TAG Report to the Parish Council on Traffic Calming Measures for the Alkham Valley Road



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Executive Summary

With the opening of the A20 dual carriageway between Folkestone and Dover in 1991 the Alkham Valley Road, B2060, was declassified to an unclassified road, intended in the future only for local traffic use and to link Alkham village and outlying hamlets to the main East Kent road network. It was planned that the through routes from the Dover area and East Kent to the western areas of Kent were to be the A2 and A20.

The residents of Alkham having overwhelmingly expressed their concerns over the impact that traffic on the Alkham Valley Road is having on their quality of life have proposed a series of measures which they want implemented to calm traffic and improve the overall environment of their village.

The measures proposed consist of the introduction of reduced speed limits, weight restrictions on HGV's, village gateways, road narrowing with priority flows, and a pedestrian crossing.

There is recognition that such measures will entail costs and that a contribution towards those costs will need to come from the village community. The response to such a suggestion, put to the people of Alkham via a questionnaire, was positive, demonstrating the high level of concern they have to the traffic problem and their willingness to help fund works to alleviate it.

1) Objectives

The prime objective of this submission is to gain recognition by all, that traffic on the Alkham Valley Road has increased over the years and has now reached such levels that an acceptable quality of life in the village and the safety of all residents, pedestrians, children, cyclists, and horse riders is at risk. In addition, the significant housing development in East Kent will further increase through traffic in the future if nothing is done to manage through traffic and calm traffic using the Alkham Valley Road.

We wish the authorities, Dover District Council, and KCC Highways, to take serious note of the expressed views of the local people and to approve a traffic calming strategy along the lines of the scheme proposals put forward in this report.

2) Current Situation

a) Traffic

From available traffic survey records at various points on the Alkham Valley Road, average one-way flows have steadily increased over the past 13 years from some 4,000 vehicles per 24 hours in 2004 to some 6,000 in 2017. The reasons for these increases are primarily the general increase in development in the Dover area and the increased need to commute between the East Kent and Dover areas and work centres to the West, namely in the Folkestone/Ashford areas and the M20 and M25 corridors. No census information is available to confirm this behaviour but local observations show higher west bound morning peak hour traffic on the road than eastbound peak hour traffic and the reverse for the evening peak hour traffic.

Traffic surveys were undertaken, on the order of the Parish Council, by Road Data Services Ltd. to determine the current traffic flows quoted in vehicles per hour (vph) and speeds (mph) through the village. It was recognised that the operation TAP on the A20 was having a detrimental effect on traffic on the Alkham Valley Road, with many vehicles diverting to the Alkham Valley Road to avoid long and unpredictable delays on the A20 between Folkestone and Dover, so two surveys were ordered the first between 17th and 23rd May 2017 and the second, between the 14th and 20th September, after the lifting of the TAP restrictions on the A20. The survey locations for both sets of surveys were the same, located to the east and west entrances to the village. Each survey measured traffic volume and speed in both directions, 24 hours per day for 7 days.

The lifting of the TAP restrictions had little effect on west bound morning peak hour traffic, but evening peak hour traffic flow, entering the village, east bound showed a marked reduction with maximum peak hour flow reducing by 19% from a figure of 667vph in May to 538vph in September. The average peak hour flow of east bound traffic reduced by 12% from 590vph to 519vph.

West bound morning peak hour flows were little changed at 718vph in May and 713vph In September. The average westbound peak hour flows were 664vph in May as against 665vph in September.

The speed of traffic through the village, within the 30mph speed limit, remains high. In September west bound traffic at the east end of the village, ie entering Alkham, had an average 85th percentile speed of 39.7mph and east bound traffic at this point had an 85th percentile figure of 43.4mph. Within the 30mph speed limit zone at the west side of the village, traffic travelling east, ie into the village, had an 85th percentile speed of 38.4mph, and traffic heading west at this point, ie having been through the centre of the village, had an 85th percentile speed

of 40.4mph. The highest speeds recorded during the survey period were between 71 and 80mph within the 30mph speed limit zone.

The distribution of cars to HGV's using the Alkham Valley Road is in the order of 90% cars to 10% HGV's. Despite this figure the disturbance caused by loaded and unloaded HGV's is severe with many residents complaining of the noise and vibrations these vehicles generate.

Accidents on the road are thankfully reasonably rare but nevertheless do occur. Many residents have experienced minor accidents and incidences of dangerous or reckless driving, which are unreported, and due to the speed of traffic, some residents have difficulties in exiting their properties safely.

In the last 3 years, within the parish boundary, there have been 7 accidents, 4 serious the most recent on the 8th February 2018. Prior to this date a review of accidents along the Alkham Valley Road between 2006 and 2015 is shown in **Appendix 7**. Speed is a contributing factor in most serious accidents and if speeds can be reduced then the risk of major accidents can also be reduced.

The overall effect of the current traffic flows and speeds has a direct negative impact on all users of the road.

b) The Dangers to users

With a lack of adequate footpaths along the Alkham Valley Road, and safe crossing points, the traffic is a real hazard to, amongst others, pedestrians, blind residents, the users of disability scooters, and mothers with prams, wishing to access the village facilities.

School children are put in danger crossing the road and at the school bus waiting points, in the village and at the Ewell Minnis bus stop where there are no crossing points, worn skid resistant road surfaces, high density commuter traffic around school bus times, and in the morning the added hazard of a low sun for east bound drivers on the bends.

Walkers and horse riders using the local footpaths and bridle paths, including the KCC designated circular bridle path routes, face hazards when crossing the Alkham Valley Road at the identified crossing points. Three KCC recommended crossing points linking bridle paths are in 40mph zones where motorists regularly exceed the speed limits. A request for a bus stop in the 40mph zone at the top of Meggett Lane has been rejected as unsafe by KCC, yet this is a marked crossing point for horses and walkers between bridle paths. The Chiltern farm bridle path crossing is on a dangerous 50mph bend, the site of two previous fatal accidents, where west bound traffic leaves the 40mph speed zone just before Chiltern Farm bend, increases to 50mph and almost immediately encounters a 'slow horses' sign.

Cyclists are endangered along the whole length of the Alkham Valley Road due to speeding traffic and HGV's. In one instance a father was knocked off his bike trying to ride for charity after his daughter was killed on the Drellingore bend. The Coroner's report, in that case, stated that she had investigated three fatal accidents in the same area, this being in a 50mph zone.

These identified dangers have been the subject of a qualitative Risk Assessment study, undertaken along the length of the Alkham Valley Road, the results of which can be studied in **Appendix 5**

The Alkham Valley Road lies within a 'Designated Area of Outstanding Natural Beauty', the primary purpose of which is to conserve and enhance the natural beauty of the Chalk Downland landscape, extending the public's ability to enjoy the countryside having regard to those who live and work there. Currently the people of Alkham are being denied this ability to enjoy their own environment due to the impact current traffic has on access along the Alkham Valley Road and as a result, on their quality of life.

The full potential of the Alkham Valley as a leisure destination cannot be realised while traffic presents such a deterrent to residents and visitors alike from accessing its outstanding countryside. Inadequate parking facilities along its length currently prevent those wishing to stop to admire the views and explore the walks and footpaths, from doing so.

3) Consultation Processes

In January 2017 Alkham Parish Council set up a Traffic Action Group (TAG) with the brief

'to gather statistical evidence of traffic behaviour and examine different calming measures that might be applicable to the Alkham situation',

The first action of TAG was to determine whether there was indeed a traffic problem on the Alkham Valley Road. A Questionnaire was prepared and distributed to all Alkham residents to consult their views as to whether, in their opinion, a problem with the volume or speed of traffic did exist. The result of this questionnaire was that there was an overwhelming view that a problem of traffic speed and volume did exist to the point that the quality of life in the village was impaired.

The results of this questionnaire are shown at **Appendix 1.**

4) Traffic Surveys

Following the presentation of the results of the residents' consultation to the Parish Council in May 2017 it was agree that two traffic surveys would be conducted on the Alkham Valley Road to gather factual evidence as to the volume of traffic, the speed of traffic and the mix of traffic using the road.

The services of Road Data Services Ltd were contracted to carry out these two surveys. The positions of the survey points were selected at either end of the village at the location of the two 'traffic activated signs' being some 200 metres inside the start of the 30mph zone.

The first survey was conducted over 7 days in May and the second over 7 days in September. The two survey dates were chosen to determine firstly traffic behaviour whilst the TAP restrictions were in place on the A20 and the second when these restrictions had been lifted.

The survey results are shown in **Appendices 2 and 3.**

During the year 2017 an Alkham Speedwatch Group, as part of the Kent Community Speedwatch scheme, has been active recording vehicles speeding in the village at different locations within the existing 30mph zone. The direction of traffic and the times of the sessions varied but records show a consistent number of vehicles exceeding the National Recommended Speed Threshold, which in a 30mph zone is that traffic travelling at 35mph or more. Despite the high visibility of the Speedwatch operators and the Visual Speed Device itself, drivers still exceed the speed limit. The percentage of vehicles recorded exceeding this limit, and hence reported to the police, varied from a minimum of 3% to a maximum of 14%, with an average of 7% of all vehicles exceeding 34mph. An average 31% of all vehicles recorded during Speedwatch sessions exceeded the designated speed limit of 30mph.

As a result of the Speedwatch Group's recording of high levels of speeding traffic, Kent Police have introduced an enforcement activity, within the existing 30 mph zone, committing the Safety Camera Unit team to provide three visits per month to the site for a year starting in July 2018. Indications so far confirm that a high percentage of traffic is exceeding the 30 mph limit.

5) Proposed Traffic Calming Measures

As speed was perceived as the most troubling aspect of traffic passing through the village, and by reducing speed the risks of serious accidents would also be reduced, TAG concentrated its focus on calming measures which would reduce the speed of traffic. A qualitative Risk Assessment exercise (see **Appendix 5**) has been undertaken along the length of the Alkham Valley Road. Traffic and calming measures proposed have been based upon the actions

identified as being necessary to reduce the risk of harm to a tolerable level at specific locations along the Alkham valley Road

The proposed traffic calming measures and their locations are shown in detail in **Appendix 4**.

It was known that steps were being taken by Kent Association of Local Councils (KALC) to introduce throughout Kent 20mph speed limits in rural areas and village centres. KCC are ready to consider these changes provided, where proposed, there is clear evidence that road conditions are suitable for 20 mph zones. TAG therefore took this as being the first thing to consider as the geometry of the Alkham Valley Road through the centre of the village would be ideally suitable for the introduction of a 20mph zone. A 20mph zone through Alkham village centre would immediately enable other calming measures to be considered which at higher speeds would not be acceptable. Amongst these was the possibility of introducing a pedestrian crossing, in the vicinity of the village green, where a children's play area is located, which would give safe access across the road for those wishing to get to the village green and also safe crossing for those wishing to reach the bus stops on either side of the road. A simple zebra crossing is proposed where solar panels would provide the power to illuminate the Belisha beacons. Appropriate warning signage of a pedestrian crossing would be required in both directions.

The introduction of a 20mph zone now enabled TAG to consider the solving of a long-standing problem regarding the safety of pedestrians passing between Slip Lane and the Marquis. The narrow two-way roadway at this point exposed pedestrians to the danger of fast-moving traffic from the Folkestone direction when trying to negotiate this section where no pedestrian footpath exists. With a 20mph speed limit at this point sight lines are within acceptable limits for the required stopping distances meaning traffic approaching from the Folkestone direction would be able to see and stop if necessary before reaching the proposed pedestrian crossing. It also allows a priority flow arrangement to be considered here where the road narrows and a pedestrian footpath can be accommodated, as again, stopping distances are within the required limits. Priority at this point would be given to traffic heading towards Folkestone.

It is interesting to note that in 1995 KCC themselves put forward the idea of a pedestrian footpath at this point even though this was within a 30mph zone where minimum stopping sight line requirements would not have been met. The KCC Public Consultation Document is shown at **Appendix 8**.

The question of speed reductions is also a concern to many who live outside the centre of the village. Traffic travelling from the Dover direction leaving Temple Ewell now have an extended 30mph zone followed, from Bushy Ruff, by a 40mph zone as they head towards Alkham. They are then faced with a short length of 50mph before reaching Wolverton Hill

where the speed limit reduces again to 40mph. Our proposal is for this short stretch of 50mph be replaced with a 40mph limit.

There is concern that at the bottom of Wolverton Hill, where the road bends, traffic from the Alkham direction travels at excessive speed putting people, particularly children, in danger crossing the road and waiting at the bus stop. The proposal is for the section of road between the new proposed 40mph limit be reduced from 40 to 30mph between Wolverton Hill and Alkham village. The requirements of house density, and minimum length between changes of speed limit are met on this section of the Alkham Valley Road to warrant it being a 30mph zone.

At this point, to the east of the entrance to 'Fair Acres' we propose the building of an Eastern Village Gateway, where the 30mph limit will end and our proposed 20mph speed limit zone begins. It is proposed that the Gateway be built with a reduction of the carriageway width to allow single file traffic alternately to pass through, with priority being given to Dover bound traffic, ie traffic leaving the village.

The 20mph speed limit is proposed to extend from this Eastern Village Gateway through the village centre to a point just beyond the west end of Valley Cottages where a change to a 30mph speed limit will take place.

It is proposed that this 30mph zone extends westward to a point to the west of Spring Meadow where we are proposing the building of the Western Village Gateway. Here we propose a reduction in the carriageway width to allow single file traffic to pass with priority being given to westbound traffic leaving the village.

From this Western Village Gateway, a 40mph speed limit is proposed to a point west of the Hawkinge/Capel cross roads by Patio Products, and from there a 50mph speed limit to the end of the Alkham Valley Road.

Along the whole length of the Alkham Valley Road, for environmental reasons, it is proposed a 7.5t weight restriction is put in place on all HGV through traffic, the exception being for traffic requiring local access. Apart from the environmental impact, the Alkham Valley Road is an unclassified road and as such is not designed, nor suitable for heavy trafficking by HGVs with its resulting damaging effect to its pavement surface. A weight restriction is therefore warranted.

It is recognised that speed limit signs alone will not necessarily be observed nor have the desired effect on the behaviour of inconsiderate speeding drivers. To enforce traffic to observe the speed limits we are proposing the construction of 'Build-Outs' at various locations between the two Village Gateways. At each Build-Out carriageway widths will be reduced to allow only single file traffic with priority flow operating.

The approximate location of these Build-Outs and the other proposed traffic calming measures are shown in **Appendix 4**

6) Results of the Public Opinion Questionnaire

The proposed measures for calming traffic were presented to the public and followed up with the distribution of a Questionnaire to all households in the Parish. The Questionnaire and the responses to the questions put are shown in **Appendix 6.**

Each proposed measure was presented in the form of a numbered question in the Questionnaire requiring the individual to give their response as to whether they 'Strongly Agreed' with the measure 'Agreed', 'Neither Agreed nor Disagreed', 'Disagreed' or 'Strongly Disagreed'.

The public were also consulted to indicate, in order of priority, which of the measures they considered most important should it be necessary to phase the implementation of the works over several financial years. The answers given are shown in **Appendix 6**.

In summary of the 170 responses received it is apparent that the majority of the respondents, 78%, Agreed or Strongly Agreed with the proposals put forward, 13% Disagreed or Strongly Disagreed and 9% Neither Agreed nor Disagreed.

It was anticipated that residents from different areas of Alkham would respond differently; those close to the Alkham Valley Road, with greater concerns, responding in greater numbers than residents in the remoter areas. This was in fact confirmed from analysis of the results by Post Code areas. For example, of the 89 Households with post codes, close to or adjacent to the Alkham Valley Road, 82 responses were received, where in contrast, in Ewell Minnis with 33 Households in the post code area only 6 responses were received. The number of responses received reflect, therefore, the views of those residents whose quality of life is most affected by traffic and should, accordingly, be given greater consideration over the views of those less affected who responded in lesser numbers or did not respond to the questionnaire at all

a) Summary Statistics on Response to Questions

- Some 91% of all respondents were in agreement with the proposed weight restriction on HGV through traffic on the Alkham Valley Road.
- 86% agreed with the proposal for a pedestrian crossing to be put in place near the Village Green play area.
- 83% wanted the 50mph speed limit east of Wolverton to be reduced to 40mph.
- 79% were in agreement with the introduction of Gateways to the village and associated road narrowing and priority flow.

- 79% were also in agreement that the 30mph speed limit be extended to the Western Gateway.
- 77% were in favour of narrowing the road by the Marquis, introducing priority flow there and having a pedestrian footpath.
- 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
- 73% agreed with the speed reductions proposing a 40mph speed limit from the Western Village Gateway westward to the Hawkinge/Capel cross roads, and the 50mph limit from there to the west end of the Alkham Valley Road.
- 72% backed the introduction for a 30mph speed limit from Wolverton Hill to the Eastern Village Gateway.
- 70% of respondents were in agreement with the introduction of Build-Outs to enforce adherence to the speed limits.

b) Summary Statistics related to Order of Priority

When residents were consulted about putting an order of priority as to which works should be implemented first the following were deemed most important to the people of Alkham:

- 1. Introduction of a 20mph zone
- 2. Introduction of a pedestrian crossing
- 3. Introduction of a weight restriction on HGV's
- 4. Introduction of Village Gateways with priority flows.

The second tier of works in order of importance were:

- 5. Narrowing of the road by the Marquis and introducing a pedestrian footpath.
- 6. Enforcement of speed limits with the building of Build-Outs
- 7. Extending the 30mph speed limit to the Western Village Gateway.
- 8. Extend the 30mph speed limit from the Eastern Village Gateway to Wolverton Hill.

The lowest tier of priorities, but still deemed important, was:

- 9. Replacement of the 50mph speed limit east of Wolverton Hill with a 40mph speed limit.
- 10. 40mph speed limit from the Western Village Gateway to the Hawkinge/Capel crossroad
- 11. 50 mph speed limit from Hawkinge/Capel crossroad westwards.

c) Summary Review of Write-In Comments

The Questionnaire also asked for any comments on the proposals or suggestions on other calming measures. 55% of respondents made no additional comments. Of the 45% who did comment 28% of them Agreed with the proposals, and 3% Disagreed with them.

Other comments made were:

- 15% considered Average Speed Cameras should be used to control speeds
- 15% had views on the speed limit proposals suggesting other limits or other zone lengths
- 13% had concerns that the proposals would encourage aggressive behaviour.
- 8% felt the proposals would cause tailbacks and increase pollution levels.

The remaining 18% of those who made comments covered issues ranging from the need to extend footpaths to enable mobility scooter users to reach village facilities; to introduce traffic signals at the Slip Lane/Hogbrook Lane junction activated to stop traffic on the Alkham Valley Road; replacing the Build-Outs with road humps to slow down motorcyclists or use speed cushions instead. Protected parking areas behind the 'Build-Outs', or elsewhere, were suggested where residents and visitors might safely park their cars on the road. These could also be located at various viewing points along the length of the valley.

d) Post-Mortem of Survey after Review and Open Session in the Village Hall

These suggestions reflect the seriousness that the people of Alkham attach to the problem of traffic through their village and its impact on their quality of life. The cost implications of introducing some of these suggestions needs to be considered against the undoubted benefit their implementation would provide. The question of Fixed or Average Speed Cameras might be seen as a viable alternative to some of the proposed calming measures. The location of such cameras and their cost of installation and their ongoing administration costs need to be carefully examined before any decision is taken to propose their introduction.

Revenue generated from speeding fines from Speed Cameras currently goes into the Treasury's Consolidated Fund. Government give a total of some £100 million a year, distributed to all the local authorities in England and Wales to spend on road safety. There is no guarantee that Alkham would benefit financially from revenues generated by Speed Cameras located on the Alkham Valley Road.

This report outlines suggested measures, which have the strong support of the local population, and will have a positive impact on improving the quality of the lives of those living in Alkham, as well as visitors to the Alkham Valley. Traffic now, and increasingly so in the future, needs to be managed so that its presence is compatible with the way of life of those who have chosen to live in this rural environment. The rural pursuits of those living in the village and its environs should have priority over those just using the valley road as a convenient rat-run on their commute to work. Other routes exist for the motorists to get to their destinations but for those living in the village only one way of life exists which they wish to preserve, and which is being increasingly destroyed by the ever-increasing volume and speed of traffic passing through their countryside.

8. Acknowledgements

The authors acknowledge the copyright of base maps adapted and annotated for this report which are based on the Kent County Council Interactive Map and UK Ordinance Survey.

Appendix 1: Alkham Parish, Residents' Traffic Survey Results, Spring 2017

1) The survey

- a) After considering Speedwatch traffic observations, the Parish Council, authorized the formation of the voluntary Traffic Advisory Group (TAG), working with Cllr Geoff Hillier. Their objective was to quantitively review traffic flow, management, volume, accidents and public safety along the Alkham valley road and through the village of Alkham.
- b) Upon completion of the TAG preliminary review, a survey template was developed by the Traffic Advisory Group and used gather Alkham Parish residents' views on a series of statements about current traffic activity identified by the Group.
- c) The survey was managed using the internet-based survey package, "Survey Monkey".
- d) Residents were invited to complete the survey using either the internet on line facility or an identical paper survey which was circulated to the majority of households via the monthly village newsletter.
- e) The survey was funded with support from a villager and the village newsletter.
- f) The survey was completed on May 1st. 2017.

2) The survey response.

- a) In total two hundred and four responses were received, and all results are included in the following analysis.
- b) The survey included 12 statements and offered a choice of five responses ranging between "Strongly agree" to "Strongly disagree".
- c) Residents were also invited to extend their answers using free text comment areas for each of the 12 question plus two supplementary questions.
- d) It was clear from the free text comments that some 48% of responding residents have been involved in some form of road traffic incident or accident when using the Alkham Valley Road.

3) The survey results. (All statements)

a) Respondents feedback combining all twelve statements.

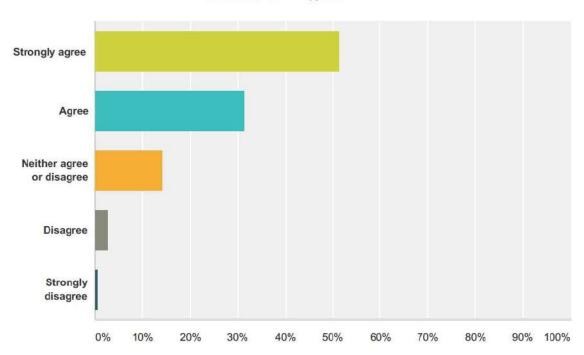
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1,115	490	171	51	6
67.8%	21.9%	7.7%	2.3%	0.3%
In total 89.7% AGREED with the statements		7.7%		DISAGREED statements

b) Survey Monkey Individual Results

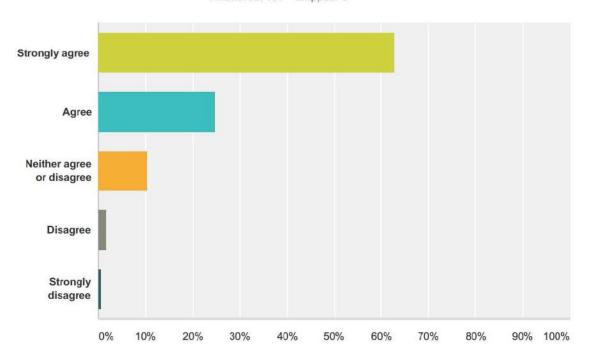
The following 6 pages contain 12 charts extracted from Survey Monkey of the Spring 2017 Survey, sorted question by question, 2 questions per page.

Q1 My quality of life is being affected by the volume of traffic through Alkham.

Answered: 191 Skipped: 0

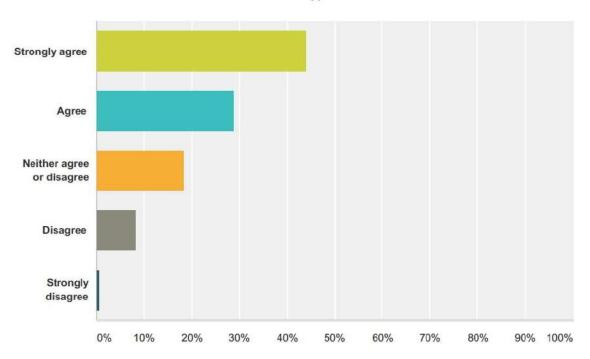


Q2 My quality of life is being affected by the speed of traffic through Alkham.

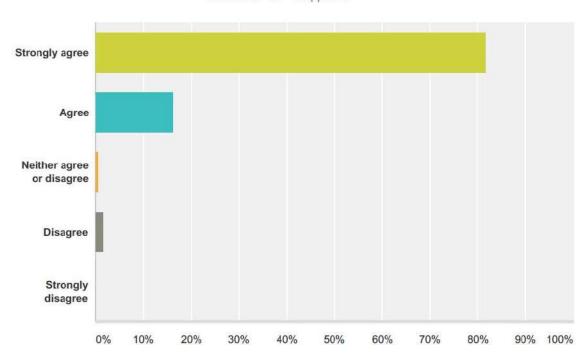


Q3 Traffic noise is affecting my quality of life.

Answered: 191 Skipped: 0

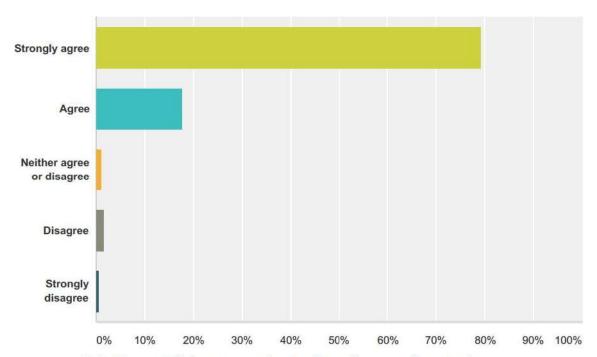


Q4 Speed of traffic on Alkham Valley Road and particularly through the village is too high.

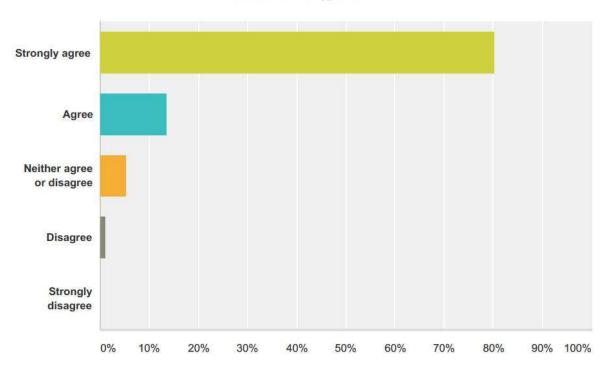


Q5 Road safety is at risk from the speed of traffic through Alkham.

Answered: 191 Skipped: 0

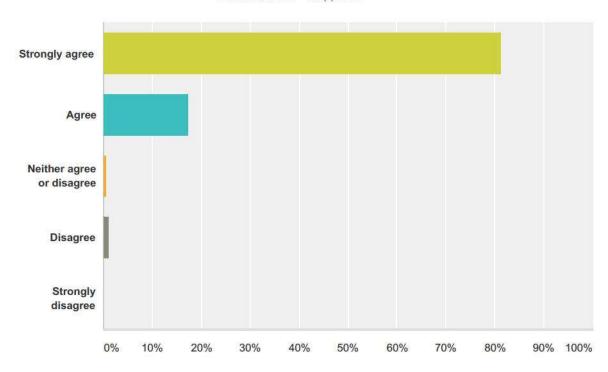


Q6 Something needs to be done about the volume of traffic through Alkham



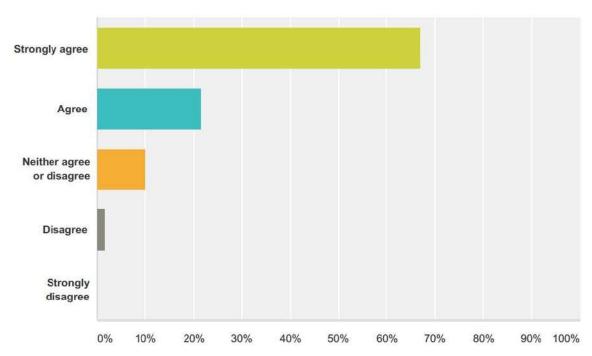
Q7 Something needs to be done about the speed of traffic through Alkham.

Answered: 191 Skipped: 0



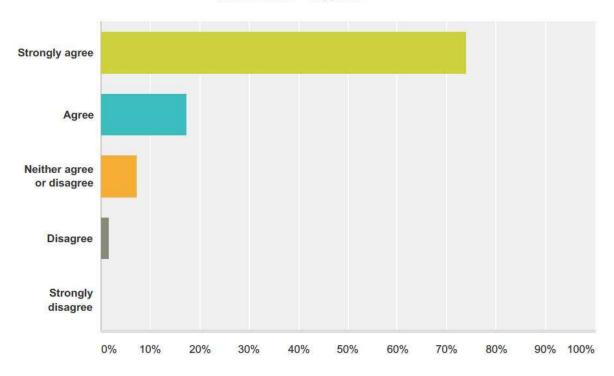
Q8 I feel it is unsafe for children to walk to the park.

Answered: 191 Skipped: 0

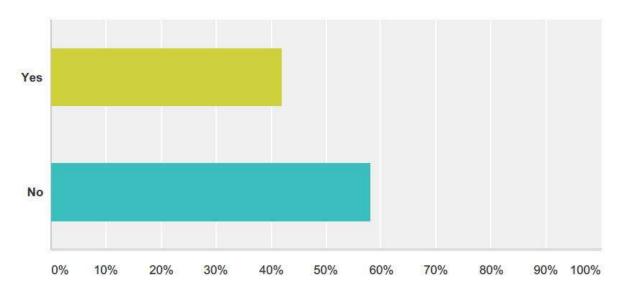


Q9 I feel it is unsafe for children to walk to the bus stops for Alkham and Ewell Minnis on Alkham Valley Road.

Answered: 191 Skipped: 0

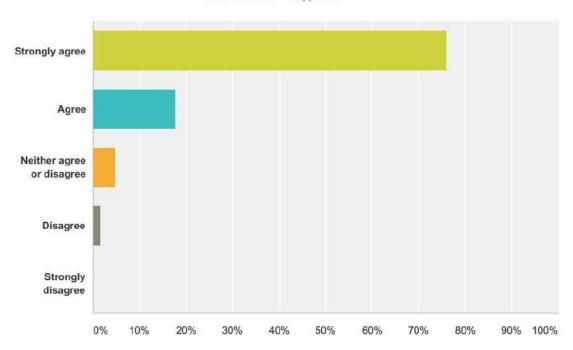


Q10 I have been involved in a traffic incident, accident or near miss on Alkham Valley Road.

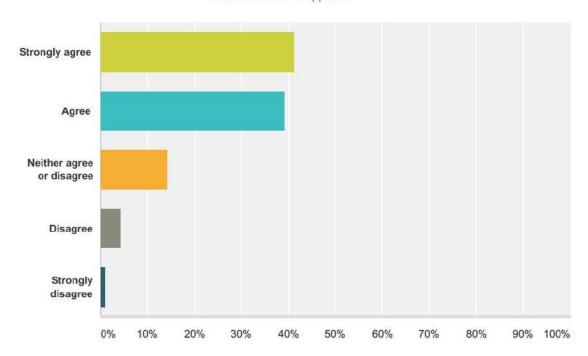


Q11 There are far too many lorries using Alkham Valley Road as a cut-through.

Answered: 191 Skipped: 0

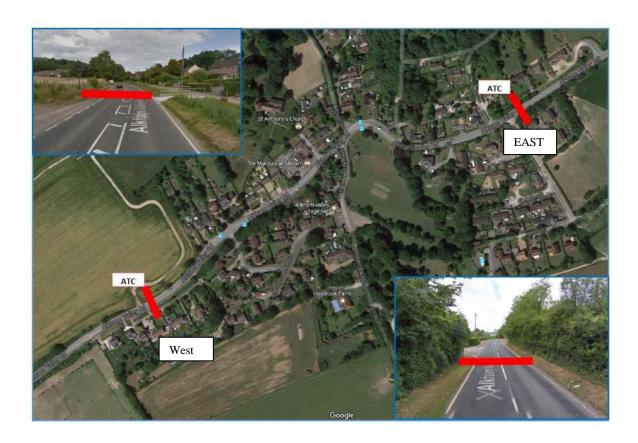


Q12 Parish Council funds of up to £1,000 should be used to pay for traffic surveys if Kent County Council refuse to pay.



Appendix 2: Traffic Survey Results May 17th to 23rd, 2017

Alkham Valley Road showing positioning of traffic flow sensors to the East and West of Alkham Village Centre.



Definitions.

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, moto

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit wi

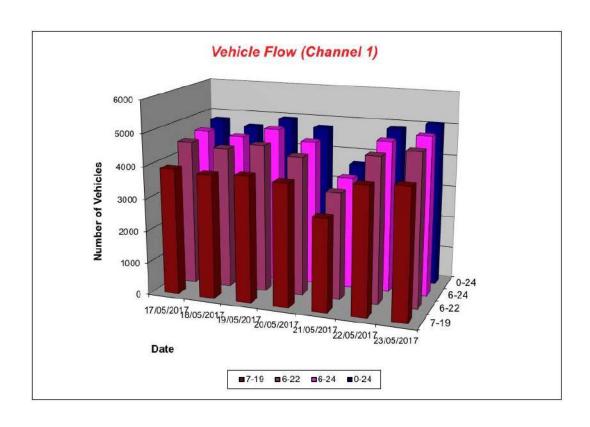
Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer. Buses and Coaches (PSV).

Alkham ATC 1, Alkham Valley Road (Western Site)

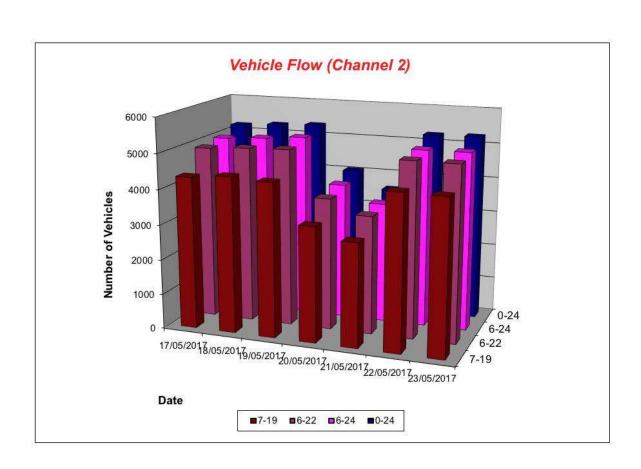
Produced by Road Data Services Ltd.

	Channel 1 -	Eastbound					Vehicle Flow		Week '
	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017	3	
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	48	21	15	81	54	24	16	25	37
2	24	17	9	32	37	27	25	20	24
3	15	5	11	28	12	13	13	11	14
4	12	4	10	16	17	19	14	12	13
5	16	14	14	22	12	21	19	17	17
6	37	42	43	41	25	43	40	41	39
7	143	134	130	113	60	126	133	133	120
8	257	269	233	186	84	266	273	260	224
9	304	332	280	194	107	285	302	301	258
10	257	236	237	280	155	248	243	244	237
11	214	210	213	313	224	193	214	209	226
12	180	254	252	320	290	238	240	233	253
13	258	238	290	371	321	271	278	267	290
14	259	248	282	414	343	224	268	256	291
15	333	322	344	454	290	315	301	323	337
16	368	350	399	422	274	351	366	367	361
17	499	488	473	305	271	502	489	490	432
18	584	522	527	279	259	667	650	590	498
19	400	362	364	253	238	366	379	374	337
20	231	194	195	152	166	214	240	215	199
21	134	129	150	120	125	132	187	146	140
22	84	93	195	122	105	108	162	128	124
23	64	100	173	126	124	131	143	122	123
24	69	49	103	100	47	71	75	73	73
7-19	3913	3831	3894	3791	2856	3926	4003	3913	3745
6-22	4505	4381	4564	4298	3312	4506	4725	4536	4327
6-24	4638	4530	4840	4524	3483	4708	4943	4732	4524
0-24	4790	4633	4942	4744	3640	4855	5070	4858	4668



Channel 2 - Westbound Vehicle Flow Week 1

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017		
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	9	18	7	28	37	10	18	12	18
2	4	14	5	18	14	11	6	8	10
3	14	11	11	12	16	11	7	11	12
4	16	7	7	11	9	14	17	12	12
5	32	30	35	31	16	41	41	36	32
6	123	121	101	70	58	121	131	119	104
7	255	246	260	120	79	274	265	260	214
8	664	661	619	177	106	718	697	672	520
9	693	705	637	261	150	684	661	676	542
10	344	340	347	272	252	344	338	343	320
11	250	265	267	309	289	272	266	264	274
12	280	276	274	331	353	283	252	273	293
13	262	283	311	335	347	271	285	282	299
14	282	294	287	314	316	262	308	287	295
15	282	308	312	313	265	260	272	287	287
16	276	291	304	260	220	284	310	293	278
17	346	341	352	271	252	340	347	345	321
18	424	403	398	226	226	414	359	400	350
19	230	268	262	199	169	259	275	259	237
20	145	133	190	158	139	129	145	148	148
21	115	117	120	108	117	97	107	111	112
22	78	65	101	99	85	87	88	84	86
23	60	53	91	75	48	43	54	60	61
24	25	35	42	57	14	26	30	32	33
7-19	4333	4435	4370	3268	2945	4391	4370	4380	4016
40.44	(alberta	1000	72227470	0000		10000	Contract Con	No. 3 (a)	100000



0-24

Alkham ATC 1, Alkham Valley Road (Western Site)

Produced by Road Data Services Ltd.

Channel 1 - Eastbound	Average Speed	Week 1

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	37.3	35.9	34.0	36.7	37.2	36.2	36.4
2	34.5	37.4	33.6	41.0	39.5	40.4	39.4
3	36.8	43.0	38.0	36.8	32.3	41.5	35.1
4	40.5	43.0	39.5	37.1	34.5	39.1	40.1
5	39.2	39.8	37.3	41.4	42.0	37.5	39.1
6	39.5	37.8	39.0	38.7	37.6	40.6	40.6
7	38.2	37.2	37.8	37.3	38.8	38.2	36.5
8	35.7	35.1	34.6	36.5	39.8	35.9	36.3
9	33.5	33.7	33.9	35.0	36.1	33.9	34.0
10	33.2	33.4	33.1	32.3	34.1	33.9	32.4
11	32.3	32.9	32.3	32.6	32.6	33.4	32.2
12	32.6	33.0	32.9	32.0	32.2	31.6	32.4
13	31.7	32.8	30.5	31.7	32.2	32.6	33.3
14	32.9	32.1	30.7	31.7	32.3	33.8	32.6
15	33.6	32.6	31.4	32.5	33.4	32.9	33.0
16	33.1	32.5	32.7	32.0	32.9	33.3	32.6
17	32.7	31.0	32.2	34.4	33.2	33.0	32.9
18	33.4	33.0	33.4	34.5	34.7	33.6	32.5
19	33.9	33.1	34.2	34.8	34.6	34.7	34.3
20	35.3	33.5	34.9	34.8	34.3	34.1	33.6
21	33.6	33.8	34.5	34.9	34.5	36.1	34.7
22	32.5	33.5	33.7	34.5	35.0	35.0	33.7
23	33.5	33.4	32.8	33.4	35.4	35.0	34.1
24	33.4	35.4	33.5	34.8	37.4	39.1	37.7
10-12	32.4	33.0	32.7	32.3	32.4	32.4	32.3
14-16	33.4	32.6	32.1	32.3	33.2	33/1	32/8

Average 33.6

Channel 1 - Eastbound

85th Percentile

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	48.7	43.6	39.0	48.7	43.9	43.7	43.2
2	38.5	48.3	43.4	48.9	43.7	48.9	48.5
3	48.6	48.3	43.3	38.8	38.5	43.5	43.3
4	43.3	48.8	43.2	43.0	43.4	43.1	48.3
5	43.3	43.8	48.2	48.5	53.1	43.8	48.0
6	48.8	43.6	48.6	43.9	43.8	53.4	43.5
7	48.0	44.0	43.4	48.4	43.5	43.5	43.2
8	38.8	43.9	38.4	43.7	48.8	43.5	43.9
9	38.8	38.2	38.7	43.5	43.6	38.2	38.6
10	38.7	38.7	38.3	38.5	38.8	38.3	38.8
11	38.0	39.0	38.6	38.5	38.0	38.1	38.9
12	38.4	38.2	38.2	38.4	38.2	38.6	38.3
13	38.9	38.5	38.2	38.4	38.1	38.2	38.5
14	38.8	38.1	33.6	38.3	38.1	38.9	38.1
15	38.4	39.0	33.1	38.1	38.3	38.1	38.6
16	39.0	38.7	38.5	38.2	38.1	38.4	38.4
17	38.9	38.0	38.9	39.0	38.0	38.3	39.0
18	38.1	38.6	38.3	38.1	43.5	38.9	38.1
19	38.9	38.1	43.8	43.4	43.7	38.8	38.9
20	38.4	38.1	43.4	43.4	43.5	38.3	38.6
21	38.5	38.8	43.3	43.5	38.8	43.7	43.3
22	38.8	38.3	38.9	38.2	43.1	38.3	38.1
23	38.1	38.0	38.6	38.5	43.2	43.1	38.5
24	38.6	38.3	38.6	38.3	43.7	48.0	43.2
10-12	38.5	38.4	38.4	38.6	38.5	38.3	39.0
14-16	38.3	38.3	38.1	38.5	38.4	38.8	38.1
0-24	38.6	38.9	38.6	38.2	38.1	38.3	38.0

85th %ile 38.4

Channel 2 - Westbound	Average Speed

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	41.3	38.3	40.1	42.6	38.3	40.5	42.2
2	40.5	35.7	36.0	40.5	44.8	43.0	46.3
3	41.2	41.2	38.5	36.8	41.4	39.4	40.9
4	42.7	40.1	38.7	40.3	43.6	41.2	41.5
5	42.4	41.0	41.3	39.8	45.2	44.8	41.3
6	40.6	39.2	40.2	41.6	42.1	41.2	41.4
7	39.5	38.7	38.6	41.0	41.2	39.5	38.9
8	36.7	35.7	36.3	39.0	40.2	35.5	35.8
9	35.0	35.3	35.1	36.6	37.4	34.9	35.8
10	35.5	35.9	35.3	35.6	35.7	35.4	35.2
11	34.5	35.4	35.1	35.8	35.2	35.5	35.2
12	35.3	35.6	34.8	35.6	36.0	35.3	36.0
13	35.4	35.3	31.7	35.9	35.7	36.0	34.8
14	35.5	35.8	24.4	35.3	35.3	36.3	33.6
15	35.7	35.4	31.1	34.9	36.0	35.8	35.1
16	35.2	35.9	35.1	37.1	35.5	34.7	35.2
17	35.7	34.7	35.8	36.1	35.8	35.0	35.0
18	35.6	35.4	35.9	37.8	37.4	36.9	35.9
19	36.6	35.3	37.0	37.1	37.1	38.2	37.0
20	37.5	36.4	37.6	37.4	37.3	37.0	36.9
21	36.9	36.2	38.2	37.1	38.5	37.0	37.7
22	35.9	38.1	36.9	37.2	38.2	40.0	38.7
23	35.8	35.2	36.6	37.5	39.8	39.2	40.4
24	38.4	34.7	37.8	37.0	39.1	41.5	38.2
10-12	34.9	35.5	35.0	35.7	35.7	35.4	35.6
14-16	35.5	35.6	33.1	35.9	35.8	35.2	35.2
0-24	36.1	35.8	35.0	36.7	36.7	36.3	36.1

Average 36.1

Week 1

Channel 2 - Westbound

85th Percentile

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/201
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	53.3	43.3	48.7	53.6	43.2	48.6	48.8
2	48.5	48.3	38.5	48.3	53.2	48.8	53.3
3	53.9	48.2	48.6	48.1	48.3	53.5	53.7
4	48.5	53.5	43.2	48.2	53.8	43.2	48.4
5	53.4	48.2	53.5	48.1	48.1	53.9	48.8
6	48.8	48.6	48.7	48.4	48.5	48.4	48.7
7	43.8	43.4	43.8	49.0	48.8	43.3	43.4
8	43.7	38.9	43.4	48.5	48.8	38.8	38.1
9	38.7	38.5	38.9	43.5	43.3	38.2	43.4
10	39.0	38.2	38.7	39.0	44.0	38.4	43.3
11	38.3	38.7	43.1	38.2	38.8	38.2	38.7
12	38.5	43.7	38.6	38.4	38.7	43.9	38.3
13	38.4	38.6	38.7	38.4	38.9	43.6	43.8
14	38.7	38.8	33.0	43.3	43.9	43.4	38.2
15	43.2	38.2	38.4	38.5	43.4	43.4	38.6
16	38.4	43.8	38.4	43.1	43.1	38.9	39.0
17	43.5	38.2	43.3	43.5	39.0	38.6	43.2
18	38.8	39.0	44.0	44.0	43.8	43.9	43.9
19	43.5	38.1	43.8	43.6	43.7	43.5	43.1
20	43.4	43.1	43.7	43.9	43.4	43.3	44.0
21	43.5	43.8	43.4	43.7	43.0	43.9	43.6
22	43.2	43.4	43.7	43.4	48.2	43.3	48.6
23	38.6	43.5	43.3	43.7	43.2	43.3	48.9
24	43.5	38.1	43.4	43.1	43.5	53.2	48.6
10-12	38.7	43.1	38.4	38.8	38.4	38.3	38.2
14-16	43.9	43.2	38.9	38.7	43.1	38.0	38.9
0-24	43.4	43.0	43.1	43.5	43.3	43.7	43.1

85th %ile 43.3

Alkham ATC 1, Alkham Valley Road (Western Site)

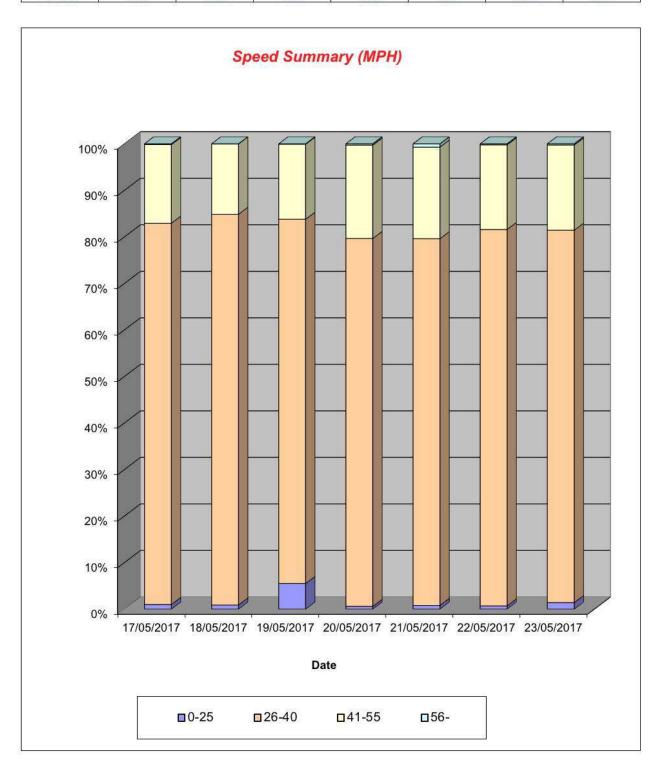
Produced by Road Data Services Ltd.

Channel 1 - Eastbound Speed Summary Week 1 17/05/2017 18/05/2017 19/05/2017 20/05/2017 21/05/2017 22/05/2017 23/05/2017 Thursday Friday Speed (MPH) Wednesday Saturday Sunday Monday Tuesday 67 102 154 112 161 0-25 138 124 3117 26-40 4215 4126 4351 4131 4164 4360 41-55 575 545 56-5 10 4 4



Channel 2 - Westbound Speed Summary Week 1

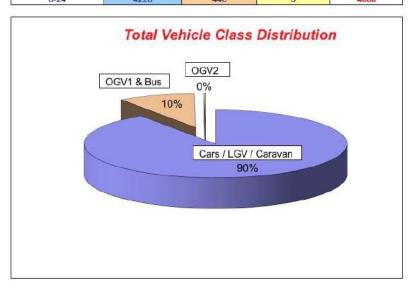
Speed (MPH)	17/05/2017 Wednesday	18/05/2017 Thursday	19/05/2017 Friday	20/05/2017 Saturday	21/05/2017 Sunday	22/05/2017 Monday	23/05/2017 Tuesday
0-25	51	46	294	24	28	36	74
26-40	4269	4439	4181	3207	2820	4252	4225
41-55	881	799	861	813	704	956	967
56-	8	1	4	11	25	11	13



Alkham ATC 1, Alkham Valley Road (Western Site)

Produced by Road Data Services Ltd.

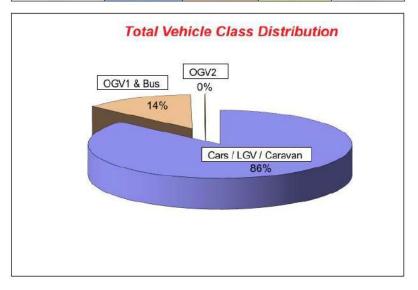
Channel 1 - I	Channel 1 - Eastbound			Week 1	
Classes Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 -4.8.9.10.11.13	TOTAL - 1-13	
17/05/2017					
7-19	3439	467	7	3913	
6-22	3980	518	7	4505	
6-24	4110	521	7	4638	
0-24	4249	534	7	4790	
18/05/2017					
7-19	3389	438	4	3831	
6-22	3910	467	4	4381	
6-24	4056	470	4	4530	
0-24	4155	474	4	4633	
19/05/2017	4100			4000	
7-19	3533	352	9	3894	
6-22	4171	380	13	4564	
6-24	4432	394	14	4840	
0-24	4522	406	14	4942	
20/05/2017	4322				
7-19	3455	329	7	3791	
6-22	3919	371	8	4298	
6-24	4131	385	8	4524	
0-24	4340	396	8	4744	
21/05/2017	4340				
7-19	2713	136	7	2856	
6-22	3126	179	7	3312	
6-24	3285	191	7	3483	
0-24	3433	200	7	3640	
22/05/2017	3433	200		3040	
7-19	3415	498	13	3926	
6-22	3957	536	13	4506	
6-24	4145	550	13	4708	
0-24	4280	562	13	4855	
23/05/2017		viningininginingini			
7-19	3567	431	5	4003	
6-22	4236	484	5	4725	
6-24	4442	496	5	4943	
0-24	4558	506	6	5070	
U-21	4500	000		3070	
Average					
7-19	3359	379	7	3745	
6-22	3900	419	8	4327	
6-24	4086	430	8	4524	
0-24	4220	440	8	4668	



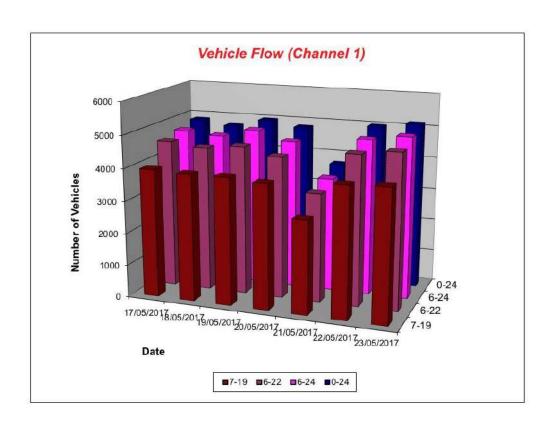
Channel 2 - Westbound Vehicle Class Week 1

Classes	Car / LGV / Caravan - 1	OGV1 / Bus - 2.3.5.6.7.12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
Day / Time 17/05/2017	Caravan - 1	- 2,3,5,0,7,12	- 4,8,9,10,11,13	- 1-13
7-19	3673	651	9	4333
6-22	4198	719	9	4926
6-24	4271	731	9	5011
0-24	4448	752	9	5209
18/05/2017				
7-19	3732	696	7	4435
6-22	4220	768	8	4996
6-24	4298	778	8	5084
0-24	4467	810	8	5285
19/05/2017				
7-19	3718	646	6	4370
6-22	4314	719	8	5041
6-24	4441	725	8	5174
0-24	4586	746	8	5340
20/05/2017				
7-19	2963	301	4	3268
6-22	3402	346	5	3753
6-24	3517	363	- 5	3885
0-24	3662	386	7	4055
21/05/2017				
7-19	2715	219	11	2945
6-22	3085	269	11	3365
6-24	3142	274	11	3427
0-24	3273	293	11	3577
22/05/2017				
7-19	3685	694	12	4391
6-22	4180	783	15	4978
6-24	4246	786	15	5047
0-24	4424	816	15	5255
23/05/2017				
7-19	3711	647	12	4370
6-22	4231	730	14	4975
6-24	4311	734	14	5059
0-24	4497	768	14	5279

Average				
7-19	3457	551	9	4016
6-22	3947	619	10	4576
6-24	4032	627	10	4670
0-24	4194	653	10	4857



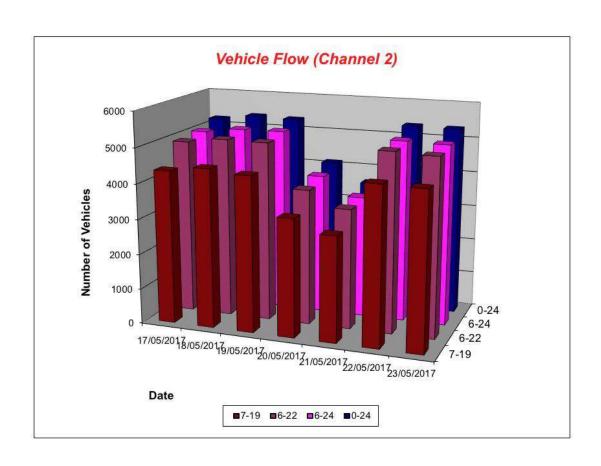
	Channel 1 -	Eastbound				A	ehicle Flow		Week
	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017		
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	47	22	17	79	64	23	19	26	39
2	25	17	8	35	38	30	26	21	26
3	15	5	10	30	13	15	13	12	14
4	12	4	10	18	19	18	15	12	14
5	14	14	15	23	20	30	29	20	21
6	35	42	46	44	40	64	53	48	46
7	144	134	125	120	69	157	145	141	128
В	278	279	269	186	89	295	299	284	242
9	332	350	305	205	111	312	324	325	277
10	258	261	243	295	165	250	246	252	245
11	219	219	222	324	206	216	218	219	232
12	205	265	258	318	303	244	250	244	263
13	248	228	293	368	306	263	269	260	282
14	271	240	268	398	347	219	270	254	288
15	329	334	337	468	283	323	296	324	339
16	357	358	376	418	274	340	379	362	357
17	498	485	471	302	280	490	480	485	429
18	579	522	518	289	266	663	624	581	494
19	389	366	357	259	243	377	379	374	339
20	230	192	201	156	174	218	240	216	202
21	144	137	144	122	125	141	182	150	142
22	95	96	199	130	104	108	165	133	128
23	64	102	174	129	130	130	142	122	124
24	68	50	106	102	45	66	73	73	73
7-19	3963	3907	3917	3830	2873	3992	4034	3963	3788
6-22	4576	4466	4586	4358	3345	4616	4766	4602	4388
6-24	4708	4618	4866	4589	3520	4812	4981	4797	4585
0-24	4856	4722	4972	4818	3714	4992	5136	4936	4744



Channel 2 - Westbound	Vehicle Flow	Week 1

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017		
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	5 Day Ave	7 Day Ave
1	10	18	6	23	33	10	20	13	17
2	4	13	5	14	14	9	5	7	9
3	14	12	8	10	14	11	6	10	11
4	15	7	7	13	10	13	15	11	11
5	31	28	32	26	16	45	41	35	31
6	121	123	97	62	56	121	134	119	102
7	241	250	261	122	78	284	268	261	215
8	655	641	612	186	114	718	692	664	517
9	673	698	618	262	152	676	653	664	533
10	345	339	371	263	244	344	329	346	319
11	254	261	258	308	275	266	264	261	269
12	272	292	267	335	344	281	254	273	292
13	264	287	324	348	346	275	287	287	304
14	275	296	290	329	329	265	314	288	300
15	288	319	303	331	285	272	279	292	297
16	298	300	313	259	229	294	318	305	287
17	356	374	358	272	263	358	353	360	333
18	438	425	410	240	228	431	381	417	365
19	233	270	279	205	172	279	305	273	249
20	150	143	196	167	145	149	135	155	155
21	120	124	113	110	116	98	105	112	112
22	80	61	97	101	82	85	88	82	85
23	65	56	79	78	44	43	55	60	60
24	25	29	31	58	11	21	31	27	29

7-19	4351	4502	4403	3338	2981	4459	4429	4429	4066
6-22	4942	5080	5070	3838	3402	5075	5025	5038	4633
6-24	5032	5165	5180	3974	3457	5139	5111	5125	4723
0-24	5227	5366	5335	4122	3600	5348	5332	5322	4904



Produced by Road Data Services Ltd.

	Channel 1 -	Eastbound		Ave	erage Speed		Week
	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	36.8	36.6	34.0	34.6	34.9	35.8	36.9
2	33.9	36.8	34.2	36.1	36.1	37.8	37.2
3	35.8	38.0	39.0	36.0	34.9	38.0	35.3
4	39.2	43.0	37.0	36.6	32.8	35.2	36.7
5	37.6	36.8	34.8	38.2	37.5	36.5	39.0
6	37.5	36.5	37.3	37.5	37.9	41.6	39.3
7	36.5	35.9	37.3	36.0	36.8	36.7	35.7
8	34.5	35.2	35.0	35.2	37.7	35.3	35.1
9	33.7	34.1	33.5	35.0	35.4	33.8	33.6
10	33.6	33.0	32.7	33.2	34.3	34.4	33.3
11	31.7	32.6	32.1	33.8	34.2	33.1	32.6
12	32.6	33.2	33.0	33.1	32.7	32.7	32.6
13	32.0	32.8	32.7	33.0	33.5	33.8	33.3
14	32.8	33.3	34.0	33.3	32.2	33.6	32.6
15	33.1	32.4	33.3	33.0	33.0	32.9	33.2
16	32.4	33.0	33.4	32.8	33.0	33.0	33.0
17	32.7	32.9	33.8	34.6	33.7	34.1	32.9
18	33.8	33.5	34.0	33.8	34.1	33.8	32.7
19	33.8	32.9	34.7	33.7	34.2	34.8	34.0
20	34.2	33.5	35.1	34.6	34.3	34.4	33.8
21	33.3	33.1	35.3	36.2	35.6	35.1	34.4
22	33.8	34.5	33.2	34.5	34.8	34.2	34.1
23	33.5	34.4	33.2	32.6	34.4	34.8	34.1
24	34.4	33.7	33.2	35.4	35.2	36.9	36.4
10-12	32.1	32.9	32.6	33.4	33.3	32.9	32.6
14-16	32.8	32.8	33.3	32.9	33.0	33.0	33.1
0-24	33.4	33.5	33.8	33.9	34.0	34.2	33.6

Average 33.8

Channel 1 - Eastbound

85th Percentile

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	43.7	43.6	44.0	38.7	38.9	38.7	38.2
2	38.5	43.3	43.4	43.9	43.7	43.9	43.5
3	43.6	43.3	43.3	43.8	43.5	43.5	38.3
4	43.3	43.8	43.2	38.0	38.4	43.1	43.3
5	43.3	43.8	43.2	48.5	38.1	43.8	43.0
6	43.8	43.6	38.6	43.9	38.8	43.4	43.5
7	43.0	44.0	43.4	43.4	43.5	43.5	38.2
8	38.8	38.9	38.4	38.7	43.8	38.5	38.9
9	38.8	38.2	38.7	43.5	38.6	38.2	38.6
10	38.7	38.7	38.3	38.5	38.8	38.3	38.8
11	38.0	39.0	38.6	38.5	38.0	38.1	38.9
12	38.4	38.2	38.2	38.4	38.2	38.6	38.3
13	38.9	38.5	38.2	38.4	38.1	38.2	38.5
14	38.8	38.1	38.6	38.3	38.1	38.9	38.1
15	38.4	39.0	38.1	38.1	38.3	38.1	38.6
16	39.0	38.7	38.5	38.2	38.1	38.4	38.4
17	38.9	38.0	38.9	39.0	38.0	38.3	39.0
18	38.1	38.6	38.3	38.1	38.5	38.9	38.1
19	38.9	38.1	38.8	38.4	38.7	38.8	38.9
20	38.4	38.1	38.4	43.4	38.5	38.3	38.6
21	38.5	38.8	38.3	43.5	38.8	38.7	38.3
22	38.8	38.3	38.9	38.2	38.1	38.3	38.1
23	38.1	38.0	38.6	38.5	38.2	38.1	38.5
24	38.6	38.3	38.6	43.3	38.7	43.0	43.2
10-12	38.5	38.4	38.4	38.6	38.5	38.3	39.0
14-16	38.3	38.3	38.1	38.5	38.4	38.8	38.1
0-24	39.6	38.0	38.6	29.2	29.1	20.2	28.0

Channel 2 - Westbound	Average Speed	Week 1
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	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	40.0	38.3	36.3	41.3	42.2	46.0	46.0
2	46.8	41.5	35.0	42.3	51.2	43.6	49.0
3	41.6	45.5	39.9	41.5	48.0	44.8	41.3
4	48.0	43.0	31.9	43.8	47.0	48.0	50.7
5	44.0	45.7	45.2	46.5	47.1	51.6	46.2
6	44.5	44.9	44.5	47.2	48.0	46.0	47.6
7	44.9	44.8	44.7	47.3	45.1	44.5	46.0
8	42.2	40.1	41.0	43.6	44.1	38.1	38.7
9	39.0	39.2	38.4	41.5	41.1	38.2	39.4
10	38.5	38.9	38.7	40.8	38.9	38.5	38.0
11	36.9	38.8	38.4	39.5	38.0	37.8	36.9
12	39.8	38.1	38.6	38.3	39.4	39.0	38.4
13	40.2	38.9	37.8	40.0	38.4	38.2	38.7
14	41.2	39.6	38.3	39.9	39.2	38.1	36.4
15	38.5	38.4	40.0	38.5	39.5	40.2	38.1
16	40.2	39.3	39.0	42.7	38.7	37.4	37.8
17	39.0	37.7	39.7	40.5	39.9	40.7	38.5
18	40.1	38.3	40.1	41.3	41.3	39.4	39.5
19	40.5	36.3	41.5	41.8	39.8	41.2	41.2
20	41.6	36.0	42.8	40.9	40.4	40.0	40.4
21	38.2	36.2	41.1	41.5	42.8	41.3	41.7
22	33.9	36.9	40.6	40.3	41.5	41.3	40.9
23	32.6	34.2	37.1	39.8	40.8	43.0	41.8
24	40.0	33.5	38.1	40.8	42.1	42.8	38.6
10-12	38.4	38.4	38.5	38.9	38.8	38.4	37.7
14-16	39.4	38.8	39.5	40.4	39.1	38.7	38.0
0-24	40.1	39.0	39.9	40.9	40.1	39.6	39.5

Average 39.9

Channel 2 - Westbound 85th Percentile

	17/05/2017	18/05/2017	19/05/2017	20/05/2017	21/05/2017	22/05/2017	23/05/2017
Hr Ending	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday
1	48.3	43.3	53.7	53.6	53.2	58.6	53.8
2	58.5	58.3	43.5	58.3	58.2	48.8	58.3
3	53.9	53.2	43.6	48.1	53.3	53.5	53.7
4	58.5	48.5	43.2	53.2	58.8	53.2	58.4
5	53.4	53.2	58.5	53.1	58.1	58.9	53.8
6	58.8	53.6	53.7	58.4	58.5	53.4	58.7
7	53.8	53.4	53.8	59.0	53.8	53.3	53.4
8	53.7	48.9	48.4	53.5	53.8	48.8	48.1
9	48.7	48.5	48.9	53.5	53.3	48.2	48.4
10	49.0	48.2	48.7	54.0	49.0	48.4	48.3
11	48.3	48.7	48.1	48.2	48.8	48.2	43.7
12	48.5	48.7	48.6	48.4	48.7	48.9	48.3
13	53.4	48.6	48.7	48.4	48.9	48.6	48.8
14	48.7	48.8	48.0	53.3	48.9	48.4	48.2
15	48.2	48.2	48.4	48.5	48.4	53.4	48.6
16	53.4	48.8	48.4	53.1	48.1	48.9	49.0
17	48.5	48.2	53.3	48.5	49.0	53.6	48.2
18	48.8	49.0	49.0	54.0	53.8	53.9	48.9
19	53.5	43.1	53.8	53.6	48.7	53.5	53.1
20	48.4	43.1	53.7	53.9	53.4	53.3	54.0
21	48.5	43.8	53.4	53.7	53.0	53.9	53.6
22	38.2	43.4	53.7	48.4	53.2	48.3	53.6
23	38.6	38.5	48.3	48.7	48.2	53.3	53.9
24	43.5	43.1	48.4	53.1	48.5	53.2	48.6
10-12	48.7	48.1	48.4	48.8	48.4	48.3	48.2
14-16	48.9	48.2	48.9	48.7	48.1	48.0	48.9
0-24	48.4	48.0	48.1	53.5	53.3	48.7	48.1

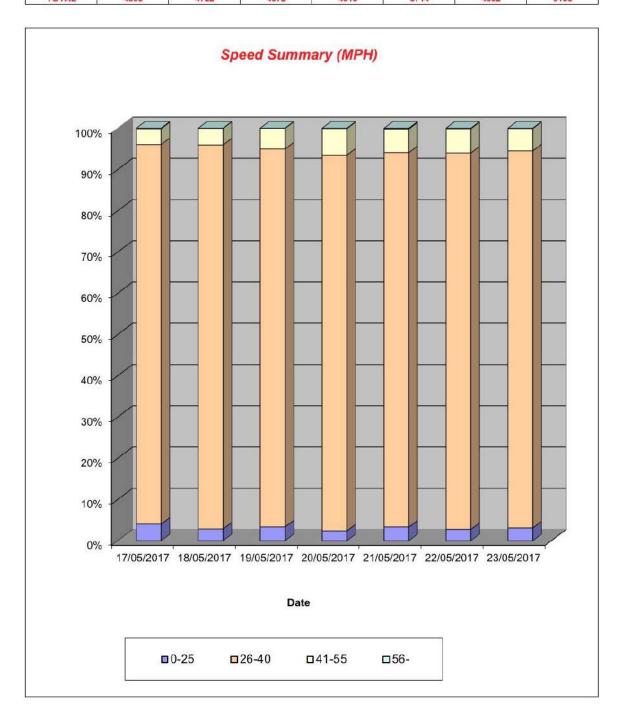
85th %ile 49.7

Produced by Road Data Services Ltd.

Channel 1 - Eastbound Speed Summary

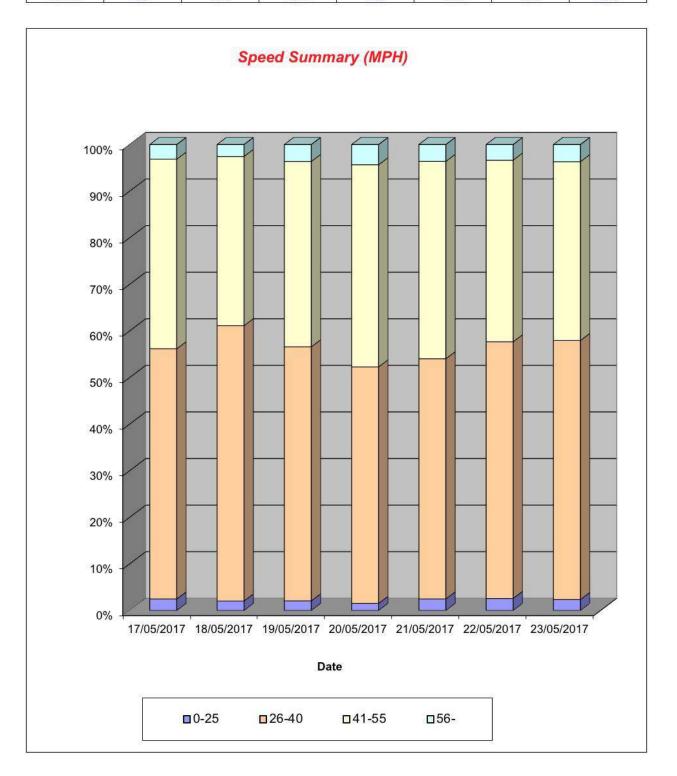
Week 1

Speed (MPH)	17/05/2017 Wednesday	18/05/2017 Thursday	19/05/2017 Friday	20/05/2017 Saturday	21/05/2017 Sunday	22/05/2017 Monday	23/05/2017 Tuesday
0-25	196	135	166	116	124	137	159
26-40	4468	4396	4556	4389	3371	4556	4696
41-55	187	190	249	310	213	294	278
56-	5	1	1	3	6	5	3



Channel 2 - Westbound Speed Summary Week 1

Speed (MPH)	17/05/2017 Wednesday	18/05/2017 Thursday	19/05/2017 Friday	20/05/2017 Saturday	21/05/2017 Sunday	22/05/2017 Monday	23/05/2017 Tuesday
0-25	129	109	110	62	89	138	125
26-40	2807	3171	2909	2093	1856	2946	2965
41-55	2127	1949	2122	1788	1525	2085	2046
56-	164	137	194	179	130	179	196

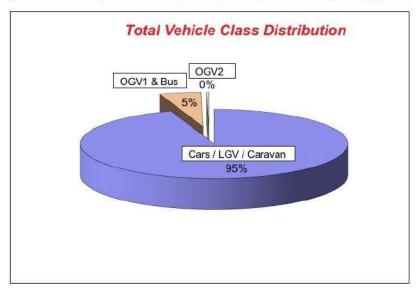


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0-24

Vehicle Class Week 1 Channel 1 - Eastbound Classes Car / LGV / OGV1/Bus OGV2 Day / Time Caravan - 1 - 2,3,5,6,7,12 - 4,8,9,10,11,13 - 1-13 17/05/2017 7-19 6-22 6-24 0-24 18/05/2017 7-19 6-22 6-24 0-24 19/05/2017 7-19 6-22 0-24 20/05/2017 7-19 6-22 0-24 21/05/2017 6-22 6-24 0-24 22/05/2017 7-19 6-22 6-24 0-24 23/05/2017 7-19 261 6-22 6-24

Average				
7-19	3580	197	-11	3788
6-22	4156	220	12	4388
6-24	4345	228	12	4585
0-24	4496	236	12	4744



Classes	Car / LGV /	OGV1/Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
17/05/2017				
7-19	4186	165	0	4351
6-22	4753	189	0	4942
6-24	4840	192	0	5032
0-24	5030	197	0	5227
18/05/2017				
7-19	4323	179	0	4502
6-22	4881	199	0	5080
6-24	4963	202	0	5165
0-24	5158	208	0	5366
19/05/2017				
7-19	4239	164	0	4403
6-22	4881	189	0	5070
6-24	4987	193	0	5180
0-24	5138	197	0	5335
20/05/2017				
7-19	3249	89	0	3338
6-22	3737	101	0	3838
6-24	3870	104	0	3974
0-24	4015	107	0	4122
21/05/2017				
7-19	2907	74	0	2981
6-22	3318	84	0	3402
6-24	3372	85	0	3457
0.24	2512	07	0	2000

Vehicle Class

Week 1

Channel 2 - Westbound

0-24

22/05/2017

7-19

6-22

6-24

0-24

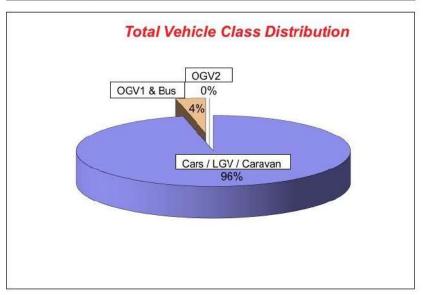
23/05/2017

7-19

6-24

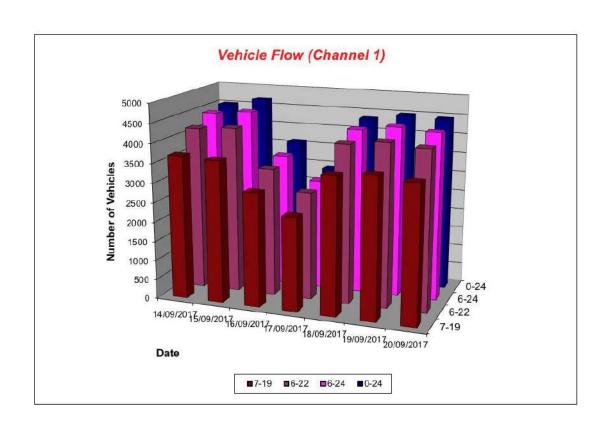
0-24

Average				
7-19	3920	146	0	4066
6-22	4468	166	0	4633
6-24	4554	168	0	4723
0-24	4731	173	0	4904



Appendix 3: Traffic Survey Results September 14th to 20th, 2017

Vehicle Flow Channel 1 - Eastbound Week 1 14/09/2017 15/09/2017 16/09/2017 17/09/2017 18/09/2017 19/09/2017 20/09/2017 Hr Ending Friday Wednesday 5 Day Ave 7 Day Ave Saturday Monday Thursday Sunday Tuesday 189 7-19 4015 6-22 0-24



									0,000,000
Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday	5 Day Ave	7 Day Ave
1	21	15	19	30	9	12	18	15	18
2	5	8	13	5	8	5	13	8	8
3	6	6	10	9	6	4	7	6	7
4	18	10	11	8	15	8	13	13	12
5	26	19	19	11	29	20	29	25	22
6	113	111	67	48	108	117	100	110	95
7	269	230	108	58	251	255	235	248	201
8	633	586	168	101	644	625	643	626	486
9	706	654	250	130	650	724	656	678	539
10	398	359	294	231	343	394	377	374	342
11	276	302	351	266	242	298	273	278	287
12	273	277	309	270	258	276	251	267	273
13	286	298	342	292	274	280	263	280	291
14	251	276	321	287	270	254	250	260	273
15	300	294	271	256	264	256	290	281	276
16	301	290	269	234	274	304	303	294	282
17	338	387	266	230	334	322	328	342	315
18	443	368	288	184	405	388	385	398	352
19	253	249	195	164	254	251	230	247	228
20	172	178	143	142	158	153	135	159	154
21	102	126	106	85	92	103	141	113	108
22	84	94	62	66	84	93	84	88	81
23	53	60	59	55	41	101	69	65	63
24	22	54	47	20	18	40	37	34	34
7-19	4458	4340	3324	2645	4212	4372	4249	4326	3943
6-22	5085	4968	3743	2996	4797	4976	4844	4934	4487
6-24	5160	5082	3849	3071	4856	5117	4950	5033	4584

3988

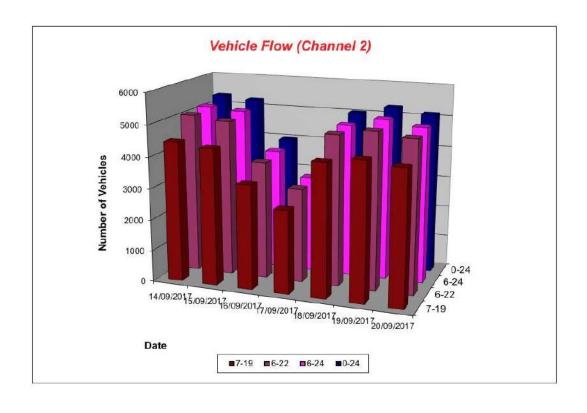
3182

5031

Vehicle Flow

Week 1

Channel 2 - Westbound



Produced by Road Data Services Ltd.

Channel 1 - Eastbound	Average Speed	Week 1

	14/09/2017	15/09/2017	16/09/2017	17/09/2017	18/09/2017	19/09/2017	20/09/2017
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
1	39.9	35.1	34.0	35.9	42.1	36.8	40.6
2	37.2	37.6	38.1	40.1	40.1	38.3	35.4
3	30.5	38.2	35.0	43.3	42.1	35.9	37.7
4	35.9	39.7	38.6	37.6	39.9	40.5	40.0
5	43.0	39.7	40.5	39.4	40.8	39.1	36.8
6	40.3	40.9	39.5	39.9	40.9	40.8	39.2
7	38.2	39.4	39.9	38.2	36.9	37.8	36.9
8	35.9	35.0	37.3	36.6	34.5	36.3	35.1
9	33.4	34.4	33.8	34.9	33.3	32.3	33.8
10	33.3	33.3	31.7	34.3	32.0	32.6	33.0
11	31.6	32.5	32.3	32.7	32.5	31.4	32.4
12	32.9	31.1	32.8	32.2	31.3	30.5	33.1
13	32.9	31.3	30.7	32.1	32.2	31.4	32.2
14	32.5	32.1	31.3	33.5	31.9	33.0	31.5
15	33.2	30.7	33.1	33.1	31.8	32.0	31.5
16	32.2	33.1	32.6	33.5	31.8	32.0	30.9
17	31.8	31.8	32.1	33.7	32.4	32.0	32.2
18	33.1	33.8	34.0	35.1	32.1	32.3	31.4
19	33.4	33.0	34.8	34.7	32.3	32.7	31.8
20	33.9	33.7	34.3	33.2	32.8	33.9	34.2
21	36.3	32.9	34.8	34.7	35.4	33.3	34.4
22	34.5	32.6	35.5	36.8	35.3	33.7	32.5
23	34.7	33.5	33.6	35.2	36.1	34.9	36.4
24	36.8	34.5	37.1	38.9	36.7	38.4	37.8
10-12	32.3	31.7	32.5	32.4	31.9	30.9	32.7
14-16	32.7	31.9	32.8	33.3	31.8	32.0	31.2
0-24	33.5	33.2	33.3	34.0	33.0	33.0	33.0

Average 33.3

Channel 1 - Eastbound

85th Percentile

	14/09/2017	15/09/2017	16/09/2017	17/09/2017	18/09/2017	19/09/2017	20/09/2017
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesda
1	48.7	43.6	44.0	43.7	53.9	48.7	53.2
2	48.5	48.3	48.4	48.9	48.7	43.9	48.5
3	43.6	48.3	43.3	48.8	48.5	48.5	43.3
4	38.3	43.8	38.7	48.0	43.4	53.1	43.3
5	58.3	48.8	53.2	43.5	43.1	48.8	48.0
6	48.8	48.6	48.6	48.9	48.8	48.4	48.5
7	48.0	49.0	48.4	48.4	43.5	48.5	43.2
8	43.8	38.9	43.4	43.7	38.8	43.5	43.9
9	38.8	43.2	38.7	43.5	38.6	38.2	38.6
10	38.7	38.7	38.3	38.5	38.8	38.3	38.8
11	38.0	39.0	38.6	38.5	38.0	38.1	38.9
12	38.4	38.2	38.2	38.4	38.2	38.6	38.3
13	38.9	38.5	38.2	38.4	38.1	38.2	38.5
14	38.8	38.1	38.6	38.3	38.1	38.9	38.1
15	38.4	39.0	38.1	38.1	38.3	38.1	38.6
16	39.0	38.7	38.5	38.2	38.1	38.4	38.4
17	38.9	38.0	38.9	39.0	38.0	38.3	39.0
18	38.1	38.6	43.3	43.1	38.5	38.9	38.1
19	38.9	38.1	43.8	43.4	38.7	38.8	38.9
20	38.4	38.1	38.4	38.4	38.5	38.3	43.6
21	43.5	43.8	43.3	43.5	43.8	43.7	43.3
22	43.8	38.3	43.9	43.2	43.1	43.3	38.1
23	43.1	38.0	43.6	43.5	43.2	43.1	43.5
24	43.6	43.3	43.6	43.3	43.7	48.0	43.2
10-12	38.5	38.4	38.4	38.6	38.5	38.3	39.0
14-16	38.3	38.3	38.1	38.5	38.4	38.8	38.1
0-24	38.6	38.9	38.6	38.2	38.1	38.3	38.0

85th %ile 38.4

Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
1	36.0	36.8	39.8	38.4	39.1	40.3	38.0
2	45.0	39.9	35.7	42.0	37.1	40.0	40.3
3	37.2	43.0	39.5	38.3	40.9	49.9	33.4
4	41.3	39.2	36.4	38.9	39.8	38.6	38.8
5	41.1	43.8	41.9	40.5	40.1	43.1	41.2
6	39.7	40.2	38.9	38.4	37.8	39.7	40.6
7	36.8	37.5	38.1	39.9	37.2	36.9	37.4
8	35.2	35.0	38.8	38.4	35.1	35.4	35.2
9	35.2	34.6	36.5	36.1	33.6	35.1	34.5
10	34.2	35.0	33.5	35.7	34.6	33.5	33.9
11	34.4	34.3	35.5	34.5	34.2	34.6	33.7
12	34.6	34.4	35.0	33.8	33.3	34.0	33.8
13	33.9	33.9	33.9	35.0	34.4	33.8	34.9
14	35.5	35.3	35.3	36.3	35.7	34.4	34.4
15	34.4	33.3	35.4	34.7	33.6	34.5	33.9
16	34.9	35.7	35.3	35.5	34.8	34.8	34.3
17	35.2	34.6	35.1	36.2	35.6	35.0	34.5
18	34.2	36.6	35.5	36.6	33.8	34.2	34.1
19	36.0	37.1	35.0	36.4	35.4	35.1	36.5
20	35.1	34.8	36.2	36.9	35.5	35.6	36.6
21	38.4	34.5	36.3	37.7	37.2	38.2	35.8
22	36.7	36.5	36.3	38.5	36.2	38.6	36.0
23	36.0	39.9	37.2	35.7	39.6	37.5	35.6
24	40.0	36.4	38.6	38.8	39.9	38.1	39.4

10-12 34.5 34.3 34.1 33.7 34.3 0-24 35.2 35.3 35.6 35.9 34.9 35.2 35.0

Average

Week 1

Channel 2 - Westbound

Channel 2 - Westbound

85th Percentile

Average Speed

	14/09/2017	15/09/2017	16/09/2017	17/09/2017	18/09/2017	19/09/2017	20/09/2017
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesda
1	43.3	43.3	43.7	43.6	48.2	48.6	48.8
2	58.5	53.3	43.5	48.3	43.2	43.8	48.3
3	48.9	48.2	48.6	43.1	53.3	76.0	38.7
4	48.5	43.5	43.2	48.2	48.8	43.2	48.4
5	48.4	48.2	48.5	48.1	48.1	48.9	48.8
6	48.8	48.6	48.7	43.4	48.5	48.4	43.7
7	43.8	43.4	43.8	49.0	43.8	43.3	43.4
8	38.7	38.9	43.4	48.5	38.8	38.8	38.1
9	38.7	38.5	43.9	43.5	38.3	38.2	38.4
10	39.0	38.2	38.7	44.0	39.0	38.4	38.3
11	38.3	38.7	38.1	38.2	38.8	43.2	38.7
12	38.5	38.7	38.6	38.4	38.7	38.9	38.3
13	38.4	38.6	38.7	38.4	38.9	38.6	38.8
14	38.7	38.8	43.0	43.3	38.9	38.4	38.2
15	38.2	38.2	43.4	43.5	38.4	38.4	38.6
16	38.4	43.8	38.4	43.1	38.1	38.9	39.0
17	43.5	38.2	38.3	43.5	39.0	38.6	38.2
18	38.8	44.0	44.0	44.0	38.8	38.9	38.9
19	43.5	43.1	38.8	43.6	43.7	43.5	43.1
20	38.4	38.1	43.7	43.9	43.4	43.3	44.0
21	43.5	38.8	43.4	43.7	43.0	43.9	43.6
22	43.2	43.4	43.7	48.4	43.2	48.3	43.6
23	43.6	48.5	43.3	43.7	48.2	48.3	48.9
24	43.5	43.1	43.4	43.1	48.5	43.2	48.6
10-12	38.7	38.1	38.4	38.8	38.4	38.3	38.2
14-16	38.9	38.2	38.9	43.7	38.1	38.0	38.9
0-24	38.4	43.0	43.1	43.5	38.3	38.7	38.1

85th %ile 40.4

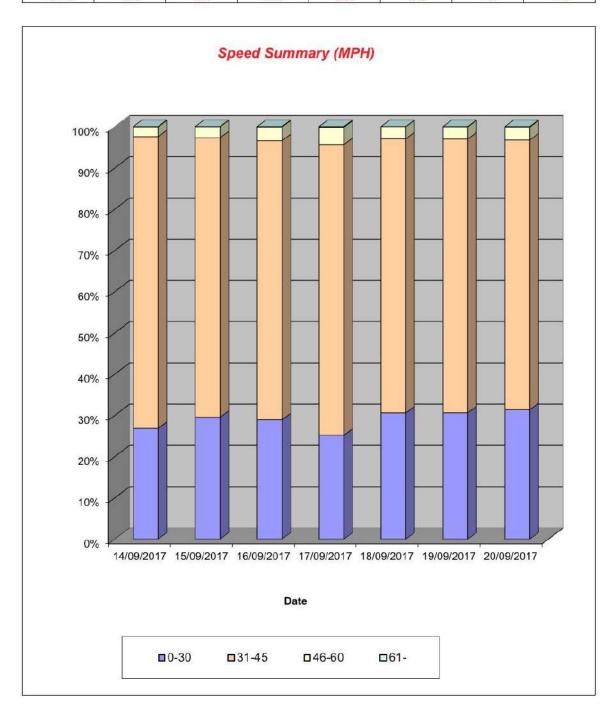
Produced by Road Data Services Ltd.

Channel 1 - Eastbound

Week 1

Speed (MPH)	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
0-30	1211	1386	1041	740	1329	1375	1396
31-45	3188	3177	2436	2071	2886	2980	2909
46-60	106	125	119	123	127	132	140
61-	3	1	3	4	0	2	4

Speed Summary



14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
684	693	506	397	779	727	735
4532	4390	3334	2632	4118	4391	4248
131	166	146	149	132	161	143
2	2	2	4	2	4	4
	Thursday 684 4532	Thursday Friday 684 693 4532 4390	Thursday Friday Saturday 684 693 506 4532 4390 3334	Thursday Friday Saturday Sunday 684 693 506 397 4532 4390 3334 2632	Thursday Friday Saturday Sunday Monday 684 693 506 397 779 4532 4390 3334 2632 4118	Thursday Friday Saturday Sunday Monday Tuesday 684 693 506 397 779 727 4532 4390 3334 2632 4118 4391

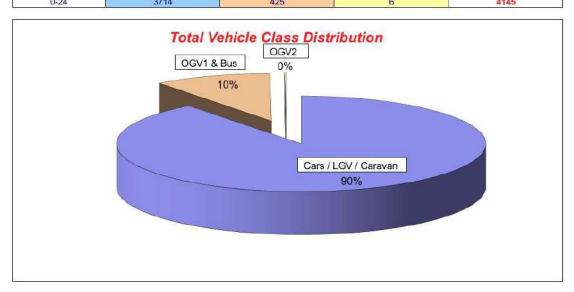
Speed Summary

Week 1

Channel 2 - Westbound

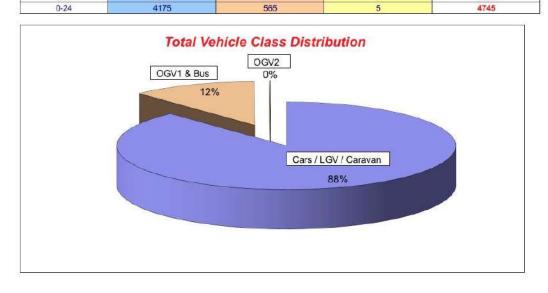


Channel 1 -	Eastbound		Vehicle Class	Week
Classes	Car / LGV /	OGV1/Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
14/09/2017				
7-19	3206	469	6	3681
6-22	3679	508	6	4193
6-24	3891	529	6	4426
0-24	3955	547	6	4508
15/09/2017				
7-19	3218	410	7	3635
6-22	3788	466	7	4261
6-24	4021	488	8	4517
0-24	4165	515	9	4689
16/09/2017				
7-19	2720	193	5	2918
6-22	3078	203	6	3287
6-24	3209	206	6	3421
0-24	3366	227	6	3599
17/09/2017				
7-19	2247	153	4	2404
6-22	2578	177	5	2760
6-24	2647	181	5	2833
0-24	2746	187	5	2938
18/09/2017				
7-19	3074	428	3	3505
6-22	3572	484	3	4059
6-24	3740	500	3	4243
0-24	3825	514	3	4342
19/09/2017				
7-19	3174	415	2	3591
6-22	3695	474	4	4173
6-24	3870	495	4	4369
0-24	3966	519	4	4489
20/09/2017				
7-19	3110	384	5	3499
6-22	3662	424	6	4092
6-24	3846	443	7	4296
0-24	3976	466	7	4449
Average				
7-19	2964	350	5	3319
6-22	3436	391	5	3832
6-24	3603	406	6	4015
0-24	3714	425	6	4145

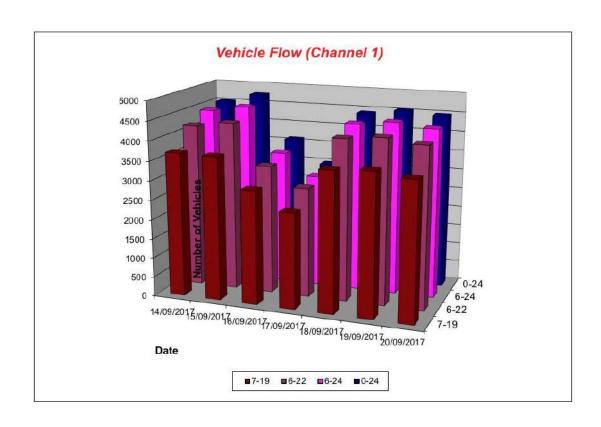


Channel 2 - Westbound	Vehicle Class	Week 1

Classes	Car / LGV /	OGV1/Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
7-19	3829	623	6	4458
6-22	4371	708	6	5085
6-24	4441	713	6	5160
0-24	4602	741	6	5349
7-19	3767	568	5	4340
6-22	4333	629	6	4968
6-24	4440	636	6	5082
0-24	4583	662	6	5251
16/09/2017				
7-19	3054	270	0	3324
6-22	3445	297	1	3743
6-24	3546	302	1	3849
0-24	3670	317	1	3988
17/09/2017				
7-19	2449	192	4	2645
6-22	2783	209	4	2996
6-24	2850	217	4	3071
0-24	2946	232	4	3182
18/09/2017				
7-19	3636	572	4	4212
6-22	4152	641	4	4797
6-24	4205	647	4	4856
0-24	4363	664	4	5031
19/09/2017				
7-19	3783	584	5	4372
6-22	4321	650	5	4976
6-24	4446	666	5	5117
0-24	4590	688	5	5283
20/09/2017				
7-19	3697	547	5	4249
6-22	4227	611	6	4844
6-24	4321	623	6	4950
0-24	4471	653	6	5130
Average				
7-19	3459	479	4	3943
6-22	3947	535	5	4487
6-24	4036	543	5	4584
0.24	4175	585	5	4745

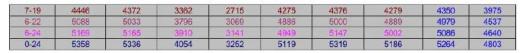


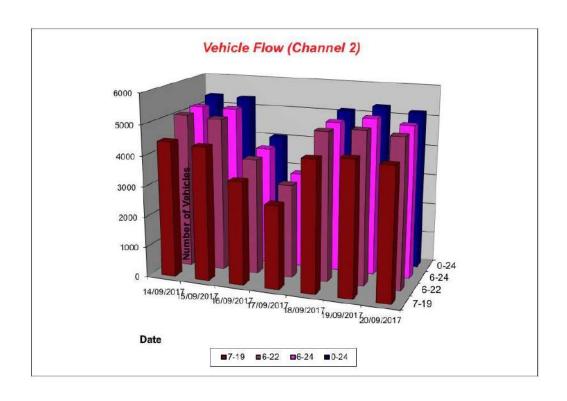
	Channel 1 -	Eastbound					Vehicle Flow		Week
	14/09/2017	15/09/2017	16/09/2017	17/09/2017	18/09/2017	19/09/2017	20/09/2017		
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	5 Day Ave	7 Day Ave
1	28	54	56	35	21	16	39	32	36
2	11	33	40	24	12	30	34	24	26
3	5	14	30	15	18	12	15	13	16
4	8	16	6	8	8	13	14	12	10
5	10	18	15	10	17	12	15	14	14
6	22	39	27	20	22	37	35	31	29
7	105	111	47	34	108	116	111	110	90
8	270	242	82	65	263	254	264	259	206
9	319	297	128	112	315	315	310	311	257
10	228	240	190	157	234	248	243	239	220
11	195	199	251	169	204	192	183	195	199
12	221	229	251	235	193	222	202	213	222
13	233	258	293	264	225	217	198	226	241
14	215	254	297	262	247	235	241	238	250
15	309	331	294	260	274	283	286	297	291
16	329	337	292	264	293	342	300	320	308
17	485	433	288	260	449	447	444	452	401
18	503	481	287	232	516	523	498	504	434
19	380	373	258	170	363	353	350	364	321
20	197	213	151	148	188	207	203	202	187
21	122	152	84	108	111	121	130	127	118
22	87	178	102	73	156	152	156	146	129
23	158	157	74	50	104	111	113	129	110
24	80	100	63	23	82	87	94	89	76
7.40		0071	0011	0.150	0570	0004	2540	2017	0050
7-19	3687	3674	2911	2450	3576	3631	3519	3617	3350
6-22	4198	4328	3295	2813	4139	4227	4119	4202	3874
6-24	4436	4585	3432	2886	4325	4425	4326	4419	4059
0-24	4520	4759	3606	2998	4423	4545	4478	4545	4190



Channel 2 - Westbound	Vehicle Flow	Week 1

Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday	5 Day Ave	7 Day Ave
1	22	15	22	29	10	12	21	16	19
2	4	9	13	5	8	7	15	9	9
3	6	5	11	9	5	4	6	5	7
4	19	12	10	8	15	8	13	13	12
5	26	19	19	13	30	21	31	25	23
6	112	111	69	47	102	120	98	109	94
7	273	235	105	61	256	263	237	253	204
8	622	589	173	102	642	608	632	619	481
9	685	640	255	143	637	713	648	665	532
10	385	359	290	222	344	377	388	371	338
11	268	289	347	257	232	296	258	269	278
12	270	268	299	276	262	284	247	266	272
13	290	295	361	297	279	274	271	282	295
14	250	280	330	300	282	260	254	265	279
15	283	294	282	265	262	258	297	279	277
16	311	319	253	244	285	323	310	310	292
17	357	396	262	245	349	318	344	353	324
18	458	383	286	188	428	400	387	411	361
19	267	260	224	176	273	265	243	262	244
20	171	194	155	143	164	151	146	165	161
21	110	127	110	84	102	106	136	116	111
22	88	105	64	66	89	104	91	95	87
23	57	70	60	52	41	104	75	69	66
24	24	62	54	20	22	43	38	38	38





Produced by Road Data Services Ltd.

Average speed	Channel 1 - Eastbound	Average Speed	Week
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Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
1	41.0	38.5	38.0	38.3	42.3	41.6	41.8
2	43.5	41.6	41.1	43.0	39.7	40.8	40.1
3	33.0	38.7	39.2	39.8	42.9	38.0	41.7
4	36.4	39.2	39.7	40.5	41.1	41.1	39.4
5	37.8	41.1	40.7	41.5	44.2	39.7	40.0
6	41.9	42.0	42.3	39.5	42.5	41.8	38.7
7	39.1	41.3	43,1	40.9	39.2	39.9	40.6
8	38.0	37.1	40.3	39.5	38.2	38.7	38.7
9	36.0	37.5	39.2	39.1	36.5	36.9	36.3
10	36.4	37.1	35.2	38.6	35.6	35.9	36.1
11	35.3	36.1	35.8	36.8	35.4	36.0	35.4
12	36.1	35.8	36.2	36.0	36.6	35.4	36.0
13	36.1	34.6	35.5	36.5	34.7	35.7	36.1
14	36.1	37.0	36.3	37.0	35.6	37.0	35.2
15	35.7	35.1	36.5	36.3	35.6	36.6	35.5
16	36.1	36.6	37.0	36.3	37.3	36.7	35.8
17	36.2	36.2	35.8	37.5	36.8	35.3	36.3
18	36.2	37.3	37.1	38.4	36.6	36.7	36.5
19	36.2	37.1	36.8	36.8	36.9	37.7	37.2
20	37.5	37.2	37.5	37.3	36.5	37.3	38.5
21	39.2	36.9	38.6	38.3	39.1	38.0	38.2
22	38.0	35.8	39.2	39.5	38.1	37.9	35.6
23	36.3	36.4	37.9	38.4	40.2	37.5	39.0
24	39.8	37.2	38.2	41.9	40.0	40.6	40.3
10-12	35.7	35.9	36.0	36.4	36.0	35.6	35.7
1000000			17677				10000

Average 36.9

36.8

37.0

Channel 1 - Eastbound

36.8

37.0

37.5

0-24

85th Percentile

36.9

	14/09/2017	15/09/2017	16/09/2017	17/09/2017	18/09/2017	19/09/2017	20/09/2017
Hr Ending	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesda
1	48.7	48.6	44.0	43.7	48.9	48.7	48.2
2	53.5	48.3	48.4	48.9	43.7	48.9	48.5
3	48.6	43.3	43.3	48.8	48.5	43.5	48.3
4	43.3	48.8	43.2	48.0	43.4	48.1	48.3
5	53.3	48.8	53.2	43.5	48.1	48.8	48.0
6	48.8	48.6	48.6	43.9	43.8	48.4	48.5
7	48.0	49.0	48.4	48.4	43.5	43.5	48.2
8	43.8	43.9	48.4	43.7	43.8	43.5	43.9
9	43.8	43.2	43.7	48.5	43.6	43.2	43.6
10	43.7	43.7	38.3	43.5	43.8	43.3	43.8
11	38.0	44.0	43.6	43.5	38.0	38.1	43.9
12	43.4	43.2	43.2	43.4	43.2	38.6	43.3
13	43.9	38.5	38.2	43.4	38.1	38.2	43.5
14	43.8	43.1	43.6	43.3	43.1	43.9	43.1
15	43.4	39.0	43.1	43.1	43.3	43.1	43.6
16	44.0	43.7	43.5	43.2	43.1	43.4	43.4
17	38.9	43.0	38.9	44.0	43.0	38.3	44.0
18	43.1	43.6	43.3	43.1	43.5	43.9	43.1
19	43.9	43.1	43.8	43.4	43.7	43.8	43.9
20	43.4	43.1	43.4	43.4	43.5	43.3	43.6
21	43.5	43.8	43.3	43.5	43.8	43.7	43.3
22	43.8	38.3	43.9	43.2	43.1	43.3	43.1
23	43.1	43.0	43.6	43.5	48.2	43.1	48.5
24	43.6	43.3	43.6	48.3	48.7	48.0	43.2
10-12	43.5	43.4	43.4	43.6	43.5	38.3	44.0
14-16	43.3	43.3	43.1	43.5	43:4	43.8	43.1
0-24	43.6	43.9	43.6	43.2	43.1	43.3	43.0

85th %ile 43.4

	Channel 2 -	Westbound		Av	erage Speed		Week 1
Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
1	34.9	38.7	39.2	37.3	40.0	38.4	36.0
2	41.8	33.8	39.2	39.0	36.1	40.1	38.7
3	35.5	41.0	39.4	40.2	37.5	41.8	33.8
4	41.2	41.8	39.0	37.7	39.0	39.2	39.0
5	41.3	40.9	40.9	37.0	39.0	42.3	41.7
6	39.6	39.6	38.4	36.6	37.9	39.5	40.3
7	36.8	35.0	37.7	39.1	35.8	36.4	36.5
8	34.0	33.4	36.4	37.4	33.7	34.5	34.2
9	33.4	32.6	33.8	35.0	32.7	33.1	32.6
10	32.3	32.4	31.0	34.5	32.6	31.1	31.3
11	32.2	32.1	32.3	32.8	32.5	32.8	32.1
12	32.2	33.1	33.5	32.4	31.1	32.0	31.5
13	32.0	33.0	31.5	33.2	32.5	32.1	32.2
14	33.5	32.9	33.5	33.8	33.0	33.1	31.4
15	29.6	33.1	33.2	33.2	32.0	33.8	32.4
16	34.2	33.7	33.8	32.3	33.4	32.9	31.5
17	32.9	32.4	33.3	34.1	34.3	34.8	32.6
18	32.8	33.9	33.8	35.9	32.0	32.6	33.7
19	34.3	33.6	32.3	35.3	34.5	33.6	34.6
20	33.7	33.2	34.3	33.9	34.8	34.2	34.7
21	33.8	34.2	34.7	36.5	35.4	36.6	35.8
22	34.4	36.4	34.5	36.1	36.1	36.9	33.8
23	34.0	37.3	36.6	34.0	39.3	38.2	35.8
24	38.5	35.9	36.9	38.5	41.6	35.4	38.3
10-12	32.2	32.6	32.9	32.6	31.8	32.4	31.8
14-16	32.0	33.4	33.5	32.7	32.7	33.3	31.9
0-24	33.5	33.5	33.6	34.2	33.5	33.8	33.3

Channel 2 - Westbound

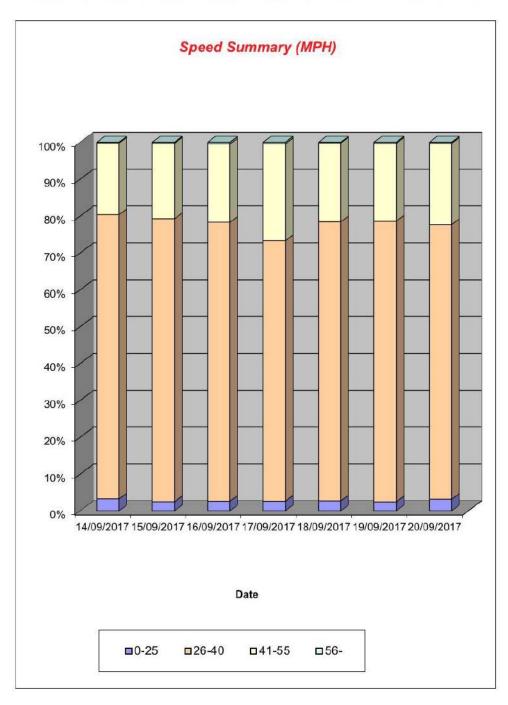
85th Percentile

Average

Hr Ending	14/09/2017 Thursday	15/09/2017 Friday	16/09/2017 Saturday	17/09/2017 Sunday	18/09/2017 Monday	19/09/2017 Tuesday	20/09/2017 Wednesday
1	43.3	48.3	48.7	43.6	43.2	48.6	48.8
2	53.5	48.3	48.5	48.3	43.2	48.8	48.3
3	48.9	43.2	48.6	48.1	48.3	53.5	43.7
4	48.5	48.5	48.2	53.2	43.8	43.2	48.4
5	48.4	48.2	53.5	53.1	48.1	53.9	48.8
6	48.8	48.6	48.7	43.4	48.5	48.4	48.7
7	43.8	43.4	43.8	49.0	43.8	43.3	43.4
8	38.7	38.9	43.4	48.5	38.8	43.8	38.1
9	38.7	38.5	43.9	43.5	38.3	38.2	38.4
10	39.0	38.2	38.7	44.0	39.0	38.4	38.3
11	38.3	38.7	38.1	38.2	38.8	43.2	38.7
12	38.5	38.7	38.6	38.4	38.7	38.9	38.3
13	38.4	38.6	38.7	38.4	38.9	38.6	38.8
14	43.7	38.8	38.0	38.3	38.9	38.4	38.2
15	38.2	38.2	38.4	38.5	38.4	43.4	38.6
16	43.4	43.8	38.4	38.1	43.1	38.9	39.0
17	38.5	38.2	43.3	43.5	44.0	43.6	38.2
18	43.8	44.0	39.0	44.0	38.8	38.9	43.9
19	43.5	43.1	43.8	43.6	43.7	43.5	43.1
20	38.4	38.1	43.7	43.9	43.4	43.3	44.0
21	43.5	43.8	48.4	43.7	48.0	43.9	43.6
22	43.2	43.4	43.7	43.4	43.2	48.3	43.6
23	43.6	43.5	43.3	43.7	48.2	48.3	48.9
24	48.5	43.1	48.4	48.1	53.5	48.2	48.6
10-12	38.7	38.1	38.4	38.8	38.4	38.3	38.2
14-16	43.9	43.2	38.9	38.7	38.1	38.0	38.9
0-24	38.4	38.0	38.1	43.5	38.3	43.7	38.1

85th %ile 39.7

Channel 1 - Eastbound Week 1 Speed Summary 16/09/2017 14/09/2017 15/09/2017 17/09/2017 18/09/2017 19/09/2017 20/09/2017 Speed (MPH) Thursday Friday Saturday Sunday Monday Tuesday Wednesday 0-25 148 118 79 120 142 2119 26-40 3485 3654 2729 3349 3460 3336 41-55 975 946 960 988 878 765 787 56-9 17 14 12 13 8 12 TOTAL 4520 4759 3606 2998 4423 4545 4478

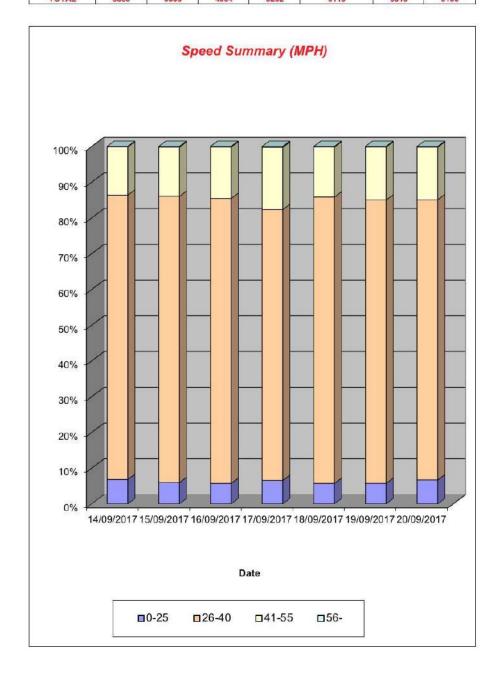


14/09/2017 15/09/2017 16/09/2017 17/09/2017 18/09/2017 19/09/2017 20/09/2017 Thursday Speed (MPH) Friday Saturday Sunday Monday Tuesday Wednesday 0-25 319 214 26-40 4262 4273 3232 2464 4102 4217 4066 788 9 762 56-10 10 TOTAL 5358 5336 4054 3252 5119 5319 5186

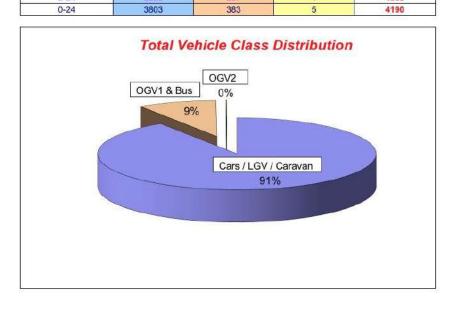
Speed Summary

Week 1

Channel 2 - Westbound



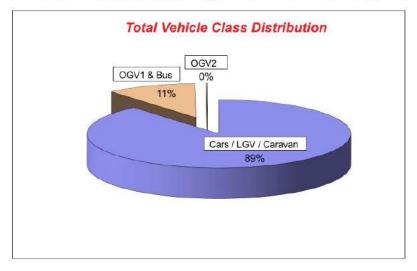
Classes	Car / LGV /	OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	-4,8,9,10,11,13	- 1-13
14/09/2017				
7-19	3239	445	3	3687
6-22	3719	476	3	4198
6-24	3938	495	3	4436
0-24	4004	513	3	4520
15/09/2017				
7-19	3280	390	4	3674
6-22	3887	437	4	4328
6-24	4128	453	4	4585
0-24	4275	479	5	4759
16/09/2017				
7-19	2755	154	2	2911
6-22	3130	163	2	3295
6-24	3261	169	2	3432
0-24	3421	183	2	3606
17/09/2017				
7-19	2323	124	3	2450
6-22	2669	138	6	2813
6-24	2739	141	6	2886
0-24	2847	145	6	2998
18/09/2017				
7-19	3175	397	4	3576
6-22	3692	443	4	4139
6-24	3866	455	4	4325
0-24	3952	467	4	4423
7-19	3245	384	2	3631
6-22	3794	431	2	4227
6-24	3979	444	2	4425
0-24	4084	459	2	4545
20/09/2017			VIIII VIIII VIIII VIII VIII VIII VIII	
7-19	3145	364	10	3519
6-22	3711	398	10	4119
6-24	3902	414	10	4326
0-24	4035	433	10	4478
Average				
7-19	3023	323	4	3350
6-22	3515	355	4	3874
6-24	3688	367	4	4059



Channel 2 - Westbound Vehicle Class Week 1

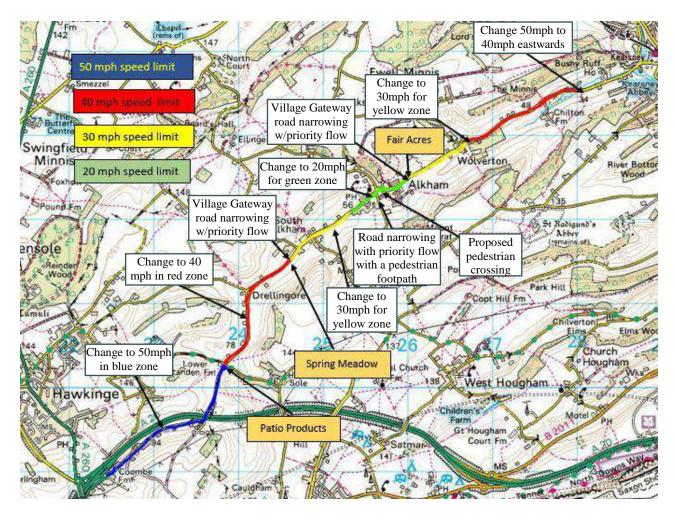
Classes	Car/LGV/	OGV1 / Bus	OGV2	TOTAL
Day / Time	Caravan - 1	- 2,3,5,6,7,12	- 4,8,9,10,11,13	- 1-13
14/09/2017				
7-19	3864	576	6	4446
6-22	4429	652	7	5088
6-24	4503	659	7	5169
0-24	4667	684	7	5358
15/09/2017				
7-19	3849	515	8	4372
6-22	4452	572	9	5033
6-24	4580	578	9	5165
0-24	4725	602	9	5336
16/09/2017				
7-19	3105	254	3	3362
6-22	3510	282	4	3796
6-24	3617	289	4	3910
0-24	3749	301	4	4054
17/09/2017				
7-19	2525	182	8	2715
6-22	2863	198	8	3069
6-24	2927	206	8	3141
0-24	3024	220	8	3252
18/09/2017				
7-19	3688	580	7	4275
6-22	4234	645	7	4886
6-24	4291	651	7	4949
0-24	4444	668	7	5119
19/09/2017				
7-19	3844	526	6	4376
6-22	4412	582	6	5000
6-24	4547	594	6	5147
0-24	4697	616	6	5319
20/09/2017				
7-19	3767	508	4	4279
6-22	4313	570	6	4889
6-24	4417	579	6	5002
0-24	4574	606	6	5186
Average				
7-19	3520	449	6	3975

Average				
7-19	3520	449	6	3975
6-22	4030	500	7	4537
6-24	4126	508	7	4640
0-24	4269	528	7	4803

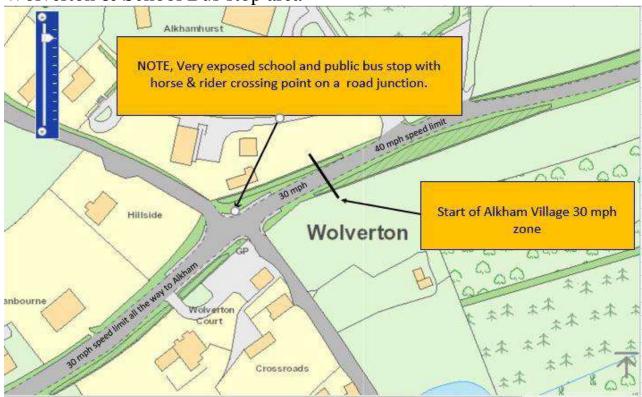


Appendix 4: The Proposed Traffic Calming Measures

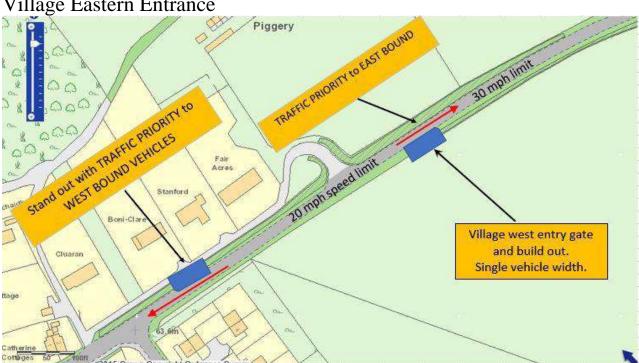
Map with overview of Proposed Traffic Calming Measures



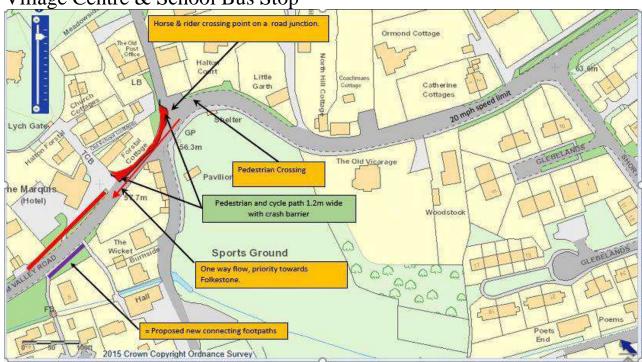
Wolverton & School Bus stop area



Village Eastern Entrance



Village Centre & School Bus Stop



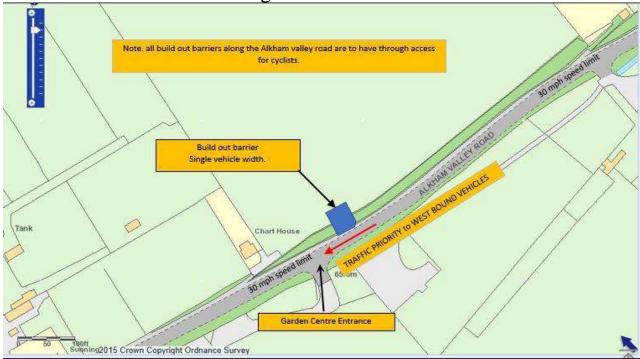




Western End, Valley Cottages



Garden Centre Traffic Calming





Appendix 5: Hazard Risk Assessment

Introduction to Risk Ratings.

These risk assessments are a study of an activity (crossing a road, speeding vehicles) within an area that has the potential to cause people, and property, harm. By assessing the hazards and risks associated to the activity, controls can be put in place to prevent harm from occurring.

- HSE guidance warns against over complicating risk assessments. The objective of the risk
 assessment is to identify whether further safeguards are required to reduce the risk of harm to a
 tolerable level.
- These risk assessments have been compiled in accordance to the guidelines set out by the HSE, and the CIEH.
- Having identified the hazards, it was then decided how likely harm, or damage, would occur; ie the
 level of risk and what to do about it. The risks where then rated in order of acceptance.

Hazard Risk Rating:

Unacceptably High "Immediate action required."

- Not acceptable
- Fatality possible to one or more individuals however infrequently.
- Major injury to a few individuals occurring infrequently.
- Likelihood of long term muscular-skeletal problems affecting numbers of individuals.

High "Requires attention as soon as possible."

- Generally, in most circumstances not acceptable.
- Major injury to one or more individuals occurring more frequently.
- Likelihood of long term muscular-skeletal problems affecting some individuals.

"Not a priority. May need attention if not as low as reasonably practicable."

- Generally in most circumstances acceptable.
- Minor injury occurring infrequently to some individuals

Low

Medium

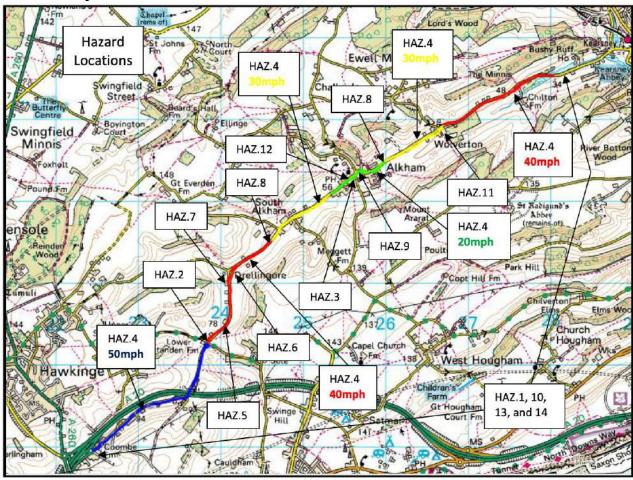
"As low as reasonably practicable. No action required."

- Acceptable
- Minor injury rarely occurring to some individuals.
- No injury occurring.

Map and notes regarding 14 Hazards that have been identified.

Note Regarding the 14 Hazard assessments and detailed review that follows: All potential hazard sites, and those who may be injured, have been identified by the Alkham Valley Traffic Action Group (an advisory sub group of Alkham Parish Council), supported by local residents both with direct input and via the community input being used to create a Parish Plan

Here is a map of Hazard Locations:



Hazard 1: No safe footpath along most of the Alkham Valley Road.

Summary.

- A footpath only exists alongside the Alkham Valley Road from East of Pimlico to the Marquis, from Slip Lane to North Hill, from Hogbrook Hill Lane to Short Lane and a small area in the vicinity of the bus stops around the Ewell Minnis junction at Wolverton Hill.
- The road has no kerb and in many places, blind bends and overgrown banking along the tarmac edge means that there is no escape route for pedestrians and cyclists from two large vehicles passing and speeding oncoming traffic.
- Poor surfaces with apparent low braking friction resistance mean that braking distances are beyond the end of visible sight lines for speeding vehicles, especially in wet or icy conditions.
 Posing potential skid and collision risk to braking motorists.
- Surveys indicate that the majority of vehicle drivers exceed speed limits when driving along the
 Alkham Valley road, at present. Traffic on the Alkham Valley Road has increased over the years
 now reaching such levels that an acceptable quality of life in the village, and the safety of all
 residents, pedestrians, children, cyclists, and horse riders is at risk.

Who might be harmed	Potential Injuries	Risk category
Residents, pedestrians, walkers, hikers (D of E award	Serious, fatal	Unacceptably High
expeditions)		
Persons with disabilities. Blind pedestrians.	Serious, fatal	Unacceptably High
Wheelchair and powered assistance vehicle users.		
School children	Serious, fatal	Unacceptably High
Young children and pram/buggy users.	Serious, fatal	Unacceptably High
Horse riders.	Serious, fatal	Unacceptably High
Cyclists	Serious, fatal	Unacceptably High
Motorists	Minor to serious	High
Motorbike Riders	Minor to serious	High
Commercial traffic, HGV's	Minor	Low

Actions

- 1. Review all existing footpaths to confirm that clear safe access currently exists for all classes of user.
- 2. Install crossing points between existing footpaths with possible centre of the road island refuges.
- 3. Reduce speed limits to more suit the road layout. Eg. Restricted line of sight, blind bends, concealed entrances, lack of safe crossing points, limited footpaths, little or no street lighting at night. etc.
- 4. Reduce speed limits to more suit the road condition. Eg. Often a flood path with debris left on road. Over hanging trees cause dappled light- poor visibility, leaves and branches debris on road, mud on road rural farm use.
- 5. Install traffic calming measures to ensure compliance to new speed limit reduction.
- 6. Recommend major capital construction investment to construct a segregated footpath and cycle Lane along the entire length of the Alkham Valley Road to KCC take into consideration the evidence for conservation of the AONB discussed below.

Evidence

- 1. Alkham Speedwatch Group observations.
 - An average 31% of all vehicles recorded during Speedwatch sessions exceeded the designated speed limit of 30mph.

- 2. Alkham Resident Traffic Calming Survey (Jan-2018) Public Opinion Results.
 - Some 91% of all respondents were in agreement with the proposed weight restriction on HGV through traffic on the Alkham Valley Road.
 - 86% agreed with the proposal for a pedestrian crossing to be put in place near the Village Green play area.
 - 83% wanted the 50mph speed limit east of Wolverton to be reduced to 40mph.
 - 79% were in agreement with the introduction of Gateways to the village and associated road narrowing and priority flow.
 - 79% were also in agreement that the 30mph speed limit be extended to the Western Gateway.
 - 77% were in favour of narrowing the road by the Marquis, introducing priority flow there and having a pedestrian footpath.
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
 - 73% agreed with the speed reductions proposing a 40mph speed limit from the Western Village Gateway westward to the Hawkinge/Capel cross roads, and the 50mph limit from there to the west end of the Alkham Valley Road.
 - 72% backed the introduction for a 30mph speed limit from Wolverton Hill to the Eastern Village Gateway.
 - 70% of respondents were in agreement with the introduction of Build-Outs to enforce adherence to the speed limits.
- 3. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - From available traffic survey records at various points on the Alkham Valley Road, average one-way flows have steadily increased over the past 13 years from some 4000 vehicles per 24 hours in 2004 to some 6000 in 2017.
 - The distribution of cars to HGV's using the Alkham Valley Road is in the order of 90% cars to 10% HGV's.
 - Speed Results from surveys each end of the village.

<u>Statistic</u>	Western Site 30 mph zone	Eastern Site 30 mph zone
East Bound Traffic	71% of vehicles exceeding 30mph	92% of vehicles exceeding 30mph
85th Percentile	38.4 mph	43.4 mph
West Bound Traffic	87% of vehicles exceeding 30mph	68% of vehicles exceeding 30mph
85th Percentile	40.4 mph	39.7 mph

- 4. Alkham Valley known road traffic accidents.
 - Please refer to Appendix 7 of this document: Accident Review 2006–2015
- 5. Alkham Valley Parish plan open day comments from residents.
 - "Cycle track and footpath combined parallel with road from Hawkinge to Temple Ewell."
 - "Safety of pedestrians, of walkers, and cyclists along whole length of Alkham V Road. A proper footpath/cycle lane is urgently needed. This road features on a number of marked walks that tourists like to use."
 - "Too dangerous for bikes and pedestrians on Alkham Valley Road, Need proper cycle/foot/pram path with trimmed vegetation."
- 6. KCC recommended horse-riding circuits through the Alkham Valley AONB.
 - KCC map and guide attached, with map annotated with all Alkham Valley Road Crossing points.
- 7. Environment.
 - The Alkham Valley is entirely within a designated area of Natural Beauty (ref Kent Downs management Plan 2014 2019. See sustainable development policies 1-12.

Pictures



Alkham Valley Road at the Marquis in Alkham village showing reduced road width, hump in road reducing visibility and village divided by no pavement.



Grass verge with no footpath, backed up on far side. Worn road surface at bridleway crossing point.



Horse riding was, and still is, very popular along the Alkham Valley. However, these days riders tend not to cross, or even use, the Alkham Valley Road due to the speed and volume of traffic. Safe paths and crossing points could be the start of a revival.

Hazard 2 and 3: Dangerous Cross Roads.

Summary.

- (2) Standen Lane / Alkham Valley Road / Hockley Sole Lane. This cross road is extremely hazardous to use due to eastbound traffic trying to overtake before AVR narrows, and westbound traffic trying to overtake as the road widens. Also, large HGV's and articulated lorries use this point in the road to carry out U-turns after becoming aware of the low bridge at Temple Ewell. This occurs more frequently at night. Furthermore, it is where National Cycle Route 17 crosses the Alkham Valley Road. A family with visual impairment living adjacent to the cross roads have a major issue in getting to the bus stop due to the traffic speed.
- (3) Slip Lane / Alkham Valley Road / Hogbrook Hill. Line of sight is shorter than the safe braking distance at 30 mph in the dry. This road junction, in severe weather, is a flood path for water down the valley, and is often covered in debris, increasing the hazard risk. Also, the lack of visibility (at 30 mph) means that there is no safe crossing point to the village hall and park / play area.

Who might be harmed	Potential Injuries	Risk category
Pedestrians	Major / Fatal	Unacceptably High
Disabled and visually impaired	Major / Fatal	Unacceptably High
Horse riders	Major / Fatal	Unacceptably High
Cyclists	Major / Fatal	Unacceptably High
Motorists	Minor to Major	High

Actions

- 1. Reduce speed limits 40 mph and 20 mph respectively.
- 2. Restrict AVR use to 7.5 tonne except for access.
- 3. Create a safe crossing point to village hall and play area.
- 4. Create a safe footpath to the west of Slip Lane
- 5. Manage flood water and keep culverts clear.

- 1. Source: Department of Transport, 1996.
 - 95% of pedestrians survive when hit by a vehicle travelling at 20 mph.
 - 50% of pedestrians survive when hit at 30 mph.
 - Only 5% of pedestrians survive when hit at 40 mph.
- 2. RoSPA's policy position on 20mph speed limits.
 - 20mph zones significantly decrease the risk of being injured in a collision.
 - Consultation and engagement with local communities and other stakeholders is of vital importance, to
 make sure that safer roads are prioritised where needed and that local communities have input into the
 schemes' development.

- 3. Alkham Speedwatch Group observations. Results from Public Opinion Questionnaire regarding speed limit changes.
 - 73% agreed with the speed reductions proposing a 40mph speed limit from the Western Gateway westwards to the Hawkinge/Capel cross roads,
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
- 4. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - 70% of the traffic entering the village is travelling well above the designated speed limit of 30 mph.
- 5. Alkham Valley known road traffic accidents.
 - Please refer to Appendix 7 of this document: Accident Review 2006–2015.
- Alkham Valley Parish plan open day comments from residents.
 - "Speed. Exiting Hogbrook Hill Lane to cross over to Slip Lane desperate about safety on daily car journey to work."



Alkham Valley Road across from Slip Lane facing South.

Hazard 4, 5, 6 and 7: Speeding Vehicles.

Summary.

- (4) General community perception that traffic speeds through Alkham Village, along the Alkham Valley Road, and feeder roads, are too high and often in excess of the current speed limits.
- (5) Speeding vehicles in excess of 50 mph approaching this bend. Speeding traffic noise nuisance in Standen Cottages.
- (6) Dangerous bend at Drellingore with numerous past fatalities and recent lesser damage accidents. This is a fast bend, where drivers often exceed the speed limit, misjudging the road conditions. There is deterioration of the non-slip road surface, with suspected friction values lower than recommended standards. This makes it extremely difficult to exit Stombers Lane due to the speeding traffic.
- (7) Drellingore Terrace, residents cannot enter or exit safely due to excessive traffic speed on AVR.

Who might be harmed	Potential Injuries	Risk category
Pedestrians. Local residents.	Major / Fatal	Unacceptably High
Pedestrians. Visitors/Tourists/Hikers/Walkers	Major / Fatal	Unacceptably High
Disabled and visually impaired	Major / Fatal	Unacceptably High
Horse riders	Major / Fatal	Unacceptably High
Cyclists	Major / Fatal	Unacceptably High
Motorists	Major / Fatal	Unacceptably High

Actions

- 1. Reduce speed limits to more suit the road layout. Eg. Restricted line of sight, blind bends, concealed entrances, lack of safe crossing points, limited footpaths, little or no street lighting at night. etc.
- 2. Reduce speed limits to more suit the road condition. Eg. Often a flood path with debris left on road. Over hanging trees cause dappled light- poor visibility, leaves and branches debris on road, mud on road rural farm use.
- 3. Reduce the speed limit in the village centre to 20mph (frequently used crossing point / village green and village hall. Children's play area)
- 4. Install traffic calming measures.
- 5. Consider the use of fixed speed cameras. (average speed camera).
- 6. Enforce the guidance given by the Highway Code. Rule 126.
 - "Drive at a speed that will allow you to stop well within the distance you can see to be clear."
 - This may not be a legal requirement, but under The Road Traffic Act may be used to establish Liability.

Evidence

- Alkham Speedwatch Group observations. Results from Public Opinion Questionnaire regarding speed limit changes.
 - 83% wanted the 50mph speed limit east of Wolverton to be reduced to 40mph.
 - 79% were also in agreement that the 30mph speed limit be extended to the Western Gateway.
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
 - 73% agreed with the speed reductions proposing a 40mph speed limit from the Western Gateway westwards to the Hawkinge/Capel cross roads, and the 50mph limit from there to the west end of the Alkham Valley Road.
 - 72% backed the introduction for a 30mph speed limit from Wolverton Hill to the Eastern Village Gateway.

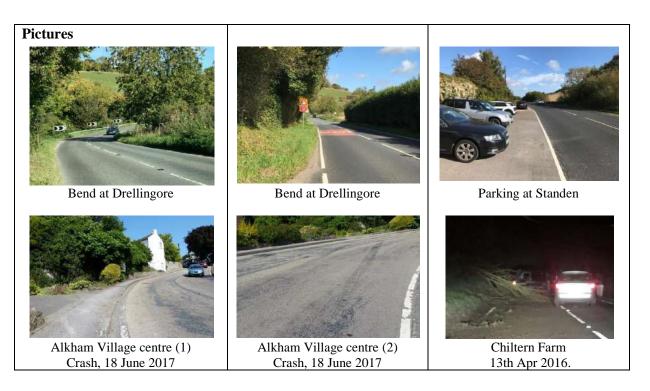
2. Alkham Valley Traffic Monitor, speed and traffic volume results.

Statistic	Western Site 30 mph zone	Eastern Site 30 mph zone
East Bound Traffic	71% of vehicles exceeding 30mph	92% of vehicles exceeding 30mph
85th Percentile	38.4 mph	43.4 mph
West Bound Traffic	87% of vehicles exceeding 30mph	68% of vehicles exceeding 30mph
85th Percentile	40.4 mph	39.7 mph

- 3. Alkham Valley known road traffic accidents. (source KentOnline)
 - 24th Jan 08. An 18 year old driving a Renault Clio from Folkestone, left the road, hit a fence and careered into a tree was tragically killed.
 - 30th Apr 08. Motorcyclist collision with car. Fatal crash.
 - 4th Dec 08. Man killed when his car struck a tree in the early hours approaching Bushy Ruff.
 - 1st Nov 13. Crash closes road at Chiltern Farm. Man airlifted to hospital after Peugeot and BMW collide.
 - 11th Oct 13. Woman injured in crash with minibus at Temple Ewell. Fire crews removed the roof from her Vauxhall Corsa to reach her.
 - 22nd Oct 14. Centre of village crash involving a white van. No injuries were reported.
 - 12th May 16. AVR blocked. Car rolls onto its side at the junction with Slip Lane. Driver received minor injuries.
 - 13th Apr 16. Driver smashed into fallen tree, at night. Spun across both lanes at Chiltern Farm. Suffered shoulder pain.
 - 18th Jun 17. Speeding BMW 320i crashes into wall in village centre. Driver minor, three passengers serious. Air ambulance required.
 - 23rd Dec 17. Motorcyclist airlifted to hospital with multiple injuries after collision with van.
 - 7th Feb 18. Woman cut free from car after a four-vehicle crash, involving two cars and two vans.
- 4. Kent County Council Road Casualty Reduction Strategy 2014 (update September 2017) Inappropriate and excess speed is a significant factor in road crashes. The outcome may result in death, serious injury and damage, as well as being a serious "quality of life" issue.
- 5. Alkham Valley Parish plan open day comments from residents.
 - Under the heading of Traffic and Road Safety, a total of 132 comments were made.
 - Of these some 50 comments related directly to speed and speeding traffic.

Highway Code Stopping Distances





Hazard 8: Village Boundaries.

Summary.

• It is felt by many villagers that traffic speed along AVR is too high, but particularly at the village boundaries. At these points traffic leaves the "open road" and enters a relatively built-up and more populated section of the road. It is believed that drivers should adjust their speed accordingly, but this rarely happens. Very few drivers have slowed down sufficiently when entering the existing 30mph boundaries, and most are speeding up in anticipation well before they have left the existing 30mph zone.

Who might be harmed	Potential Injuries	Risk category
Pedestrians. Local residents.	Major / Fatal	Unacceptably High
Pedestrians. Visitors/Tourists/Hikers/Walkers	Major / Fatal	Unacceptably High
Disabled and visually impaired	Major / Fatal	Unacceptably High
Horse riders	Major / Fatal	Unacceptably High
Cyclists	Major / Fatal	Unacceptably High
Motorists	Minor to Major	High

Actions

- 1. Create a 20mph zone for the village centre, thus reducing the speed limit from 30mph.
- 2. To the West of the village, but still within the boundaries, introduce a 30mph speed limit reduction from 40mph.
- 3. Introduce Village Gateways at both ends of the village, with priority flow.
- 4. Install average speed cameras at each end of the village.

- 1. Alkham Speedwatch Group observations.
 - During the year 2017, the Alkham Speedwatch Group, as part of the Kent Community Speedwatch scheme, has been active recording vehicles speeding in the village at different locations within the existing 30mph zone.
 - The direction of traffic and the times of the sessions varied but records show a consistent number of vehicles exceeding the National Recommended Speed Threshold, which in a 30mph zone is that traffic travelling at 35mph or more.
 - Despite the high visibility of the Speedwatch operators and the Visual Speed Device itself, drivers still exceed the speed limit.
 - The percentage of vehicles recorded exceeding this limit, and hence reported to the police, varied from a minimum of 3% to a maximum of 14%, with an average of 7% of all vehicles exceeding 34mph.
 - An average 31% of all vehicles recorded during Speedwatch sessions exceeded the designated speed limit of 30mph.
 - The highest speeds within the 30mph zone where recorded as between 71 and 80mph.

2. Alkham Valley Traffic Monitor, speed results. Surveys taken at the traffic activated 30mph signs, some 200 meters within the 30mph zone.

<u>Statistic</u>	Western Site 30 mph zone	Eastern Site 30 mph zone
East Bound Traffic	71% of vehicles exceeding 30mph	92% of vehicles exceeding 30mph
85th Percentile	38.4 mph	43.4 mph
West Bound Traffic	87% of vehicles exceeding 30mph	68% of vehicles exceeding 30mph
85th Percentile	40.4 mph	39.7 mph

- 3. Alkham Residents Traffic Calming Survey (Jan-2018) Public opinion.
 - 79% were in agreement with the introduction of Gateways to the village and associated road narrowing and priority flow.
 - 79% were also in agreement that the 30mph speed limit be extended to the Western Gateway.
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
 - 45% of respondents made additional comments. Of these,15% considered Average Speed Cameras should be used to control speeds
- 4. Alkham Valley Parish plan open day comments from residents.
 - Under the heading of Traffic and Road Safety, a total of 132 comments were made.
 - Of these some 50 comments related directly to speed and speeding traffic.
 - In addition, 22 of these 50 comments mentioned the use of speed cameras, and average speed cameras.

Pictures



Examples of a Village Gateway with priority flow.



Priority flow showing the start of a 20mph zone..

Hazard 9: Dangerous road crossing point.

Summary.

• The Alkham Valley Road in the village centre is a crossing point for many residents, and visitors to the village. Locals cross here for the village green and play area, village hall, the continuation of opposite footpaths, bus stops, post box, visiting neighbours, or simply just having a stroll. There are many visitors to the village who use the parking area for the village green. Walkers and hikers cross here to access the various footpaths radiating out from the village. Visitors attending weddings and funerals cross here to reach the church. Visitors to properties with restricted parking along AVR cross here to visit family and friends.

Who might be harmed	Potential Injuries	Risk category
Pedestrians. Local residents.	Major / Fatal	Unacceptably High
Pedestrians. Visitors/Tourists/Hikers/Walkers	Major / Fatal	Unacceptably High
Disabled and visually impaired	Major / Fatal	Unacceptably High
Horse riders	Minor	Low
Cyclists	Minor	Low
Motorists	Minor to Major	High

Actions

- 1. Introduce a 20mph speed limit through the village centre.
- 2. Introduce a pedestrian crossing in the vicinity of the village green children's play area.

- 1. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - Of the traffic entering the village, only 30% were travelling at 30 mph or below.
- 2. Alkham Resident Traffic Calming Survey (Jan-2018).
 - 76% of respondents supported a proposed reduction of the village speed limit to 20mph.
 - 84% agreed with the suggestion of a proposed pedestrian crossing in the vicinity of the Village Green.
 - Residents were asked to prioritise their answers rating proposals they felt were most important. The top tier works with the highest priority were:
 - o 1st. The introduction of a 20mph speed limit through the village.
 - o 2nd. The introduction of a pedestrian crossing in the vicinity of the village green.
- 3. Alkham Valley Parish plan open day comments from residents.
 - A pedestrian crossing near meadow or Marquis: "Traffic calming and safety should be a key area of improvement."
 - "Safe pedestrian access to postbox..."





Bus stop located on the edge of the Village Green.

Hazard 10: HGV's, Tipper trucks, and other large multi-axle vehicles.

Summary.

- General community perception is that low height HGV's, tipper trucks, and other multi-axle commercial vehicles are using the valley as a "rat-run" for commercial gain to reach the M20, rather than using the M2/A20 links from Whitfield. Thus, increasing the risk to other users along the narrower sections of the Alkham Valley Road, through the village centre, and through the connecting valley lanes (Ewell Minnis, Greenwich Lane and Newcastle Lane) to name but a few.
 - The road surface is being broken up, causing potholes, due to the excessive weight of these vehicles on roads that were never designed to carry them.
 - These large vehicles, many going over the speed limit, are creating possible structural damage, due to vibrations, to the older properties (some listed) along the AVR.
 - Environmentally these large diesel vehicles are adding to air pollution and are creating significant noise pollution especially when the tippers are empty.
 - At the Dover end of Alkham Valley Road is a Low rail bridge. Warning signs are situated along the road but are regularly ignored by the drivers of large vehicle. This results in holding up other road users while they attempt to turn around, or on some occasions, the bridge being struck, thus causing road closures and serious disruption to the rail network.

Who might be harmed	Potential Injuries	Risk category
Motorist	Minor (Vehicle damage	Medium
	on narrow stretches)	
Motorbike rider	Minor	Low
Cyclist	Minor to Major	High
Pedestrian	Minor to Fatal	Unacceptably High
Horse rider	Minor to Fatal	Unacceptably High
Home owner	Stress. Damage to	High
	property.	
Environment	Pollution. Air quality,	High
	noise.	

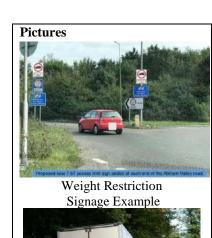
Actions

- 1. Restrict heavy vehicles using the Alkham Valley Road to 7.5 tonne except for access.
 - KCC. "There are two types of restrictions that can be implemented to legally limit HGV traffic along a road".
 - Environmental Limits. 7.5 tonne weight restrictions for roads that are deemed unsuitable. They are useful in preventing HGVs from using minor roads as inappropriate short-cuts between main routes. These restrictions often have exemptions of "except for access" for vehicles delivering within the restriction.
 - Structural Weight/Height Limits. Implemented on routes that have a weak structure or low bridge. These restrictions generally cover short sections, and do not have exceptions.

- 2. Instruct Sat Nav companies to include Alkham Valley Road and the surrounding lanes as unsuitable for large vehicles and HGV's.
 - KCC's Freight Action Plan for Kent. Are "Developing and adopting the Freight Journey Planner, a
 web-based route planning tool that aims to help HGV drivers and Transport Managers to plan their
 routes within Kent".
 - "The information on the Freight Journey Planner feeds into HGV specific sat-navs to limit the routing of HGVs from restricted and unsuitable routes
 - "KCC works with other mapping and satellite navigation companies to update mapping systems", "Problems can arise when drivers do not update devices", or" devices used by HGV's were designed for the use of cars and so do not consider restrictions".
- 3. Especially in adjoining lanes, cut back vegetation to allow clear view of existing signage (no through road). Erect additional signs (esp. Private property No through road).
- 4. Enforce the guidance given by the Highway Code. Rule 126.
 - "Drive at a speed that will allow you to stop well within the distance you can see to be clear."
 - "Large vehicles and motorcycles need a greater distance to stop".

Due to the nature of Alkham Valley Road and the Lanes off it (restricted line of sight, blind bends, concealed entrances, lack of safe crossing points, limited footpaths) this is impossible to achieve, so restrictions need to be put in place.

- 1. Alkham Speedwatch Group observations. Public opinion survey.
 - Some 91% of all respondents were in agreement with the proposed weight restriction on HGV through traffic on the Alkham Valley Road
- 2. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - The distribution of cars to HGV's using the Alkham Valley Road is in the order of 90% cars to 10% HGV's
 - Despite this figure the disturbance caused by loaded and unloaded HGV's is severe with many residents complaining of the noise and vibrations these vehicles generate.
- 3. Alkham Valley Parish plan open day comments from residents.
 - "Heavy lorry restriction through valley. Inform satnav to restrict lorries through valley."
 - "Traffic calming through the village to save our old houses and damage to cottages. There are huge vehicles going through this valley which are higher than my old cottage which rattles as they pass and cause real damage."
- 4. Highway Code stopping distances, Rule 126.
- 5. KCC's Freight Action Plan for Kent "When road freight vehicles travel on the local road network they can have an adverse impact on local communities through property damage, vibrations/noise and air pollution".
 - "Many towns and villages in Kent were not designed to take such large freight vehicles".
- 6. Bridge collisions (source KentOnline)
 - 10-Apr-07, 16-Jun-15, 05-Aug-15, 05-Jan-16, 09-Mar-16, 08-Nov-16, 17-Nov-16,









Bridge Collision Kearsney.

Bridge Collision Kearsney.

Bridge Collision Kearsney.

Hazard 11: Unsafe school bus waiting area.

Summary.

• From day to day there are between five and ten children using the school bus stop at the bottom of Wolverton Hill. The waiting area is small, narrow, and overgrown. It is located at the road junction of Wolverton Hill and Alkham Valley Road, which at this point has a speed limit of 50mph. Visibility along the AVR, in both directions, is reduced due to bends in the road, which leaves the stopped bus in a venerable position as there is no lay-bye area. School children are put in danger crossing the road and at the school bus waiting point at the Ewell Minnis bus stop where there are no crossing points, worn skid resistant road surfaces, high density commuter traffic around school bus times, and in the morning the added hazard of a low sun for east bound drivers on the bends.

Who might be harmed	Potential Injuries	Risk category	
School children	Major / Fatal	Unacceptably High	
Bus driver	Minor to Major	High	
Other road users	Minor to Major	High	

Actions

- 1. Reduce the speed limit for the short stretch of road from 50mph to 40mph from Wolverton to the Eastern Parish boundary.
- 2. Reduce the speed limit from Wolverton Hill to Alkham village from 40mph to 30 mph.
- 3. Clear vegetation from area.
- 4. Possibly erect children crossing warning signs

- 1. Alkham Speedwatch Group observations. Alkham Resident Traffic Calming Survey (Jan-2018) Public opinion.
 - 83% wanted the 50mph speed limit east of Wolverton to be reduced to 40mph.
 - 72% backed introduction of a 30mph speed limit from Wolverton Hill to the Eastern Village Gateway.
- 2. Alkham Valley Traffic Monitor, speed and traffic volume results.
- 3. Alkham Valley known road traffic accidents.
 - Please refer to Appendix 7 of this document: Accident Review 2006–2015.
- 4. Alkham Valley Parish plan open day comments from residents.
 - "Ewell Minnis school bus stop. Major safety hazard. Footpath to be cleared on Wolverton Corner to restore width crashbarrier 30 mile per hour speed limit and children crossing signs fitted."



Hazard 12: No continuity of footpaths in village centre.

Summary.

• The safety of pedestrians passing between Slip Lane and the Marquis has been a long-standing problem. The narrow two-way road at this point exposes pedestrians to the danger of fast moving traffic from the Folkestone direction when trying to negotiate this section where there is no pedestrian footpath to connect with the existing paths. With a 20mph speed limit at this point sight lines are within acceptable limits for the required stopping distances meaning traffic approaching from the Folkestone direction would be able to see and stop if necessary before reaching the proposed pedestrian crossing. It also allows a priority flow arrangement to be considered here where the road narrows and a pedestrian footpath can be accommodated, as again, stopping distances are within the required limits. Priority at this point would be given to traffic heading towards Folkestone. It is interesting to note that in 1995 KCC themselves put forward the idea of a pedestrian footpath at this point even though this was within a 30mph zone where minimum stopping sight line requirements would not have been met..

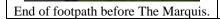
Who might be harmed	Potential Injuries	Risk category
Pedestrians. Residents, hikers (Church goers and	Serious, fatal	Unacceptably High
visitors to The Marquis)		
Persons with disabilities. Blind pedestrians.	Serious, fatal	Unacceptably High
Wheelchair and powered assistance vehicle users.		
Children	Serious, fatal	Unacceptably High
Pram/buggy users.	Serious, fatal	Unacceptably High
Motorists	Minor to Major	High

Actions

- Introduce a road narrowing, with priority flow, by The Marquis with a footpath alongside Forstal Cottage
 wall
- 2. Introduce a 20mph speed limit through the village centre.
- 3. Introduce a pedestrian crossing in the vicinity of the village green children's play area.

- 1. Alkham Resident Traffic Calming Survey (Jann-2018) Public opinion.
 - 77% were in favour of narrowing the road by the Marquis, introducing priority flow there and having a pedestrian footpath.
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
 - 86% agreed with the proposal for a pedestrian crossing to be put in place near the Village Green play area.
- 2. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - From available traffic survey records at various points on the Alkham Valley Road, average one-way flows have steadily increased over the past 13 years from some 4,000 vehicles per 24 hours in 2004 to some 6,000 in 2017.
- 3. Alkham Valley Parish plan open day comments from residents. A few examples.
 - "Walking dangerous in village centre. Pavement needed past Marquis."
 - "No pavements outside Marquis. One-way traffic and space for pavement."
 - "Traffic near Marquis not safe for pedestrians."

Pictures





Narrow road with no footpath.



Location of proposed footpath.

Hazard 13: Concealed entrance and exits.

Summary.

• Along the length of Alkham Valley Road there are numerous property entrances, adjoining roads, lanes, and bridleways that are concealed or obscured from traffic using the main road. The line of sight between those pulling out, and vehicles using the main road, is often much less than safe stopping distances. Many residents have real concerns about pulling onto AVR whether from their own property or out of an adjoining road. With many stating that on occasions there has been a near miss too close for comfort. Obviously, the faster the traffic, the longer the stopping distance; therefore, it is felt that the only way to improve safety is to slow the traffic down.

Who might be harmed	Potential Injuries	Risk category
Motorist	Minor to Fatal	Unacceptably High
Motorbike rider	Minor to Fatal	Unacceptably High
Cyclist	Minor	Low
Pedestrian	None	Low
Horse rider	Minor to Fatal	Unacceptably High

Actions

- 1. Reduce speed limits to more suit the road layout e.g. restricted line of sight, blind bends, and concealed entrances
- 2. Where most residential properties occur, in the village centre, reduce the speed limit to 20mph and introduce calming measures.
- 3. Reduce all speed limits where safe stopping distances cannot be achieved.
- 4. Inform road users with signage. Beware concealed entrance.
- 5. Enforce the guidance given by the Highway Code. Rule 126. "Drive at a speed that will allow you to stop well within the distance you can see to be clear."

- Alkham Speedwatch Group observations. Public opinion results for speed limit reductions (Residents Survey Jan-2018)
 - 76% agreed to the proposal for a 20mph speed limit to be introduced through the village centre.
 - 83% wanted the 50mph speed limit east of Wolverton to be reduced to 40mph.
 - 79% were also in agreement that the 30mph speed limit be extended to the Western Gateway.
 - 73% agreed with the speed reductions proposing a 40mph speed limit from the Western Village Gateway westward to the Hawkinge/Capel crossroads, and the 50mph limit from there to the west end of the Alkham Valley Road.
 - 72% backed the introduction for a 30mph speed limit from Wolverton Hill to the Eastern Village Gateway.
- 2. Alkham Valley Traffic Monitor, speed results from the September survey .
 - In both cases, at the Western site and the Eastern site, some 70% of the traffic entering the village were travelling well above the designated speed limit of 30 mph with only 30% travelling at 30 mph or below and 15% of all traffic exceeding 40 mph. Some 90% of traffic leaving the village were also exceeding 30 mph with only 10% being below 30 mph and 15% exceeding 43mph.

- 3. Alkham Valley known road traffic accidents.
 - Please refer to Appendix 7 of this document: Accident Review 2006–2015.
 - Human error is a factor in 95% of road crashes. Based on the Department for Transport's (DfT) figures the cost to the community of a fatal crash is around £1.9 million, a serious crash costs in the region of £216,000 and a slight crash costs £23,000. For more information about crash and casualty figures please visit our website at http://www.kent.gov.uk/roads-and-travel/road-safety/crash-and-casualty-data
 - o **Fatal** a crash resulting in a death
 - Serious detention in hospital, includes paralysis, fractures and severe lacerations
 - O Slight includes whiplash, sprains and minor lacerations
- 4. Alkham Valley Parish plan open day comments from residents. Examples.
 - "Dangerous blind junction onto main road from Slip Lane. An accident waiting to happen."
 - "Traffic passing Wolverton Hill to Minnis. More slow sign unsafe to pull out either way."
 - "Lane adjacent Little Garth leading to North Hill. Sign please 'beware concealed entrance'."
 - "Speeding. Drellingore Terrace. Reduce speed to at least 30mph, Residents can't get in or out safely."





Lane leading to North Hill on right



Marquis Car Park Entrance on blind bend



Restricted view from Short Lane



Hogbrook Hill and Slip Lane both obscured.



Concealed Entrance on right access to 4 properties



Meggett Lane on left with oncoming car.

Hazard 14: Potholes

Summary.

• A pothole is a structural failure in a road's surface, usually asphalt, due to water in the underlying soil structure and traffic (especial HGV's and other heavy vehicles) passing over the affected area. Water first weakens the underlying soil; traffic then fatigues and breaks the poorly supported asphalt surface in the affected area.

Who might be harmed	Potential Injuries	Risk category
Motorist	Minor (vehicle	Low
	damage)	
Motorbike rider	Minor to Major	High
Cyclist	Minor to Fatal	Unacceptably High
Pedestrian	None	Low
Horse rider	None	Low

Actions

- 1. Already in place. KCC Report a problem on-line. Potholes will be repaired within 28 days.
 - 1.a. Parish Council to encourage all residents to report road damage when first noted, and again if the damage increases.
 - 1.b. Publish information on Parish website and newsletter every autumn as a reminder of the reporting process for potholes within the parish.
 - 1.c. Copy all reports, made to KCC, to the Parish Clerk for monitoring by the Parish Council.
- 2. Restrict heavy vehicles using the Alkham Valley Road to 7.5 tonne except for access.
- 3. Create a dedicated cycle lane.

Evidence

- 1. Alkham Speedwatch Group observations.
 - From available traffic survey records at various points on the Alkham Valley Road, average one-way flows have steadily increased over the past 13 years from some 4,000 vehicles per 24 hours in 2004 to some 6,000 in 2017
 - The distribution of cars to HGV's using the Alkham Valley Road is in the order of 90% cars to 10% HGV's
- 2. Alkham Valley Traffic Monitor, speed and traffic volume results.
 - a. Class of vehicle: Car/LGV/Caravan.-1. OGV1/Bus-2.3.5.6.7.12. OGV2-4,8,9,10,11,13
- 3. Alkham Valley Parish plan open day comments from residents.
 - Many comments were made regarding potholes and bad road conditions.

Pictures Pothole Example

Appendix 6: Results of Traffic Calming Proposals Questionnaire

Alkham Resident Traffic Calming Survey (Jan-2018)

Introduction:

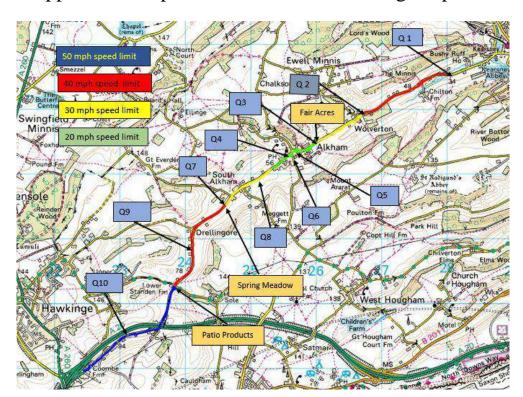
*Survey Return Deadline: 31 JAN 2018

The results from our first questionnaire in the Spring delivered the overwhelming opinion that something needed to be done to calm traffic through the village. Your views and opinions are now being sought on the following proposals aimed to achieve a reduction in traffic speed and volume on the Alkham Valley Road and by doing so improve the quality of life for all residents and provide a safe environment for all users of the road.

All adult members of every household in the Parish are now asked to express their individual views on the proposals by completing this questionnaire by the latest 31st of January 2018 and either posting the completed paper version into the Parish Council's Suggestion Box located outside the Village Hall or by completing the questionnaire on-line version via Alkham.org

Name	Street Address (incl. House/Flat no.)	Post Code
This data is for Allaham	Pariah Caunail was only no narroanal data will be ab	and with a 2nd Book
	Davich Council was anly no navagnal data will be ab	avad with a 7 val Dawl
	Parish Council use only, no personal data will be sh on any questions, be sure to give an optional e-ma	

Appendix - Map to Review Traffic Calming Proposals



Alkham Traffic Calming Measures Questionnaire (Jan-2018)

For each question, please indicate in the appropriate box whether you a) Strongly Agree, b) Agree, c) Neither Agree nor Disagree, d) Disagree, or e) Strongly Disagree

Strongly		Neither Agree		Strongly
Agree	Agree	nor Disagree	Disagree	Disagree
lap Q2. To introdu ne eastern end of t		imit from Wolverton Hill to a	point East <mark>o</mark> f the entrar	nce to 'Fair Acres
Strongly Agree	Agree	Neither Agree	Disagree	Strongly Disagree
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	StronglyDisagree
of the existing 40 m		m this "Eastern Village Gate rn end of Valley Cottages.	way" through the village	
			way" through the village	e centre to the lo Strongly Disagree
of the existing 40 m Strongly Agree	ph sign at the weste	rn end of Valley Cottages. Neither Agree	O Disagree	O Strongly Disagree
Strongly Agree Map Q5. To introdu Strongly Agree Map Q6. To introdu	Agree ce a pedestrian cros Agree ce a road narrowing	Neither Agree nor Disagree sing in the vicinity of the Villa Neither Agree	Disagree age Green children's pla Disagree th alongside Forstal Co	Strongly Disagree ay area. Strongly Disagree

		install a "Western Village Ga with a reduced road width a		
Strongly Agree	Agree	Neither Agree	Disagree	Strongly Disagree
	his "Western Village introduce a 30 mph	Gateway" and the proposed speed limit	20 mph speed limit sig	n at the western en
Strongly		Neither Agree		Strongly
Agree	Agree	nor Disagree	Disagree	Disagree
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
		d 40 mph speed zone by Pat the Alkham Valley Road. Neither Agree	io Products to introduce	Strongly
		nor Disagree Gateways, to enforce adher		Disagree
number of 'Build-ou	its' each with reduce	d road width and priority flow	1.	
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Q12. To introduce a equired for access		n HGV traffic throughout the	length of the Alkham V	alley Road (unless
Strongly	O Agree	Neither Agree	Disagree	Strongly
Agree	○ Agree	nor Disagree	Disagree	Disagree
contribute a commu	unity average of appr	n whole or in part, you, throug roximately £12 a year to their serves, to build up a fund to	costs. Should the Pari	sh Council ring-fen
Strongly	0	Neither Agree	Disagree	Strongly
Agree	Agree	nor Disagree	Disagree	Disagree

Alkham Traffic Calming - Prioritisation

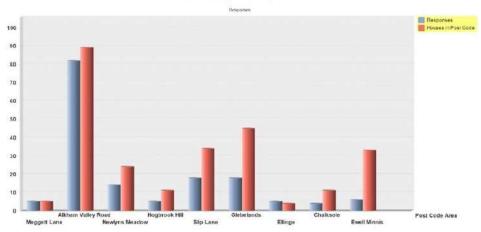
These proposals, if implemented, will be phased over several financial years.

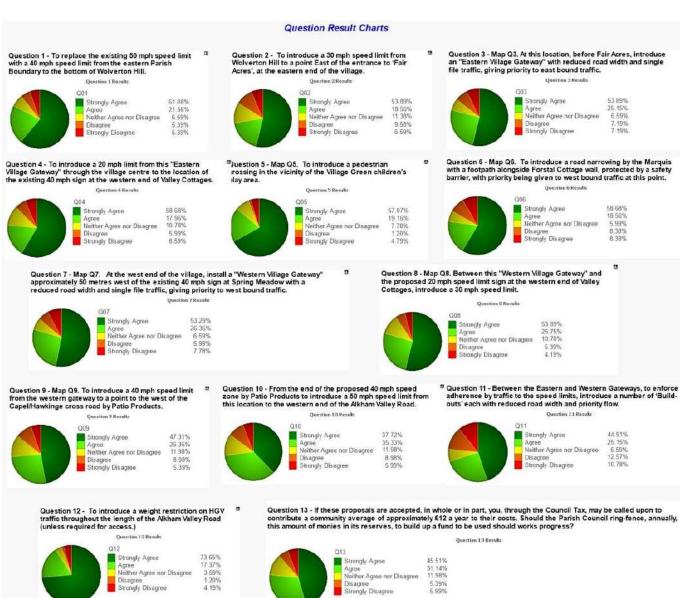
REGARDLESS of your answers above, would you please indicate, in order of priority, 1 to 11, which of the following proposals you consider most important (e.g 1 is best)

A. Extend the 30 mph speed limit from the village to Wolverton Hill			G. Introduce a 20 mph limit through the village centre
B. Replace the 50 mph limit with a 40 mph limit from Wolverton Hill eastwards		Tr.	H. Enforce adherence to the speed limits
C. Introduce 'Village Gateways' with reduced road width at either end of the village with priority flow given to traffic leaving the village			using 'build-outs' that create single line traffic and priority flow at specific points along the road between these 'Village Gateways'
D. Extend the existing 30 mph limit westward to the proposed 'Western Village Gateway'		5 8	I. Introduce, by the 'Marquis, priority flow to west bound traffic and a pedestrian footpath on the north side of the road
E. Introduce a 40 mph limit from the 'Western Village Gateway' to a point west of the Capel/Hawkinge cross roads by 'Patio Products'			J. Introduce a pedestrian crossing across the Alkham Valley Road by the village green play area
F. Replace that section of the road having an existing national speed limit of 60 mph to a 50 mph limit			K. Introduce a weight restriction on HGV's using the Alkham Valley Road (except for access)
If you have any other question	or feedba	ck, ente	r it in the space below:

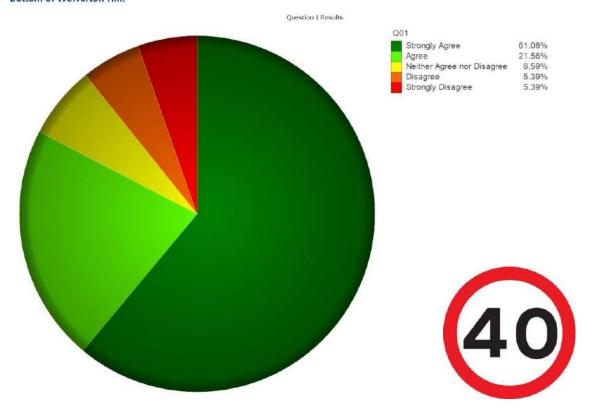
Thank you for your support in what is being proposed and for taking the time to complete and return this questionnaire.

Traffic Survey Responses per Area

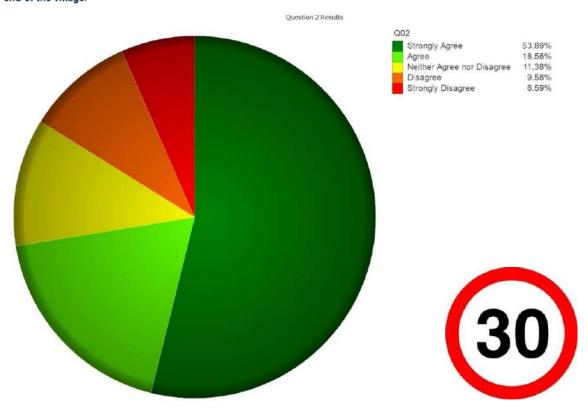




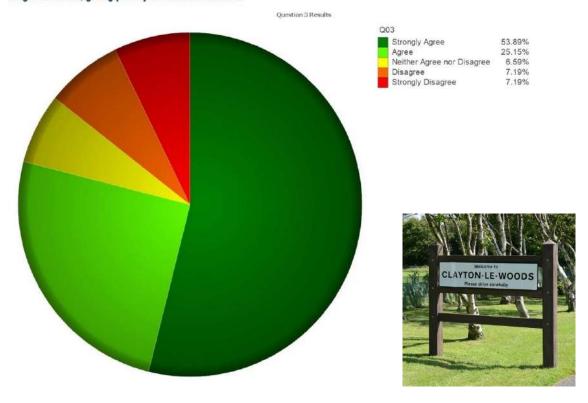
Question 1 - To replace the existing 50 mph speed limit with a 40 mph speed limit from the eastern Parish Boundary to the bottom of Wolverton Hill.



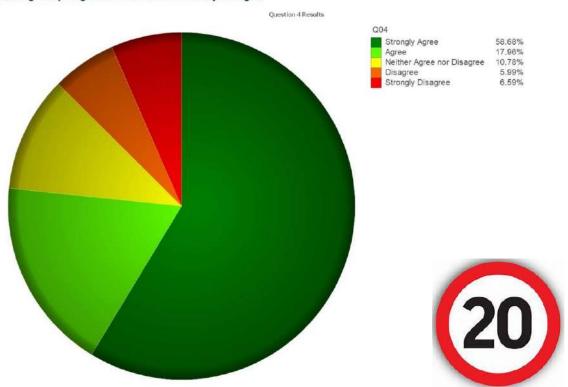
Question 2 - To introduce a 30 mph speed limit from Wolverton Hill to a point East of the entrance to 'Fair Acres', at the eastern end of the village.



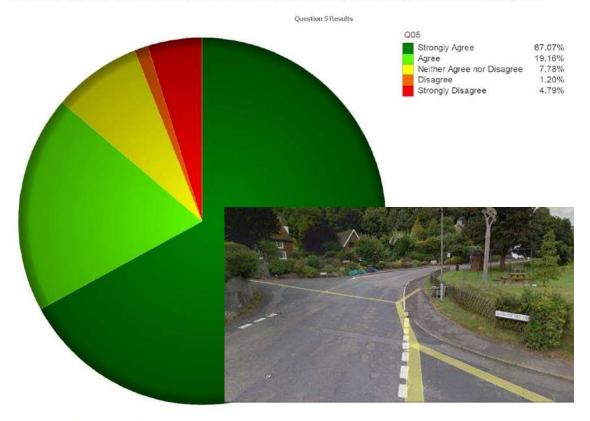
Question 3 - Map Q3. At this location, before Fair Acres, introduce an "Eastern Village Gateway" with reduced road width and single file traffic, giving priority to east bound traffic.



Question 4 - To introduce a 20 mph limit from this "Eastern Village Gateway" through the village centre to the location of the existing 40 mph sign at the western end of Valley Cottages.



Question 5 - Map Q5. To introduce a pedestrian crossing in the vicinity of the Village Green children's play area.



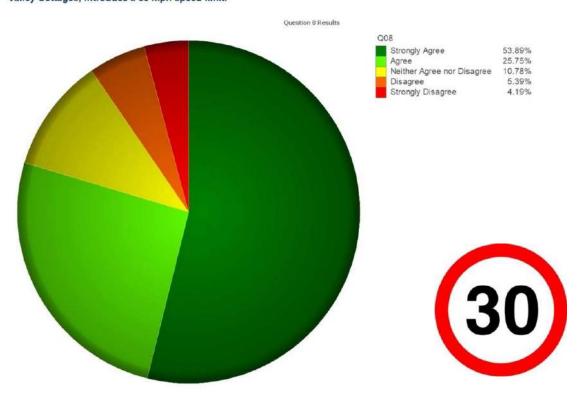
Question 6 - Map Q6. To introduce a road narrowing by the Marquis with a footpath alongside Forstal Cottage wall, protected by a safety barrier, with priority being given to west bound traffic at this point.



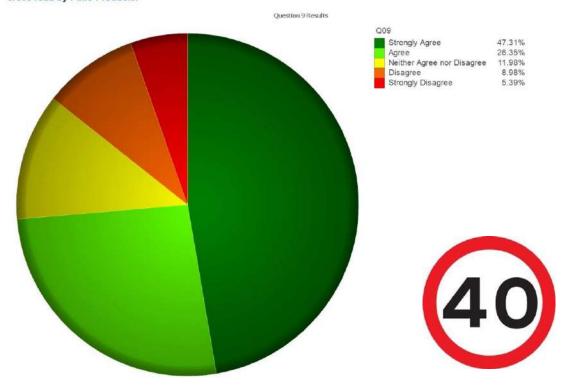
Question 7 - Map Q7. At the west end of the village, install a "Western Village Gateway" approximately 50 metres west of the existing 40 mph sign at Spring Meadow with a reduced road width and single file traffic, giving priority to west bound traffic.



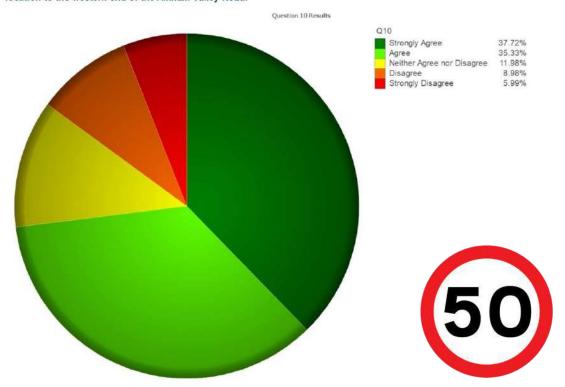
Question 8 - Map Q8. Between this "Western Village Gateway" and the proposed 20 mph speed limit sign at the western end of Valley Cottages, introduce a 30 mph speed limit.



Question 9 - Map Q9. To introduce a 40 mph speed limit from the western gateway to a point to the west of the Capel/Hawkinge cross road by Patio Products.



Question 10 - From the end of the proposed 40 mph speed zone by Patio Products to Introduce a 50 mph speed limit from this location to the western end of the Alkham Valley Road.



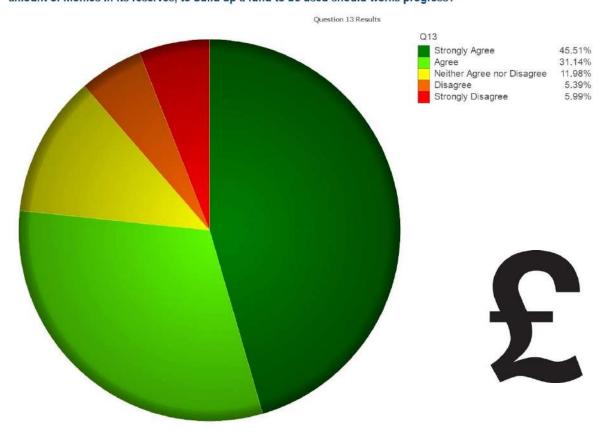
Question 11 - Between the Eastern and Western Gateways, to enforce adherence by traffic to the speed limits, introduce a number of 'Build-outs' each with reduced road width and priority flow.

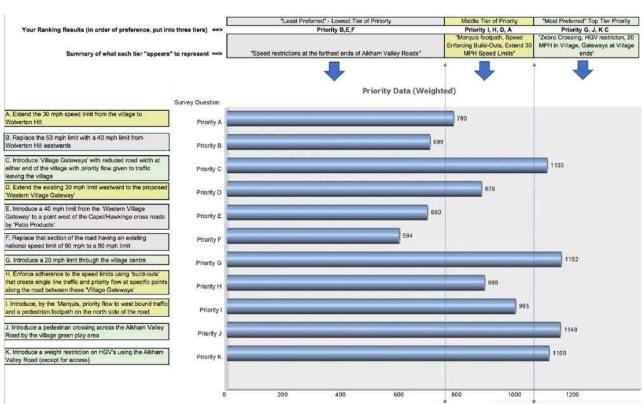


Question 12 - To introduce a weight restriction on HGV traffic throughout the length of the Alkham Valley Road (unless required for access.)



Question 13 - If these proposals are accepted, in whole or in part, you, through the Council Tax, may be called upon to contribute a community average of approximately £12 a year to their costs. Should the Parish Council ring-fence, annually, this amount of monies in its reserves, to build up a fund to be used should works progress?

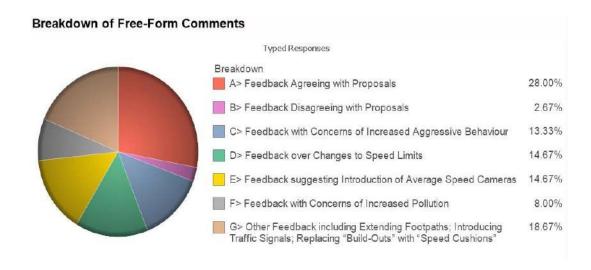




Feedback (across Surveys)

Survey Feedback





Appendix 7: Accident Review 2006 - 2015

Alkham Valley Road ACCIDENT REVIEW 2006 to 2015

1. This information is compiled from accident information provided by KCC for the Alkham Valley Road from 2005 - 2015, plus information from ""every accident.co.uk"" since 1979. In addition, Dover, Folkestone and Hawkinge newspaper and other websites have been used to validate data and provide additional information on fatal accidents.

The average annual accident rate for the 6.04 miles long Alkham Valley Road, between 2006 and 2015, is 8 accidents per year, including 4 fatalities.

2. It should be noted that the Coroner at the 2004 Inquest into the death of a driver near the Drellingore bend referred to their, "experience from inquests into three other fatalities in that vicinity", these are not recorded in any other statistics or website reports that has been searched. Consequently, those three reported fatalities are not included in these statistics.

In addition, the coroner referred to concern that, "the road friction value was a quarter to a third less than it should be", the accident was attributed to excess speed and the low friction level on the road.

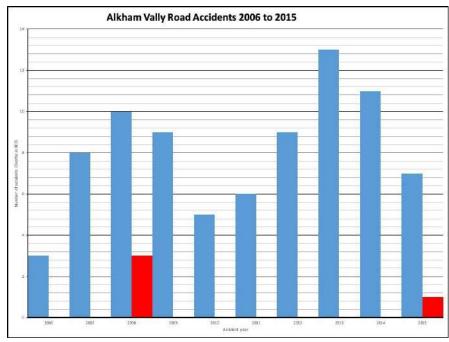
Given the 2015-16 increased usage of the Alkham Valley Road by cars and rise in heavy vehicles use, combined with a visible decrease in surface maintenance, it might be appropriate for the Parish Council to request information on current road surface friction values. Then using the results review speed limits on the major bends and in the vicinity of bus stops along the Alkham Valley Road based upon that information.

- 3. The former B2060 appears to extend from the western end of the Alkham Valley Road, to Kearsney and then on to the Lydden Hill junction with the A2. Some B2060 accidents attributed to the Alkham Valley Road have grid references in the Lydden area and these have been removed from this report.
- 4. It should be noted that many government accident data sites acknowledge that national accidents statistics are notably unreliable, especially with respect to information about minor injuries.
- 5. Alkham Valley Road, accident rates.

The significant traffic increase in traffic was during the latter part of 2015 and 2016. It is difficult to draw conclusions with such little 2015/16 data, but the overall accident trend on the Alkham Valley Road seems to be declining which is good news. However, without doubt, the perception is that the road is more dangerous today with a very low friction surface in many places including some bends, (Especially where village school children stand waiting for school buses and around surface furrows on several bends caused through use by heavy lorries.)

Caution- data accuracy.

This information contains information collected from numerous sources including unverified internet content and any information contained in this report should be independently verified before it is used for any specific purpose.



Year	Fatal	No of deaths	Dates of Fatalities	Serious	Slight	Total	News related to any Fatalities
2006	0			2	3	3	
2007	0			2	6	8	
2008	1	1	23/01/2008	0	0	1	A teenage driver died when his car struck a tree on the Alkham Valley Road. The family of a teenage driver who was killed when his car crashed into a fence.
2008	1	1	27/04/2008	3	4	8	A Bank manager, 45, lived in Ramsgate.He suffered fatal injuries following a collision with a car on the Alkham Valley Road, near Folkestone, at around 10.30am
2008	1	1	04/12/2008	0	0	1	The man who died after the car he was driving struck a tree in a country lane on the outskirts of Dover on Thursday has been identified. The crash - which involved only one car - happened at around 3.20am on the Alkham Valley Road between Dover and Folkestone, near Bushy Ruff. Emergency services went the scene and found 41-year-old male from Ewell Minnis, near Dover. He was taken to the William Harvey Hospital at Ashford but was pronounced dead.
2009	0			0	9	9	
2010	0			0	5	5	
2011	0	5		0	6	6	
2012	0			2	7	9	
2013	0			2	11	13	
2014		5		2	9	11	
2015	1	1	06/12/2015	0	6	7	Kent Fire and Rescue Service was called to a serious road crash on Alkham Road near Dover. The crash, involving one vehicle happened between Temple Ewell and Alkham. The driver of the car, a local man in his 20's, he was confirmed dead at the scene. No other vehicles were involved.
Total	4	4		13	66	81	
Study pe	riod in y	ears	10	Long tern	n average	8	Accidents per year. Note that it is accepted by Authorities that many minor accidents remain unreported.

Appendix 8: KCC Public Consultation Document 1995

Public Consultation

Alkham Valley Road - Proposed Traffic Management Measures (Including New Footway)





Alkham Valley Road - Proposed Traffic Management Measures (Including New Footway)

Alkham Valley road is an important local route connecting the village of Alkham with Folkestone and Dover. It carries around 5,000 vehicles/day (including some 300 heavy vehicles).

The approaches to the village tend to encourage high traffic speeds. The 85th percentile speed (ie the speed that 85 % of traffic does not exceed) has been recorded at 44mph.

Traffic management measures are proposed (see plan) comprising the following features:

- A "Gateway" at the western end of the village consisting of a traffic island, enhanced signing and a contrasting surface.
- A "Gateway" at the eastern end of the village consisting of enhanced signing and a contrasting surface.
- A new footway (1.2 metre minimum w.dth) opposite the "Marquis of Granby public house.
- 4. Two traffic islands between the western "Gateway" and the new footway

The scheme has the support of the emergercy services and is estimated to cost £25,000. It represents good value for money and I am hopeful that it could be constructed during the 1996/97 financial year, although the final decision on funding would be made by Members of the County Council's Highways & Public Transport Sub-Committee early in 1996.

I would be pleased if you could spend a few minutes to complete the enclosed questionnaire. The completed questionnaire should be folded as indicated and posted so that it reaches us no later than 31 July 1995. If you require any further information, please contact Mike Smith on 01622 696817.