	700.5	927.8
Rigid HGV/Van	200	147	382	388	384	373	324	2198	173.5	370.2
Artic HGV	47	17	96	91	100	108	101	560	32	99.2
							total	**22476**		

Table 8: daily traffic flows for traffic travelling towards Basingstoke

Analysing the traffic speeds in 10 mile an hour speed slots again shows the majority of traffic is travelling at or under the speed limit as shown in tables 9 and 10.

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	28	373	424	278	34	1137
21 – 30	8	818	592	205	79	1702
31 – 40	12	6827	3010	1109	350	11308
41 – 50	9	5274	1872	574	99	7828
51 – 60	4	305	86	29	2	426
61 – 70	0	34	4	1	0	39
71 – 80	0	5	0	0	0	5
81 – 90	0	0	0	0	0	0
Over 90	0	0	0	0	0	0
Total	61	13636	5988	2196	564	22445

Table 9: breakdown of vehicle speeds by type for traffic travelling towards Basingstoke

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	40	1081	290	79	26	1516
21 – 30	13	1658	435	111	94	2311
31 – 40	58	9455	2279	440	207	12439
41 – 50	20	3322	754	122	34	4252
51 – 60	4	142	38	7	1	192
61 – 70	0	14	4	1	0	19
71 – 80	0	0	0	0	0	0
81 – 90	0	0	0	0	0	0
Over 90	0	0	0	0	0	0
Total	135	15672	3800	760	362	20729

Table 10: breakdown of vehicle speeds by type for traffic travelling towards Overton

Looking at maximum speeds again shows that cars, light vans and rigid heavy goods vehicles all exceed the speed limit. Worryingly, two cars were recorded travelling at 91 and 80 miles per hour respectively. In this road layout configuration, this is very dangerous. A vehicle emerging from either side roads at the junction would have been hit by the vehicle travelling on the main road. It is also interesting to note that articulated heavy goods vehicles were travelling faster in this week

than in the previous week and it is thought that the dryer conditions in week two may be responsible for this. Table 11 shows the breakdown of vehicle maximum speeds by type.

	Sat	Sun	Mon	Tues	Wed	Thur	Fri
2 wheelers	61	59	59	56	46	45	58
Cars	91	80	66	68	71	65	71
Vans	59	62	59	64	64	62	57
Rigid HGV/Van	62	60	62	54	58	60	59
Artic HGV	45	28	56	46	51	51	48

Table 11: maximum speeds by vehicle type

2.5 Week 3 - 8th to 15th December

Traffic flows during the third week appear to be slightly lower than previous weeks. Table 12shows the daily traffic flow towards Overton. Again cars and vans make up the majority of the traffic.

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers	21	2	23	45	24	62	62	239	11.5	43.2
Cars	1985	176	2357	2069	2481	1969	1969	13006	1081	2169
Vans	418	17	645	286	486	185	185	2222	217.5	357.4
Rigid HGV/Van	51	7	135	97	127	64	64	545	29	97.4
Artic HGV	34	0	71	45	70	39	39	298	17	52.8
							Total	**16310**		

Table 12: daily traffic flows for traffic travelling towards Overton

Table 13 shows the daily traffic flow of traffic travelling towards Basingstoke. Again the pattern is roughly the same over the three weeks with slightly more traffic travelling towards Basingstoke than towards Overton.

	Sat	Sun	Mon	Tue	Wed	Thur	Fri	Total	W'end av	W'day av
2 wheelers	12	13	7	25	8	15	8	88	12.5	12.6
Cars	1883	161	1959	2282	2159	2435	2152	13031	1022	2197
Vans	726	62	897	755	883	625	923	4871	394	816.6
Rigid HGV/Van	208	15	419	283	390	309	385	2009	111.5	357.2
Artic HGV	63	3	96	86	105	104	94	551	33	97
							total	**20550**		

Table 13: daily traffic flows for traffic travelling towards Basingstoke

Analysing the traffic speeds in 10 mile an hour speed slots again shows the majority of traffic is travelling at or under the speed limit as shown in tables 14 and Error: Reference source not found.

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	52	981	223	45	13	1314
21 – 30	35	1566	294	61	74	2030
31 – 40	115	9482	1776	425	219	12017
41 – 50	20	3221	580	124	39	3984
51 – 60	1	133	37	5	0	176
61 – 70	0	11	5	0	0	16
71 – 80	0	2	0	0	0	2
81 – 90	0	0	0	0	0	0
Over 90	0	0	0	0	0	0
Total	223	15396	2915	660	345	19539

Table 14: breakdown of vehicle speeds by type of traffic travelling towards Overton

speed mph	2 wheeler	Car	Van	Rigid HGV	Artic HGV	Total
20 or less	64	446	380	214	35	1139
21 – 30	11	947	535	198	64	1755
31 – 40	8	7155	2755	1142	380	11440
41 – 50	15	5696	1686	573	95	8065
51 – 60	5	347	107	29	0	488
61 – 70	0	25	4	2	0	31
71 – 80	0	1	0	0	0	1
81 – 90	0	0	0	0	0	0
Over 90	0	0	0	0	0	0
Total	103	14617	5467	2158	574	22919

Table 16: breakdown of vehicle speeds by type for traffic travelling towards Basingstoke

Analysing the maximum speeds for traffic in week three shows that all vehicle types apart from articulated heavy goods vehicles exceeded the speed limit by significant amounts. The maximum

speed recorded was 77 mph which is considerably less than that recorded in week two. However, it continues to be of concern that speeding is so common and speeds are consistently in the high 50s and low 60s. Table 15 shows the maximum speeds by vehicle type.

	Sat	Sun	Mon	Tues	Wed	Thur	Fri
2 wheelers	59	56	51	45	53	53	49
Cars	70	71	77	69	63	64	68
Vans	61	58	59	66	66	59	61
Rigid HGV/Van	62	51	56	54	59	55	61
Artic HGV	47	46	48	48	47	46	48

Table 15: maximum speeds by vehicle type

3 Peak period traffic

For the purposes of this study, two peak periods were defined each day: from 07:3 to 09:30 and 15:30 to 18:30. During these two periods traffic flow was expected to be at its maximum as people travelled to and from their place of work. The following tables show the peak traffic flow by direction for the peak periods for each week.

All speeds in excess of the 50 mile an hour speed limit highlighted: average gap time between vehicles is 30 seconds.

3.1 Morning peak period 07:30 to 09:30

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	5	49	5	45	10	48	7	43	3	42	4	42
Cars	80	58	440	55	226	52	249	52	249	58	305	52	234	50
Vans	13	57	132	52	16	57	29	47	37	50	59	47	48	48
Rigid HGV/Van	6	49	5	41	17	47	15	44	16	43	20	42	29	47
Artic HGV	3	39	6	37	3	34	8	41	6	38	9	38	9	43
Total	**102**		**588**		**267**		**311**		**315**		**396**		**324**	

Table 16: Week 1 – morning peak hour traffic travelling towards Overton

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	52	45	2	16	0	0	2	46	5	40	3	43
Cars	80	58	69	49	253	53	286	53	257	51	293	52	246	52
Vans	13	57	63	39	84	50	94	48	93	45	68	47	22	46
Rigid HGV/Van	6	49	60	41	27	45	30	48	17	41	20	43	17	41
Artic HGV	3	39	46	0	7	41	15	45	14	40	9	43	11	39
Total	**102**		**290**		**373**		**425**		**383**		**395**		**299**	

Table 17: Week 2 - morning peak hour traffic travelling towards Overton

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	0	0	3	40	4	31	1	35	8	43	3	16
Cars	81	55	42	55	287	53	273	48	291	54	271	57	259	56
Vans	22	54	10	48	51	55	104	48	45	57	22	46	53	53
Rigid HGV/Van	5	43	3	45	22	42	23	49	22	45	12	41	29	53
Artic HGV	3	35	0	0	6	35	12	44	10	41	7	39	12	42
Total	**111**		**55**		**369**		**416**		**369**		**320**		**356**	

Table 18: Week 3 - morning peak traffic travelling towards Overton

Tables 16, 17 and 18 show the morning peak traffic flows travelling towards Overton with the maximum speed of each vehicle type. Of interest here is that the maximum speeds are slightly lower than the overall maximum speeds and this is thought to be due to the greater traffic density with vehicle to vehicle gaps being much closer.

The next three tables show the morning peak traffic travelling towards Basingstoke. The traffic survey started at 10 o'clock in the morning so there is no data for the first Sunday morning peak period. Traffic numbers are slightly higher with traffic travelling faster towards Basingstoke than towards Overton. This may be explained by people rushing to get to work in Basingstoke.

It is interesting to note that there is more speeding in weeks two and three than there is in week one.

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	1	10	3	59	2	42	1	21	0	0	6	40
Cars	102	55	262	56	308	56	295	58	308	52	332	51	430	56
Vans	37	59	122	53	196	54	196	54	199	52	168	55	166	56
Rigid HGV/Van	12	49	25	52	80	51	86	52	78	50	80	53	69	49
Artic HGV	5	44	4	35	17	44	14	43	19	42	25	51	17	41
Total	**156**		**414**		**604**		**593**		**605**		**605**		**688**	

Table 19: Week 1 – morning peak traffic travelling towards Basingstoke

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	1	10	3	59	2	42	1	21	0	0	6	40
Cars	102	55	262	56	308	56	295	58	308	52	332	51	430	56
Vans	37	59	122	53	196	54	196	54	199	52	168	55	166	56
Rigid HGV/Van	12	49	25	52	80	51	86	52	78	50	80	53	69	49
Artic HGV	5	44	4	35	17	44	14	43	19	42	25	51	17	41
Total	**156**		**414**		**604**		**593**		**605**		**605**		**688**	

Table 20: Week 2 - morning peak traffic travelling towards Basingstoke

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	0	0	1	51	1	41	1	45	1	35	2	36
Cars	118	60	47	76	336	54	323	58	325	55	425	57	321	67
Vans	27	49	19	50	124	58	117	53	99	61	96	52	85	59
Rigid HGV/Van	16	51	5	45	55	50	61	52	50	52	36	49	50	51
Artic HGV	6	35	2	37	13	44	7	41	13	44	7	41	9	48
Total	**167**		**73**		**529**		**509**		**488**		**565**		**467**	

Table 21: Week 3 - morning peak traffic travelling towards Basingstoke

3.2 Afternoon peak traffic – 15:30 to 18:30

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	1	c	2	42	13	43	12	41	4	39	5	47	4	41
Cars	549	50	387	50	352	49	413	51	528	55	529	69	497	58
Vans	116	55	44	58	39	46	40	48	76	44	99	50	156	49
Rigid HGV/Van	12	42	6	44	14	51	17	44	12	52	15	46	30	46
Artic HGV	8	40	2	36	8	42	6	36	12	41	11	48	12	41
Total	**686**		**441**		**426**		**488**		**632**		**659**		**699**	

Table 22: Week 1 - afternoon peak traffic travelling towards Overton

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	5	49	4	39	3	38	0	0	4	45	8	37
Cars	460	50	382	51	454	50	518	61	484	52	488	57	550	55
Vans	91	55	112	52	151	45	138	49	136	49	80	51	80	52
Rigid HGV/Van	11	42	5	41	21	48	40	46	31	54	24	45	12	43
Artic HGV	6	40	4	37	14	41	10	44	10	46	9	38	11	43
Total	**568**		**508**		**644**		**709**		**661**		**605**		**661**	

Table 23: Week 2 - afternoon peak traffic travelling towards Overton

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	3	40	No data		6	40	14	39	12	49	21	41	41	49
Cars	456	70			604	56	531	61	625	51	445	50	50	50
Vans	129	52			199	51	33	42	119	50	34	48	48	55
Rigid HGV/Van	8	43			37	45	11	41	25	45	10	43	43	48
Artic HGV	8	44			12	44	5	35	15	44	6	42	42	44
Total	3				**858**		**594**		**796**		**516**		**224**	

Table 24: Week 3 - afternoon peak traffic travelling towards Overton

There is no data for the afternoon on the Sunday because the traffic survey closed at 10 o'clock in the morning.

It is interesting to note there appear to be fewer instances of speeding for traffic travelling towards Overton. Is this because people are travelling home from work and there is no time pressure to be in a certain place at a certain time?

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	0	0	0	0	4	53	0	0	0	0	0	48
Cars	467	55	294	53	345	59	369	58	388	56	334	56	56	57
Vans	200	52	101	58	118	48	114	54	170	55	202	51	51	55
Rigid HGV/Van	45	48	23	54	58	50	60	46	71	52	66	49	49	49
Artic HGV	9	45	4	43	19	46	21	41	21	45	20	42	42	44
Total	721		**422**		**540**		**568**		**650**		**622**		**198**	

Table 25: Week 1 - afternoon peak traffic travelling towards Basingstoke

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	0	0	7	49	9	59	6	42	2	33	4	45	15	40
Cars	320	64	760	56	971	56	1062	61	985	52	1028	57	1200	56
Vans	137	61	281	53	424	54	432	54	415	52	324	55	296	56
Rigid HGV/Van	50	52	36	52	116	51	141	52	129	54	116	53	93	49
Artic HGV	8	40	11	37	40	44	29	44	37	46	38	51	33	43
Total	**515**		**1095**		**1560**		**1670**		**1568**		**1510**		**1637**	

Table 26: Week 2 - afternoon peak traffic travelling towards Basingstoke

	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday	
	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed	No	Max speed
2 wheelers	1	8			3	43	8	41	1	48	6	46	2	39
Cars	356	38			414	61	529	63	445	56	476	52	461	55
Vans	179	37	No data		235	54	151	48	210	49	144	52	243	52
Rigid HGV/Van	49	35			116	56	52	49	105	49	86	48	93	61
Artic HGV	8	30			27	43	18	44	25	45	27	45	19	45
Total	**593**				**795**		**758**		**786**		**739**		**818**	

Table 27: Week 3 - afternoon peak traffic travelling towards Basingstoke

Again there is no data for the Sunday because the traffic survey closed at 10 o'clock in the morning.

There is a close correlation between the numbers of traffic traffic travelling in both directions in peak periods.

4 Conclusions and recommendations

Maintaining a speed limit is not just important because it improves safety, it also has a significant impact on pollution and fuel consumption. Carbon emissions from exhaust gases, dust from brake pads and tyre wear all contribute to atmospheric and rainwater run-off pollution. Driving at the speed limit also reduces fuel consumption which can reduce the cost of motoring considerably.

It would appear from the data collected, especially that for the 85th percentile that there is a good case for lowering the speed limit to 40 miles an hour from the crest of each hill on either side of this junction. Although there have only been three injury accidents recorded in the recent past there is anecdotal evidence of a number of incidents where there have been no personal injuries: these accidents are not recorded in the official statistics but are nevertheless part of the overall picture.

Lowering the speed limit would give traffic turning onto the B3400 or crossing the junction to go to Steventon or to enter Dean more time to make the required manoeuvre. In the autumn winter and early spring the turning from Dean onto the B3400 towards Basingstoke is made more difficult by the decaying leaves which make the pull away from this junction very slippery.

Speeding is an issue at this point but it is difficult to see a simple but effective way of making drivers aware of their speeds. It is intended in the future to put an automatic warning device on this junction from time to time and it is hoped that this will see a significant reduction in the excessive speeds.

5 Comments and suggestions

Your comments on this report are very welcome as are any suggestions you may have for improving Oakley's traffic management. Please send them to hwp.odpc@gmx.com.

6 Acknowledgements

Figure 4 is derived from Google Maps.

Figures 5, 6, 7 and 9 are derived from Crashmap.

Thanks to Bakers Recovery of Oakley for sponsoring Oakley's traffic surveys.

7 MSID Counter set up parameters

Default setting parameters for the MSID Counter are as follows:

Mounting height – lower edge of the MSID Counter device is approximately 2.25m from ground level.

Distance from near kerb – approximately 1m

Measurement parameters (manufacturer's default):

	Bicycle/motor cycle	Car	Large van	Rigid HGV/bus	Artic HGV
Physical length	<2.5m	<5.2m	<9m	<12m	>12m
Measurement length on-coming traffic					
	<250	<450	<650	<870	>870
Measurement length departing traffic					
	<290	<500	<750	<850	>850

Table 28: set up parameters used in OTIS

8 Laser measuring device

Model, Tracklife MLR01 serial number K024-UKAKKOB167547-FBA40

9 Data sources

The following files were used to provide data for this report:

- week 1 – 24th November to 1st December 2019 – vc011519.047 and vc011219.048
- week 2 – 1st to 8th December 2019 – vc081219.149 and vc081219.050
- week 3 – 8th to 15th December 2019 – vc181219.051 and vc181219.052

Data was extracted from the files using the app Viagraph 5 supplied by Via Traffic Controlling, the manufacturer of the MSID ll counter device.

10 Accident data

10.1 Accident on June 11th 2014

Time of accident – 07:40

Number of vehicles involved – 2 one car and one motorcycle

Weather conditions – fine full daylight

Road conditions – dry

Number of casualties – one male, serious

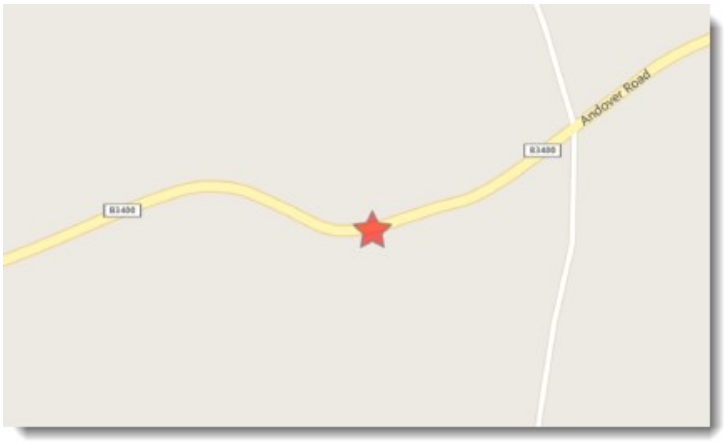

Figure 6: site of accident on June 11th 2014

10.2 Accident on August 25th 2014

Time of accident – 18:10

Number of vehicles involved – 2 two cars

Weather conditions – fine full daylight

Road conditions – damp

Number of casualties – one male, slight

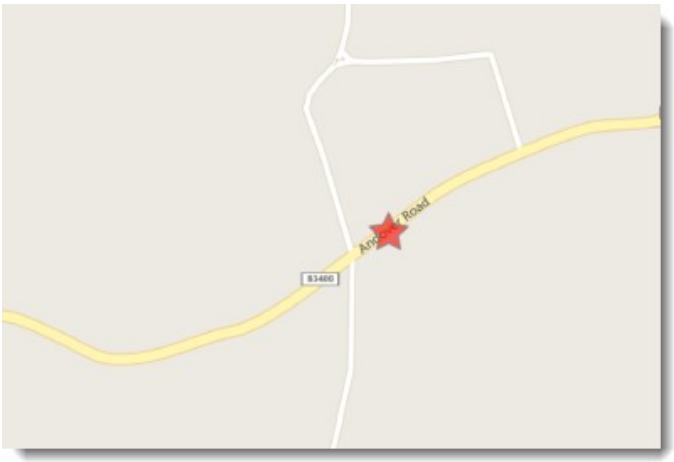

Figure 7: site of accident on August 25th 2014

10.3 Accident on November 13th 2015

Time of accident – 22:02

Number of vehicles involved – 1 one car

Weather conditions – dark

Road conditions – damp

Number of casualties – one male, slight

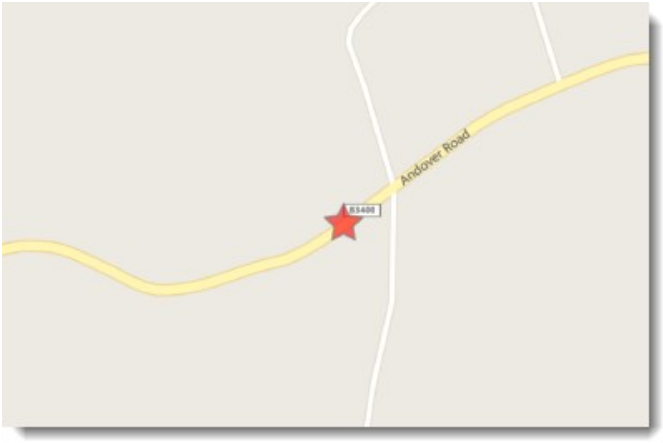

Figure 8: site of accident on November 13th 2015

11 Revision history

Date	Revision no	Detail	Author
31/12/2019	1	Initial draft for comment.	Stephen Harding
3/1/2020	2	Spelling corrected. Average gap time between vehicles added.	Stephen Harding