

Dear Sir / Madam,

re: Objection to proposed Traffic Regulation Order, reference TRO 7052 (B1052 Little Walden Road)

I wish to object to the above Traffic Regulation Order proposed for the B1052 at Little Walden as it stands, and propose an amendment, for the reasons set out following the analysis presented below.

Automatic Traffic Count Survey Data analysis

Three Automatic Traffic Count (ATC) survey sites were in place within and near Little Walden for the seven days of Tuesday 4th October to Monday 10th October 2016, as illustrated within the survey data sheets:



Site **16333-1** (40mph existing speed limit):



Site **16333-2** (40mph existing speed limit):



Site **16333-3** (60mph existing speed limit):

It is impossible to accurately determine the speeds of passing vehicles without empirical data-gathering tools, such as the ATC surveys detailed above, because the perceptions of those observing vehicle speed from a static point are likely to be influenced by tyre noise, road surface noise, engine noise, weather, time of day/night, proximity to the vehicles in question, personal experience, preconceptions and 'gut feeling' about what speeds passing vehicles are travelling at, etc. This therefore makes anecdotal reports/complaints about speeding vehicles in any given location very subjective and highly likely to be subject to personal bias.

The empirical ATC survey data presented for each of the three sites above notes (with added emphasis in bold) that:

16333-1:

- A 7-day automatic traffic count ... recorded 9,181 vehicles travelling eastbound and 8,417 westbound vehicles.
- The posted speed limit of 40mph was exceeded by 7.5% of eastbound vehicles and 11.5% of westbound vehicles.

16333-2:

- A 7-day automatic traffic count ... recorded 9,335 vehicles travelling southbound and 10,060 northbound vehicles.
- The posted speed limit of 40mph was exceeded by 1.2% of southbound vehicles and 2.2% of northbound vehicles.

16333-3

- A 7-day automatic traffic count ... recorded 9,602 vehicles travelling southbound and 10,272 northbound vehicles.
- The posted speed limit of 60mph was exceeded by 0.2% of southbound vehicles and 0.2% of northbound vehicles.

The above percentages of vehicles exceeding the existing speed limits over the seven days of the survey therefore translate into the following numbers:

16333-1:

- Eastbound – 688 vehicles (of 9,181) exceeding 40mph
- Westbound – 964 vehicles (of 8,417) exceeding 40mph

16333-2:

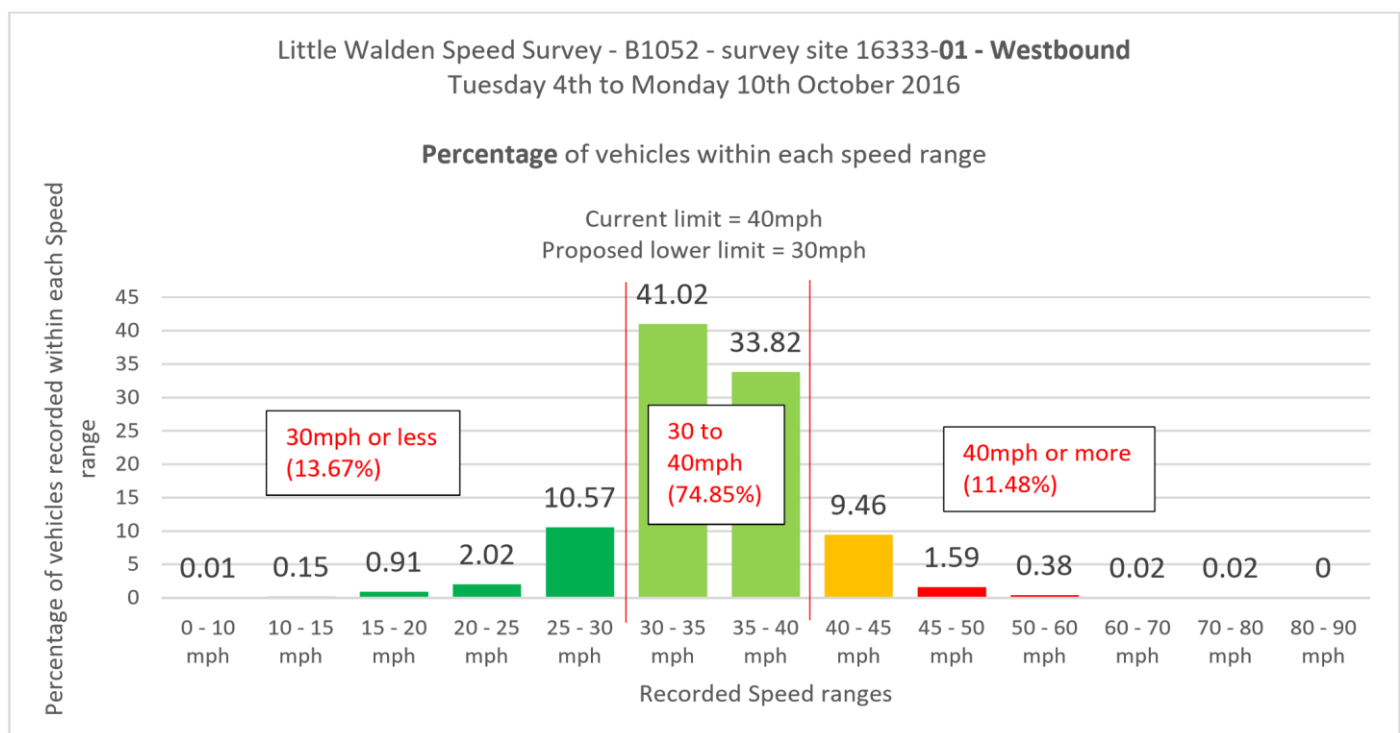
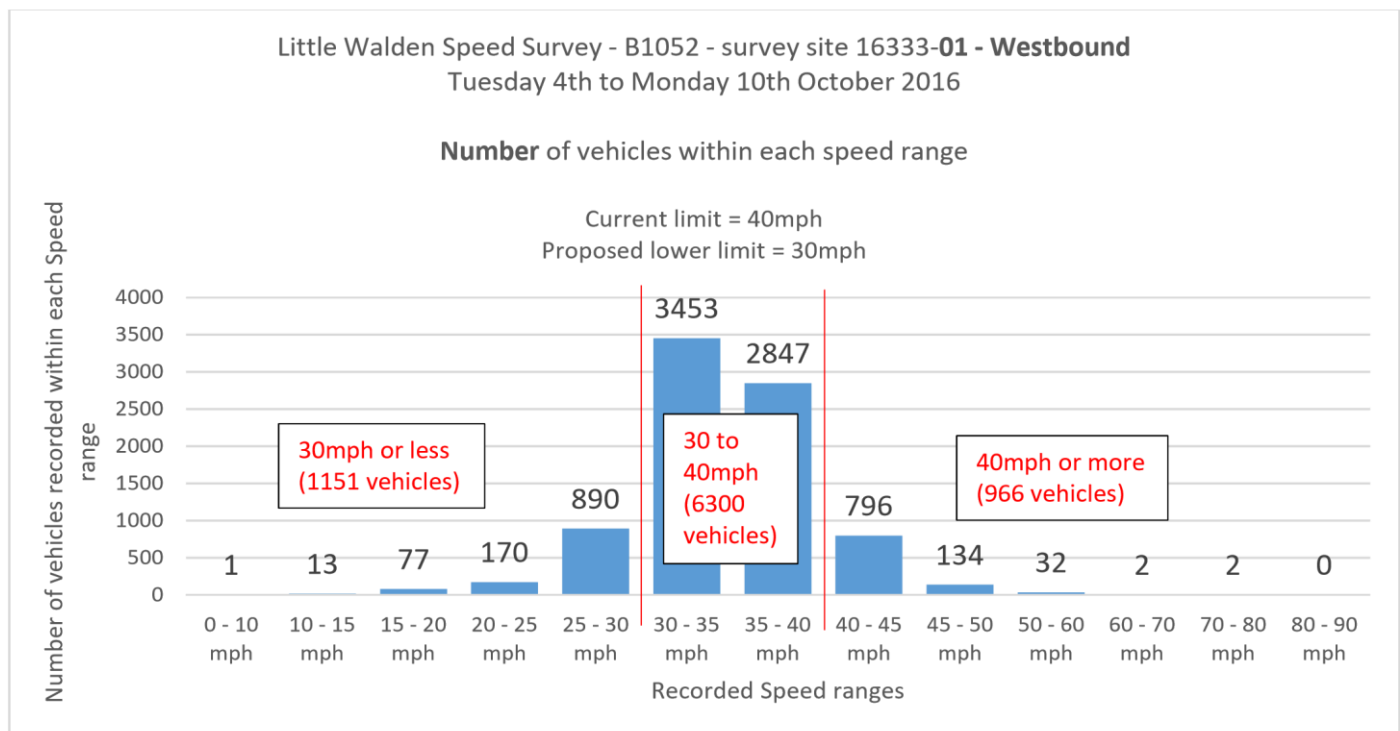
- Southbound – 109 (of 9,335) vehicles exceeding 40mph
- Northbound – 224 vehicles (of 10,060) exceeding 40mph

16333-3:

- Southbound – 22 vehicles (of 9,602) exceeding 60mph
- Northbound – 18 vehicles (of 10,272) exceeding 60mph

If we put these speed survey results into graphs, the distribution of traffic speeds can be seen more clearly and conclusions drawn as to the suitability of the proposed speed limit reductions, as shown and discussed below.

16333-1 Westbound (i.e. traffic approaching the village):



As can be seen from the annotations, only 11.48% of traffic (966 vehicles over the week) exceeds the current 40mph speed limit westbound at **16333-01**, with 9.46% of traffic only exceeding the limit by up to 10% (i.e. up to 45mph).

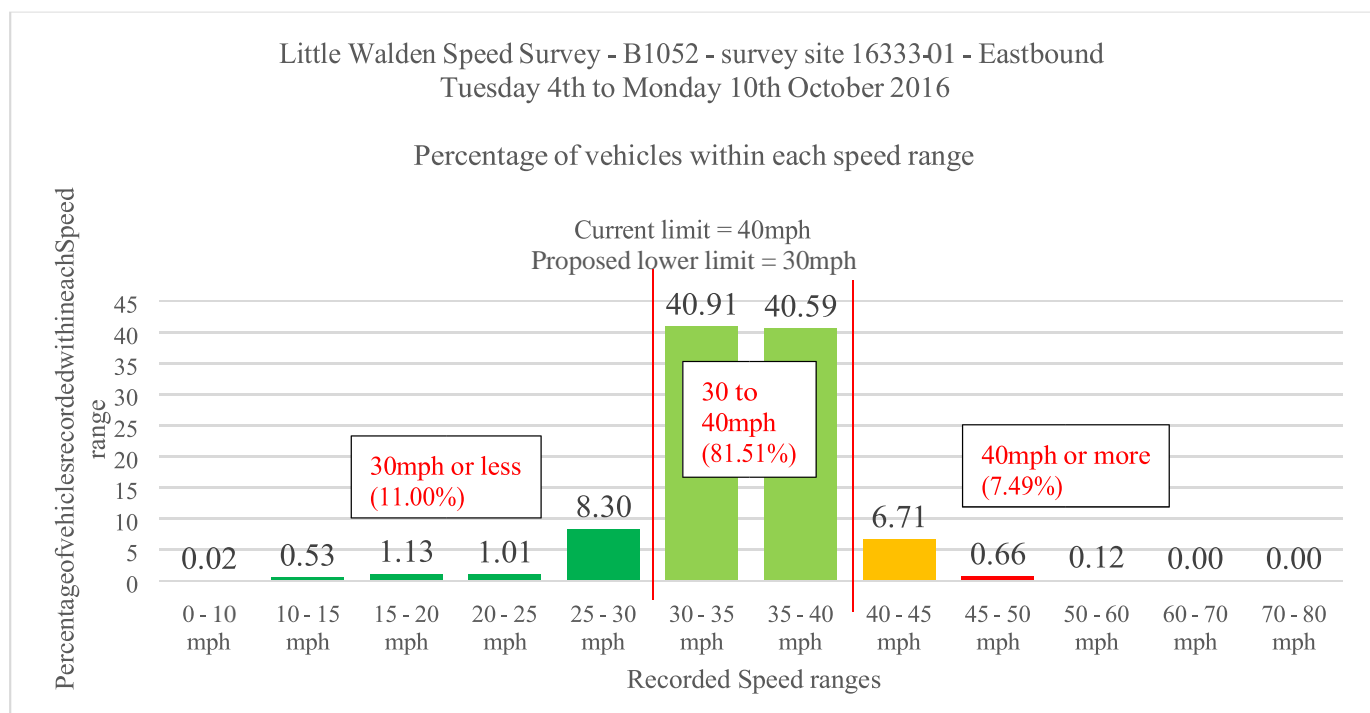
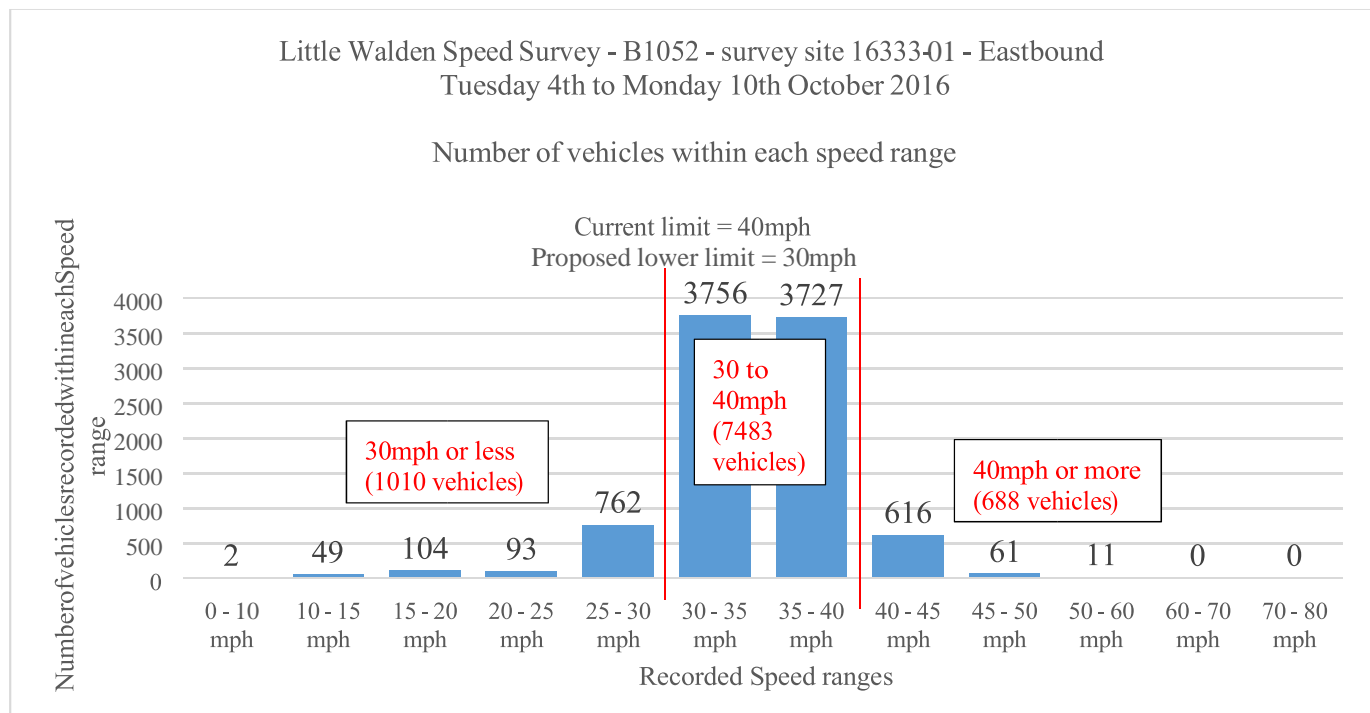
These figures strongly indicate that the current 40mph limit is correctly set at this point – the vast majority of drivers are intelligent and sensible and choose speeds appropriate for the road and surrounding environment, so limit setting should reflect that. There is always a small minority who cannot or will not choose an appropriate speed, and the figure of only 2% (170 vehicles) exceeding 45mph (the 40mph limit plus 10%) reflects that.

If, however, the limit is reduced from 40mph to the proposed 30mph at this point, **three quarters (74.85%) of traffic** (6300 vehicles(!)) will move from 'legal and within the speed limit' to 'illegal and liable for

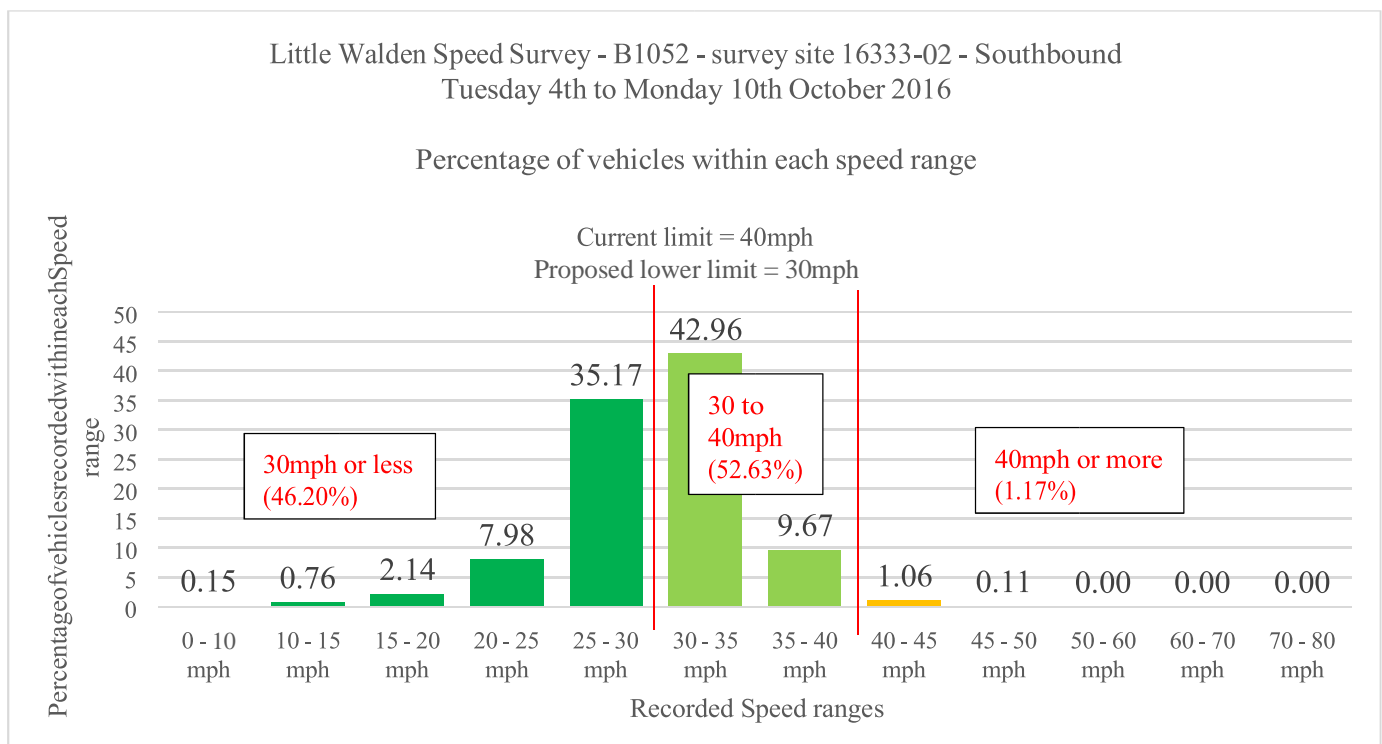
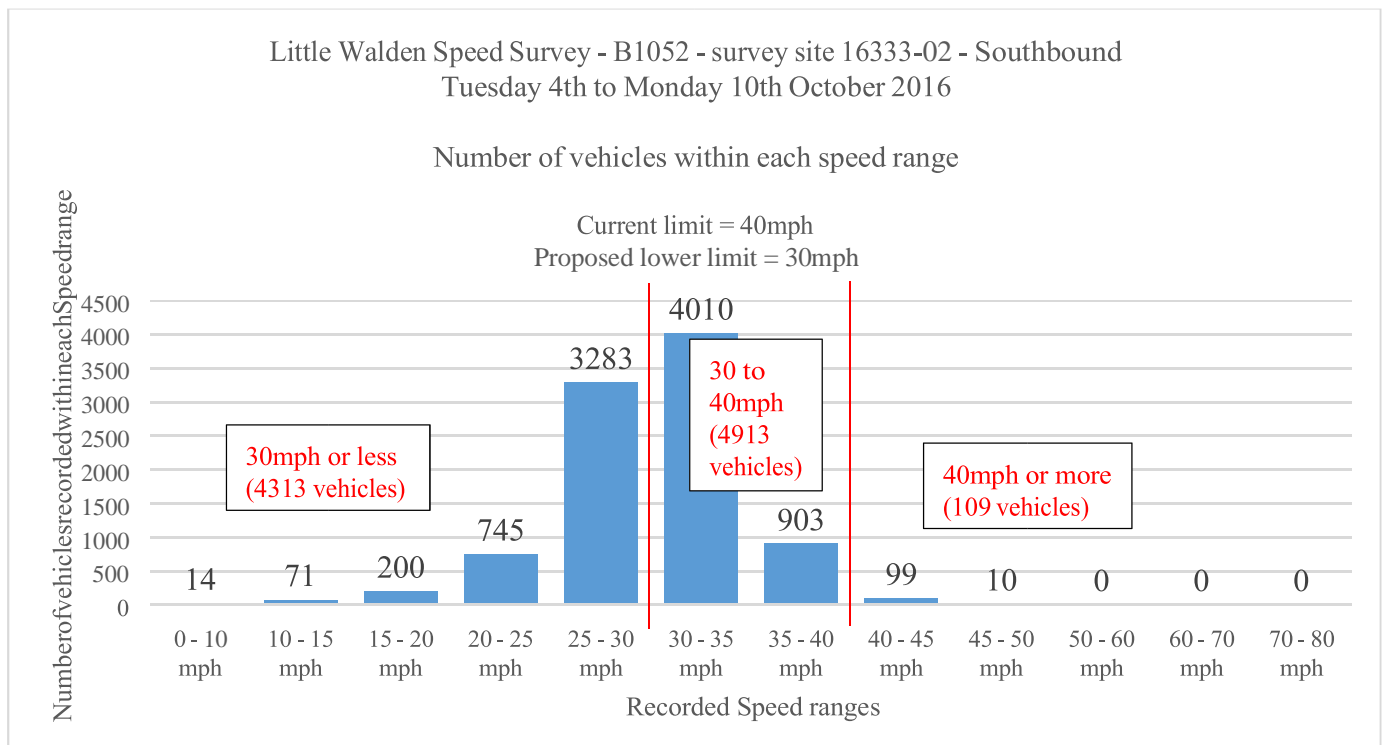
prosecution’, meaning the preferred driving speeds of 86.33% of westbound drivers (7266 of 8417) chosen at free will (i.e. without enforcement taking place) would exceed the proposed 30mph speed limit.

These figures and graphs, illustrating that **only 13.67% of drivers (1151 of 8417 vehicles) currently choosing to drive at or below 30mph at this point**, strongly suggest a 30mph limit would be **inappropriately slow for the road and surrounding environment at this point** because 30mph is felt to be too slow by the vast majority of drivers.

A similar conclusion is also clearly evidenced within the figures for eastbound traffic departing the village at this point (16333-2 Eastbound), as shown in the following two graphs, where only 11% of drivers (1010 of 9181 vehicles) choosing a speed of their own free will feel that 30mph is an appropriate speed for the road and environment at this point. **Were the limit to be lowered from the current 40mph to the proposed 30mph, 81% of eastbound traffic (7483 drivers) that are currently choosing reasonable, safe, legal speeds between 30mph and 40mph would be criminalised.**



16333-2 Southbound (i.e. traffic within the village):



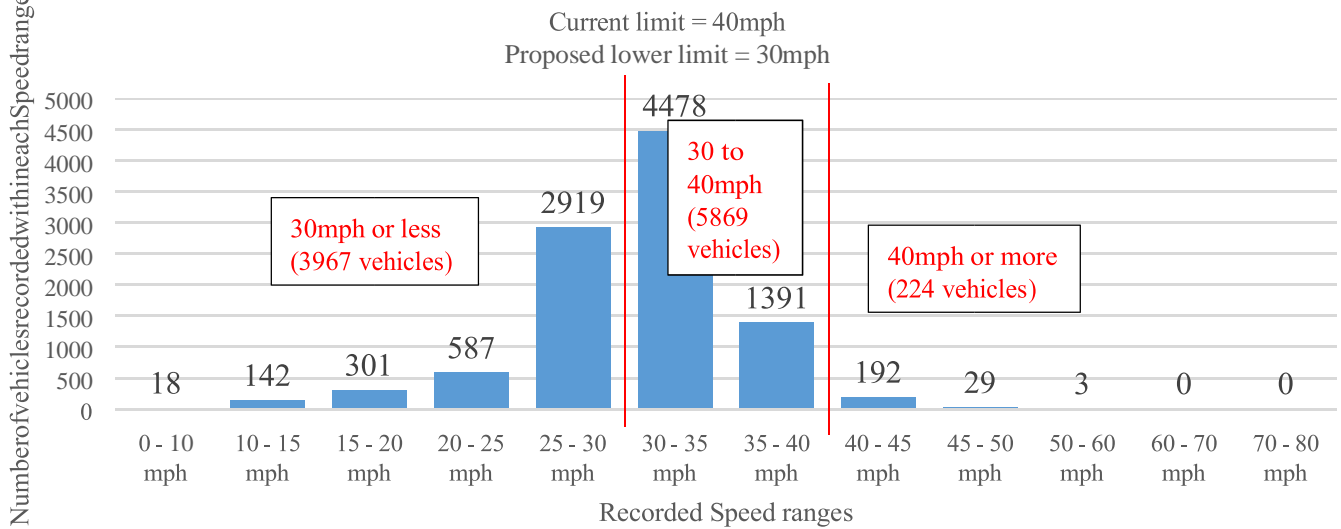
This site, **16333-02**, within the centre of the village, **has very high compliance with the existing 40mph speed limit**, with only 1.17% of southbound traffic (109 vehicles) and 2.23% of Northbound traffic (224 vehicles) exceeding 40mph.

It is similar to site 16333-01 already discussed, whereby while a larger percentage of drivers than at site 16333-01 are choosing speeds below 30mph of their own free will at this point, the fact that 52-58% of drivers are choosing speeds between 30mph and 40mph must not be disregarded. **Lowering the limit from the current 40mph to the proposed 30mph would see very high numbers of reasonable, intelligent drivers (4913, 52.63% Southbound and 5689, 58.34% Northbound) criminalised for travelling at appropriate speeds between 30mph and 40mph at this point.**

16333-2 Northbound (i.e. traffic within the village):

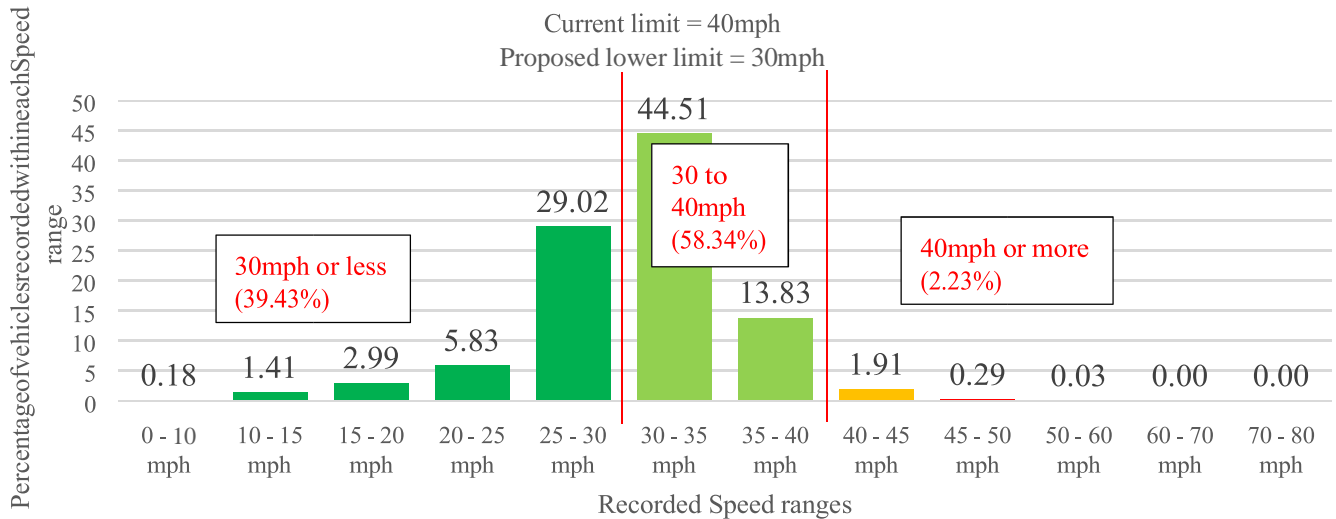
Little Walden Speed Survey - B1052 - survey site 16333- 02 - Northbound
Tuesday 4th to Monday 10th October 2016

Number of vehicles within each speed range

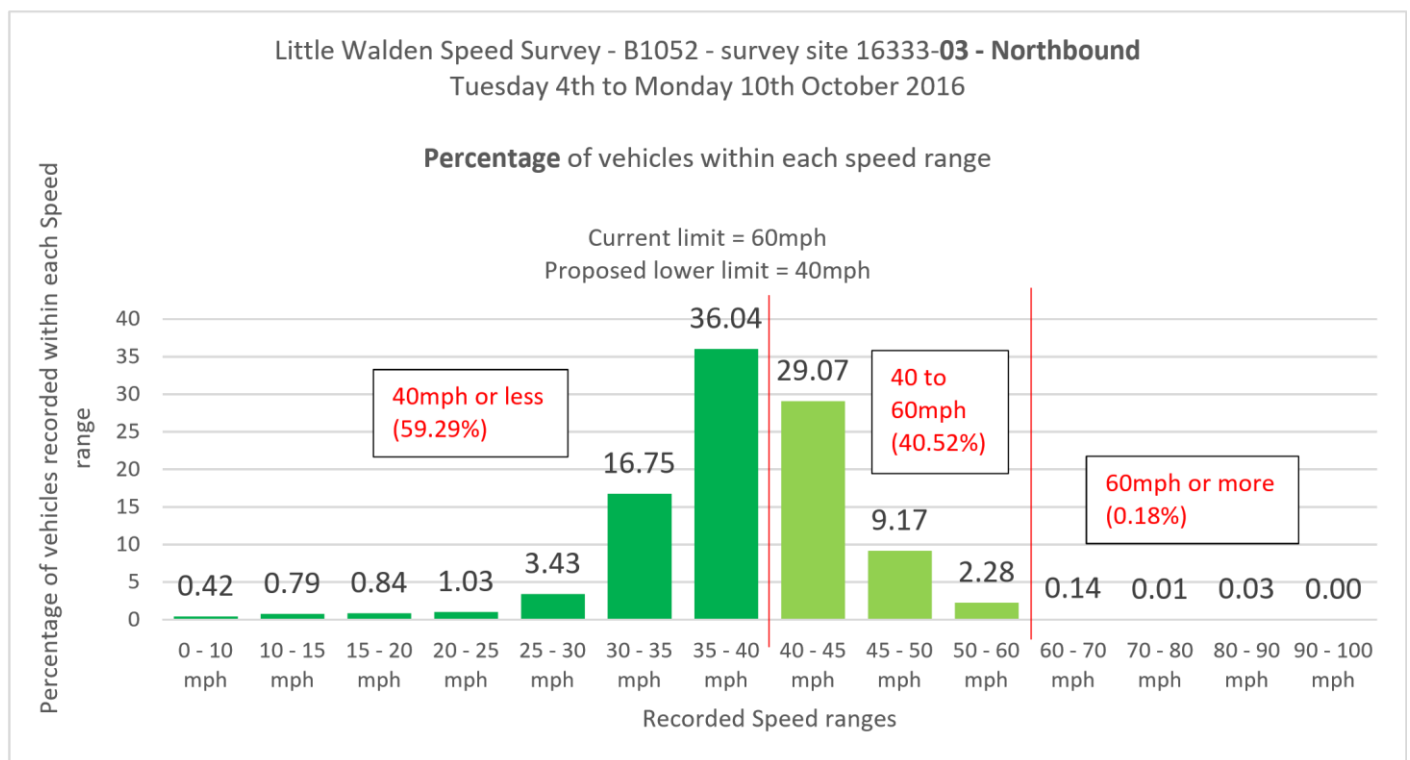
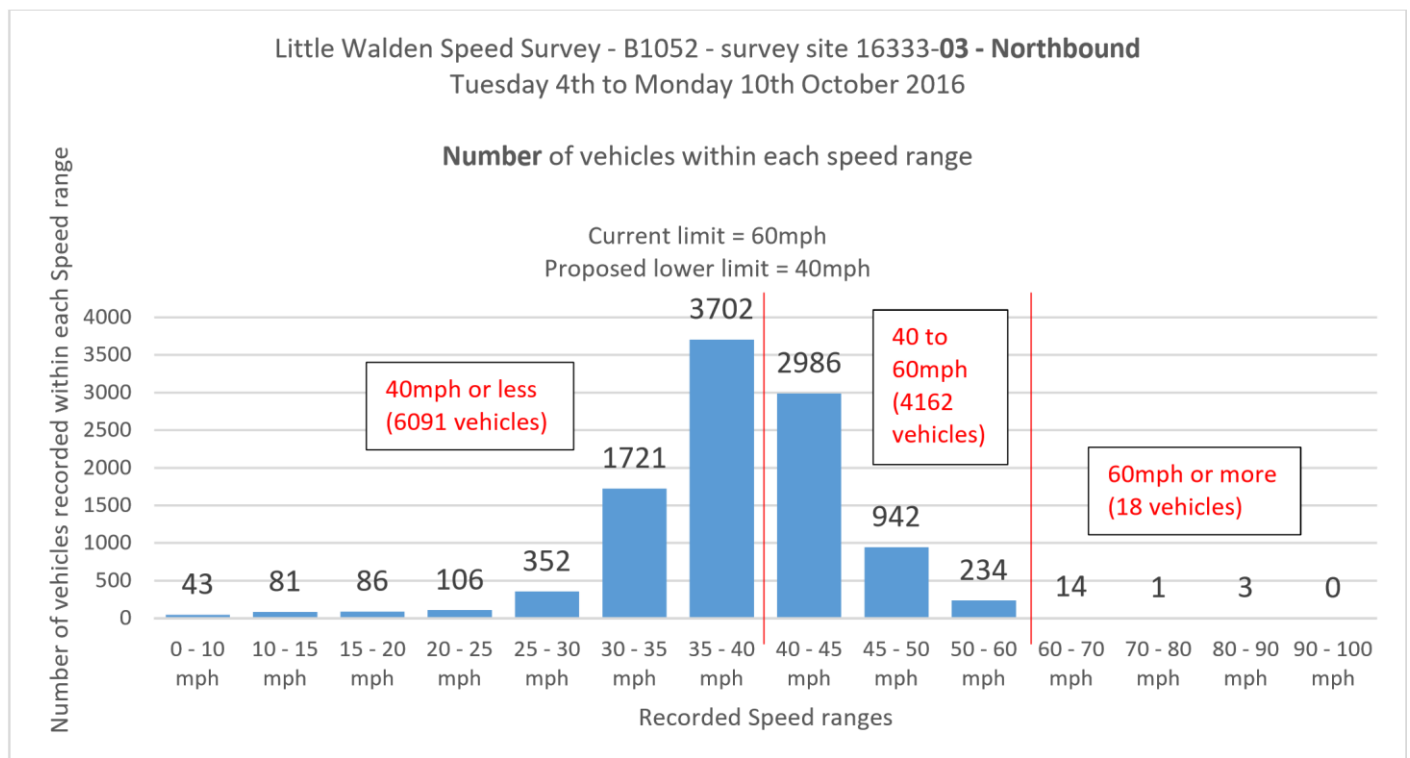


Little Walden Speed Survey - B1052 - survey site 16333- 02 - Northbound
Tuesday 4th to Monday 10th October 2016

Percentage of vehicles within each speed range



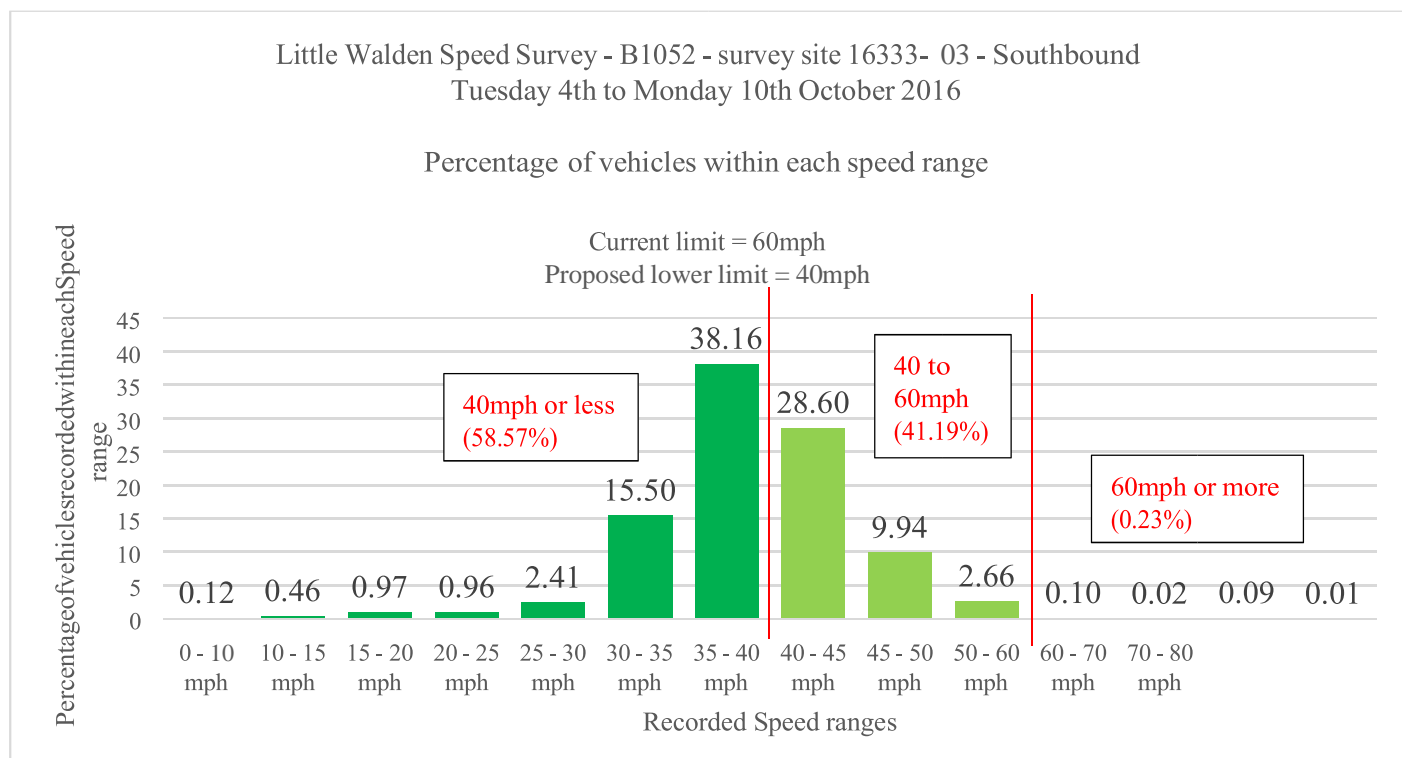
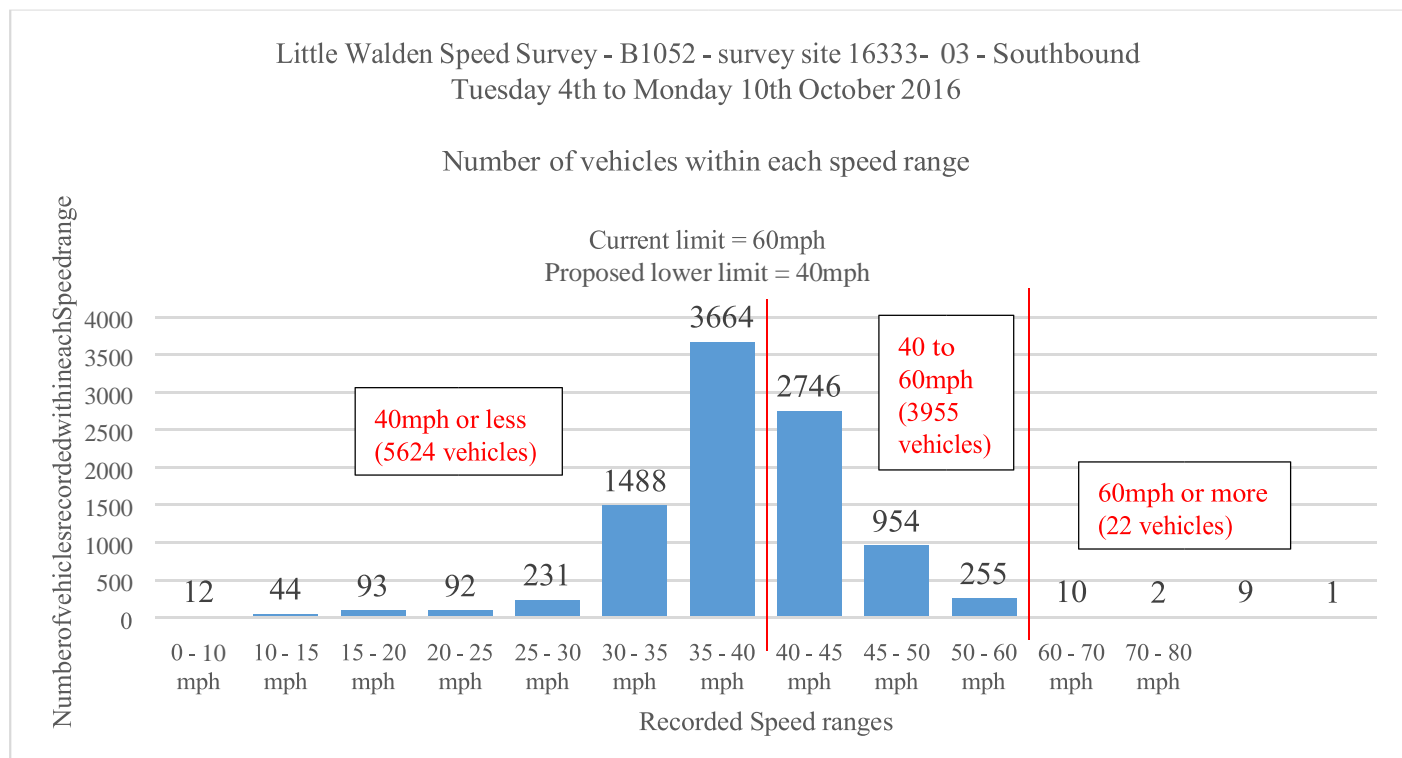
16333-3 Northbound (i.e. traffic approaching the village):



On the outskirts of the village, site 16333-03 has a similar traffic speed profile to the other survey sites, albeit at slightly higher speed ranges that reflect the more open nature of the road and the surrounding environment, and **has very high compliance with the existing limit.**

The proposed reduction in speed limit, from 60mph to 40mph, would create the same issues as the proposed speed limit reductions at the other sites, whereby **a large percentage of drivers (40.52%, 4162 Northbound and 41.19%, 3955 Southbound) would be criminalised for their speed choices**, instead of the focus of any enforcement being on those very few drivers choosing obviously excessive speed choices in excess of 60mph, the national speed limit for most vehicles for on carriageway roads.

16333-3 Southbound (i.e. traffic departing the village):



If any speed limit reduction is to be put in place between the location of survey site 16333-03 and the current 40mph speed limit terminus point, it should be a 50mph limit. This reduction in limit would give the 'buffer' to the village centre that is sought, but also take into account the fact that 97.54% of Northbound traffic and 97.1% of Southbound traffic chooses speeds under 50mph at this point.

A 50mph limit would indicate to drivers that the environment is changing and a reduction in speed is required, reduce the highest speeds of vehicles recorded, and also increase the ability to carry out enforcement against those still travelling at excessive speeds, while **not unduly penalising the majority of drivers travelling at safe and reasonable speeds between 40mph and 50mph (38.53%, 3700 Southbound vehicles and 38.24%, 3928 Northbound vehicles).**

Summary

The graphs and analysis above can be summarised into key points, as follows:

Site 16333-01, north of the village centre

- The overwhelming majority of drivers are choosing speeds between 30mph and 40mph at this point - between 6300 and 7483 vehicles depending on direction, representing 74.85% to 81.51% of all traffic at this point.
- Only 11% to 13.67% of drivers (1010 to 1051 vehicles) choose to drive at speeds under 30mph.
- It cannot reasonably be argued that the above large majority of drivers at this point, choosing speeds between 30 and 40mph, are 'speed freaks'.
- Therefore, to reduce the limit from 40mph to 30mph at this point would:
 - not reflect what the sensible majority of drivers perceive to be an appropriate speed for the road and surround environment,
 - criminalise huge numbers of reasonable and safe drivers, and
 - increase the likelihood that drivers thinking the limit is incorrect would drive inappropriately through the village centre due to frustration.

Site 16333-02, within the village centre

- A higher percentage (39.43% to 46.2%, 3967 to 4313 drivers) are driving at speeds below 30mph at this point within the village centre, but...
- ... similar to site 16333-01, the majority of drivers are choosing speeds between 30mph and 40mph (52.63% to 58.34% representing 4913 to 5869 vehicles).
- This suggests that drivers are already adapting their chosen speeds to reflect the road and surrounding environment, and do not need a speed limit reduction to tell them what is appropriate.
- A change in speed limit therefore is unnecessary and unsuitable, because:
 - a higher number of drivers are already travelling more slowly than the existing 40mph limit,
 - only a very small percentage (1.17% to 2.23%, 109 to 224 vehicles) are exceeding the existing 40mph limit, and
 - a very large number of reasonable and safe drivers travelling between 30mph and 40mph (52.63% to 58.34%, 4913 to 5859 vehicles) would be criminalised.

Site 16333-03, south of the village centre

- 40.52% - 41.19% of drivers are choosing speeds between the existing 60mph and the proposed 40mph limit at this point, representing 3955 to 4162 vehicles, depending on direction.
- A very small number of vehicles (18 to 22 vehicles) are travelling at high speed, above the 60mph National Speed Limit for most vehicles.
- The vast majority of drivers (over 99%) are driving within the existing speed limit, with 97.1% to 97.54% travelling under 50mph and only 2.28% to 2.66% (234 to 255 vehicles) travelling between 50mph and 60mph.
- Implementation of a 40mph limit between site 16333-03 and the existing speed limit terminus would therefore criminalise the large percentage of safe and reasonable drivers detailed above.
- An alternative, 50mph limit would still create the desired 'buffer' before the existing speed limit terminus point but not unduly penalise the majority of drivers travelling at safe and reasonable speeds between 40mph and 50mph (38.24% to 38.53%, 3700 to 3928 vehicles).

Conclusion

Speed limits must reflect the majority of sensible, reasonable drivers' conscious and unconscious speed choices in order to engender respect, encourage self-enforcement, and allow targeted enforcement of those few drivers travelling at inappropriate speeds.

Changing a speed limit alone does not induce any marked reduction in vehicle speeds. Reducing limits without regard for existing traffic speed profiles, such as setting newly reduced limits at speeds that as few as 14% of drivers would choose of their own free will without enforcement present (as is proposed in the case of site 16333-01, above), creates driver frustration, can induce risky overtaking manoeuvres, and leads to disrespect for limits that are set appropriately – the logic being that if one limit seems to be set with complete disregard for the road and surrounding environment, others are likely to be the same.

There is a real risk that the introduction of a 40mph limit as a 'buffer' to the south of the village could be at risk of creating this situation, given the very few access points along the proposed section of new limit and the open nature of the road, and the situation is perhaps even more apparent at the north end of the village, outside of the village centre but within the existing speed limit, where there is no apparent reason for the proposed 30mph limit until one arrives at the village centre itself.

If perceptions of traffic speeds are not in line with actual traffic speeds (resident perceptions usually being higher than recorded traffic speeds) then understanding of the reasons for the situation should be sought – is the road surface very noisy? Is traffic passing close to the footway or adjacent buildings? Are a few individual vehicles driving at excessive speed or with excessively loud exhausts creating the feeling of a 'race track'? Or is it perhaps just the case that the feeling is 'something must be done' with no evidence to support this assertion?

If reductions in traffic speeds are sought due to vehicles speeding, consideration should be given to physical changes to the highway and surrounding environs – perhaps removing the centreline to encourage more uncertainty and greater driver interaction, bringing the carriageway edge lines further in to create the illusion of narrower running lanes, installing 'countdown' signs to the speed limit terminus points, and creating a footway where none exists if pedestrian desire lines are unserved and the reduction in carriageway width would encourage lower speeds.

Both the proposed sections of 30mph and 40mph limits are therefore unnecessary and unsuitable because...:

- ... they do not reflect the majority of sensible drivers' behaviour and speed choices, meaning...
- ... the lowered limits would be widely ignored unless rigorously (and therefore expensively) enforced by the Police, which...
- ... will lead to increased driver frustration and risky behaviour, and increasing levels of disrespect for speed limits generally, reducing the value of lowered limits when they are needed to genuinely tackle dangerous highway environments and permit enforcement where required.

The proposed limits also do nothing to change the physical layout or appearance of the highway and surrounding environment, which is by far the greater influence on drivers' speed choices than the speed limit in force – as is evidenced by the higher percentages of lower speeds seen at survey site 16333-02 within the village centre, despite it having the same speed limit as survey site 16333-01 outside of the village centre.

I would hope that the above argues conclusively that no changes are needed to the current arrangements (in terms of speed limits, if not physical highway layouts) but if there is still felt the need to introduce a 'buffer' zone south of the village, it should be set at 50mph (not 40mph) to reflect the majority of reasonable and safe drivers' speed choices.

I am cognisant of the fact that a consultation response report will need to be drawn up but I would politely request that the Cabinet Member has sight of the graphs and full analysis - I appreciate this response is

somewhat long and detailed but it is necessary to demonstrate the points being made, so I thank you for your time and consideration.

Yours sincerely,