



An Analysis of the Data collected by Traffic Counters in 2012 and 2018

We undertook the Count to obtain, for the revision of the 2016 Neighbourhood Plan, evidence of the weight of traffic that currently uses the main Village crossroads. We carried it out from the first floor of the Memorial Hall on 15th to 19th October for four half-hour periods between 7.00 and 9.00 a.m. on each day, recording all motorised traffic movements into and out of the crossroads from all four directions.

We wished to compare these data with those collected in 2012 to establish what changes there had been in the traffic volumes. The Count in 2014, carried out between 7.30 a.m. and 9.30 a.m. at the crossroads, Coldrey, Jenkyn Place and the bottom of School Lane, gave a detailed picture of the traffic flow in the Village but the time difference made comparison with 2012 and 2018 less rewarding.

The wealth of data collected in 2012 and 2018 provides almost unlimited scope for analysis. The following illustrates some ways in which the data can be manipulated. What, and how much, can be incorporated in the Neighbourhood Plan is quite another matter.

Page 3. Figures 1 and 2 provide a pictorial comparison between 2012 and 2018 of the traffic passing through the crossroads. The volume increases from 5025 to 5884, an increase of 17% equivalent to an annual increase of 2.7% with the preponderance of traffic coming from the South and going to the East. In 2012 a vehicle passed through the crossroads every 7.2 seconds whereas this decreased to 6.1 seconds in 2018. Table 1 shows the disproportionate increase in traffic from the North.

Page 4. Table 2 shows the remarkable consistency between the source and destination of traffic in every direction in 2012 and 2018. Histograms 1 and 2 for traffic from the four sources and to the four destinations underlining that most comes from the South and goes to the East.

Page 5. Table 3 and Histogram 3 show the steady increase in traffic flow from the first to the last half-hour. Evidence from the 2014 Count suggests that this rate may well fall away from 9.00-9.30 a.m.

Page 6. Table 4 and Histograms 4-7 give some substance to the suggestion that traffic falls off on Fridays.

The purpose of this analytical report is to present the salient features that have emerged so that the Transport Working Party and Steering Group can ponder on such considerations as the following:

1. How have the new dwellings completed in Froyle, Bentley (Hole Lane and elsewhere) and Bordon/Whitehill since 2012 affected the amount of traffic entering Bentley crossroads?
2. Do residents believe that additional development in or near Bentley would result in an unacceptable increase in traffic in the village? If YES, to mitigate the effects of further development
 - (a) Should a new link between River Road and the A31 eastward direction be built? Or
 - (b) Should a Wrecclesham relief road be constructed from the A325 to the A31 at a point East of the by-pass bridge?

Richard Leonard & Roger Duffett/25th October 2018

'A useful exercise'



Total traffic for 5 days from 7.00 to 9.00 a.m.

Figure 1. 2012

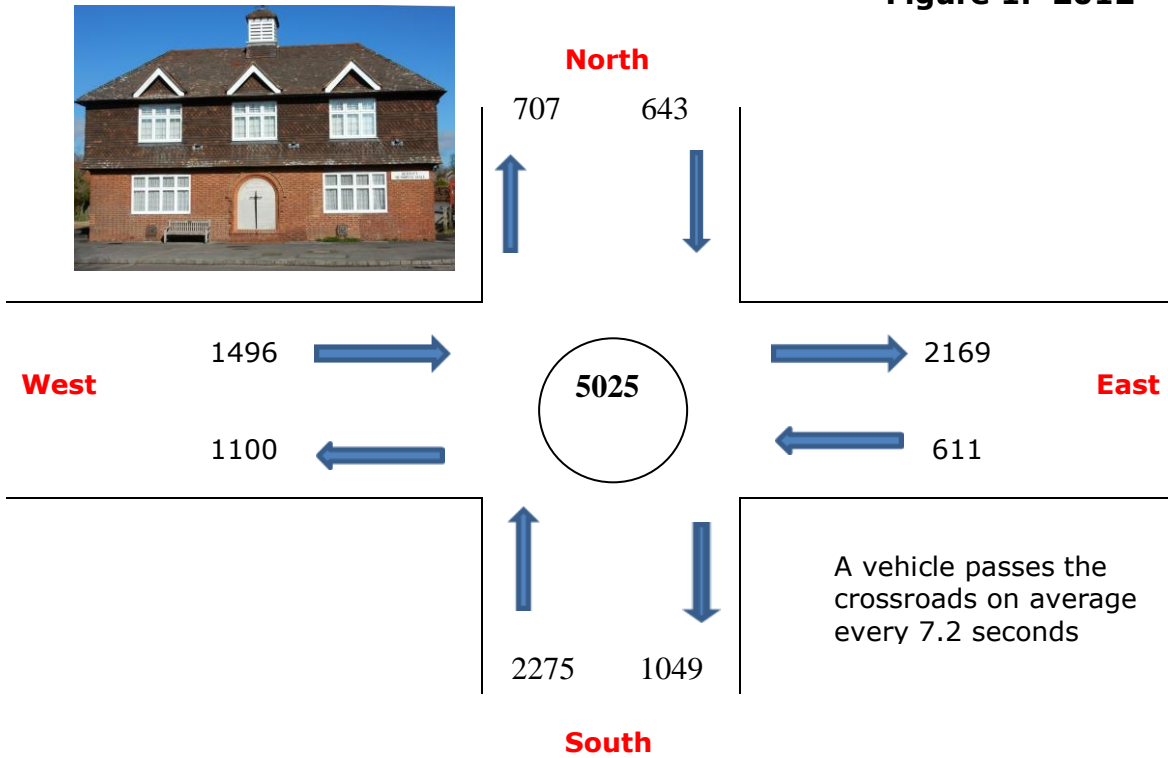


Figure 2. 2018

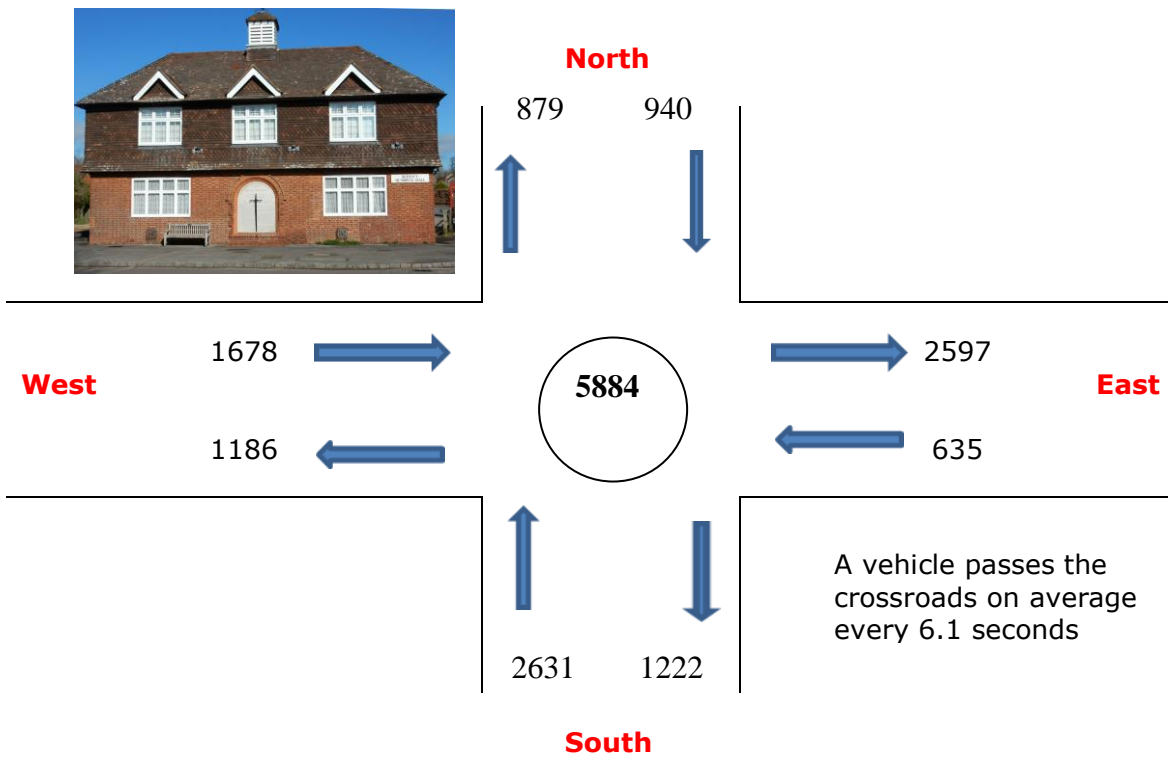


Table 1. Increase in Traffic from all Directions

	From				To				Total
	South	West	North	East	South	West	North	East	
2012	2275	1496	643	611	1049	1100	707	2169	5025
2018	2631	1678	940	635	1222	1186	879	2597	5884
	Percentage								
2018/12	16	12	46	4	16	8	24	20	17

Histogram 1. Vehicles FROM Directions

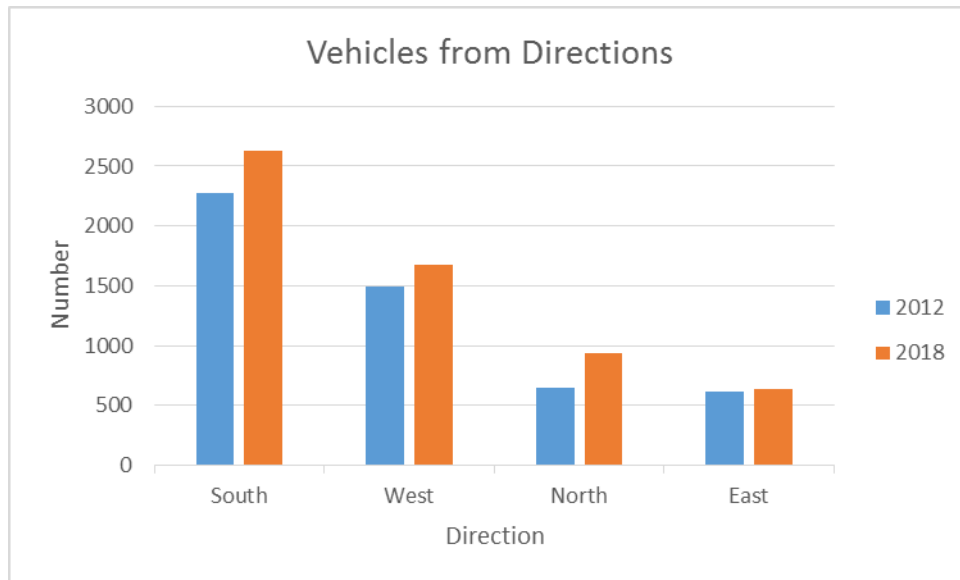


Table 2. Percentage Source and Destination

	Percentage FROM				Percentage TO			
	South	West	North	East	South	West	North	East
2012	45	30	13	12	21	22	14	43
2018	44	29	16	11	21	20	15	44

Histogram 2. Vehicles TO Directions

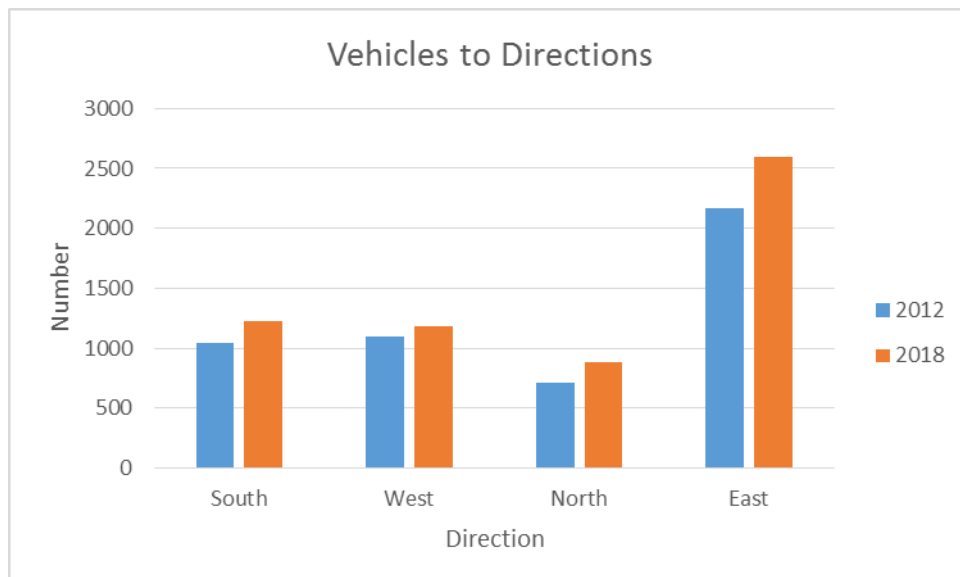
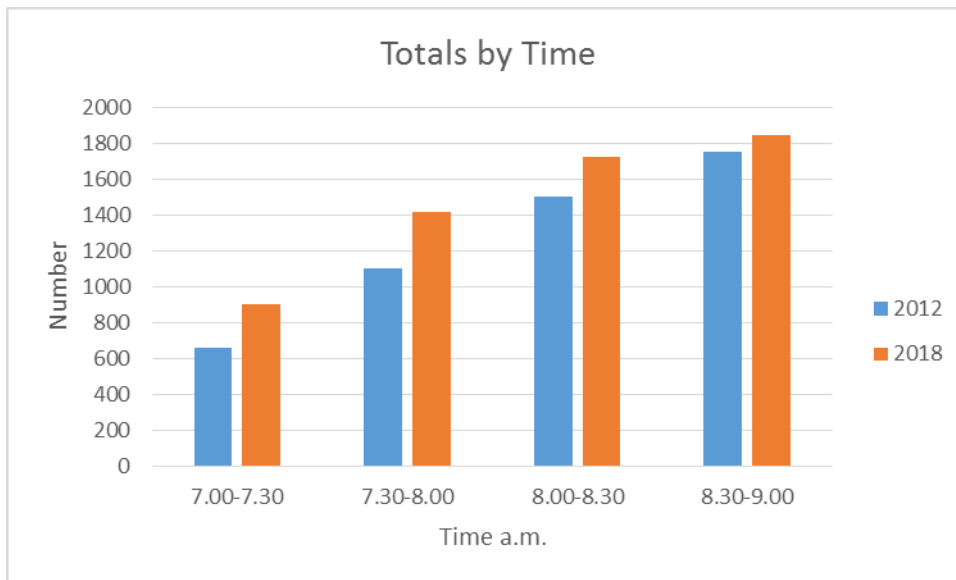


Table 3. Total traffic through Crossroads every half-hour

Times a.m.	Number of Vehicles		A vehicle passing every 'n' seconds	
	2012	2018	2012	2018
7.00-7.30	662	905	13.6	9.9
7.30-8.00	1106	1415	8.1	6.4
8.00-8.30	1505	1721	6.0	5.2
8.30-9.00	1752	1843	5.1	4.9
Total for two hours	5025	5884	7.2	6.1
Annual % increase	2018/12	2.7		

Histogram 3



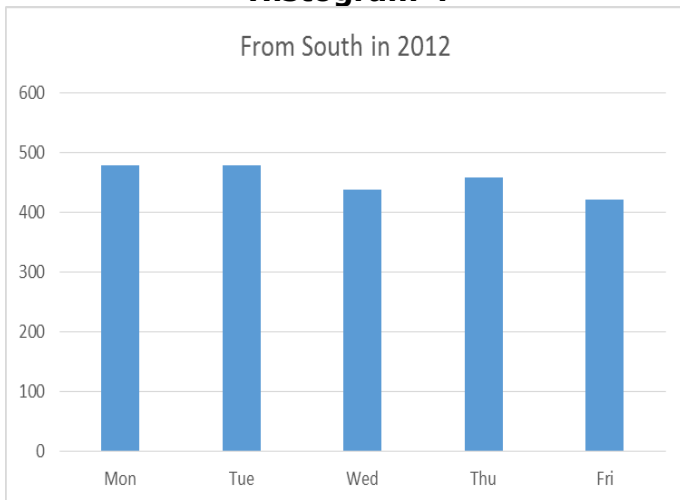
The 2014 traffic count at four places in the Village enabled a much more detailed analysis of the traffic flow than is possible with the 2012 and 2018 counts. Although it will never be possible to track the movement of every vehicle it was possible in 2014 to deduce that about 55% were using the Village as a rat-run. There is no reason to believe that this has changed.

Table 4. Variation of Traffic from 7.00 to 9.00 a.m. by day

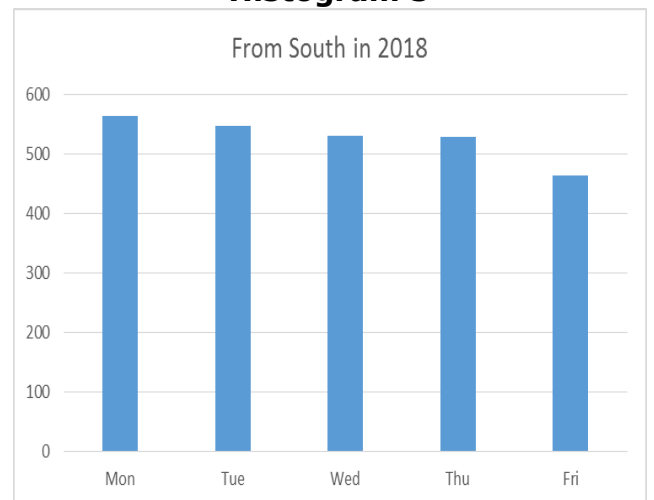
	Monday		Tuesday		Wednesday		Thursday		Friday		Total	
From	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018
South	479	563	479	546	438	531	458	528	421	463	2275	2631
West	296	330	301	321	362	347	296	354	241	326	1496	1678
North	136	193	135	188	127	212	118	179	127	168	643	940
East	138	125	106	140	111	141	109	127	147	102	611	635
Total	1049	1211	1021	1195	1038	1231	981	1188	936	1059	5025	5884

	Monday		Tuesday		Wednesday		Thursday		Friday		Total	
To	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018	2012	2018
South	218	254	225	243	208	264	194	247	204	214	1049	1222
West	216	257	220	246	234	229	228	246	202	208	1100	1186
North	161	164	150	179	132	191	134	172	130	173	707	879
East	454	536	426	527	464	547	425	523	400	464	2169	2597
Total	1049	1211	1021	1195	1038	1231	981	1188	936	1059	5025	5884

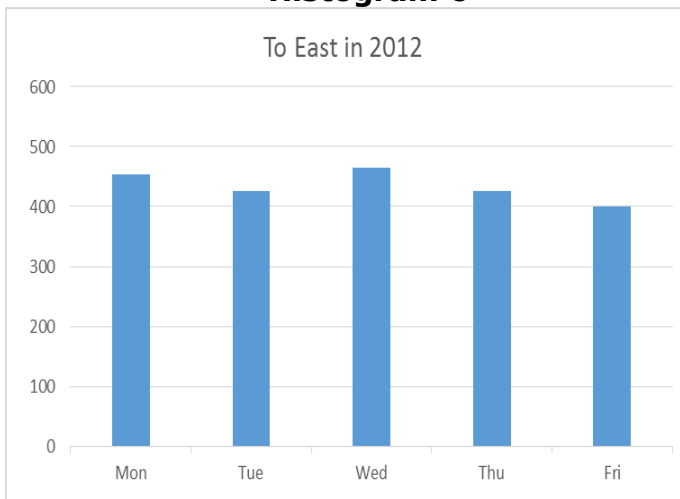
Histogram 4



Histogram 5



Histogram 6



Histogram 7

