Analysis of Highways England Average Speed Data collected from sensors located in Hurst Green, East Sussex

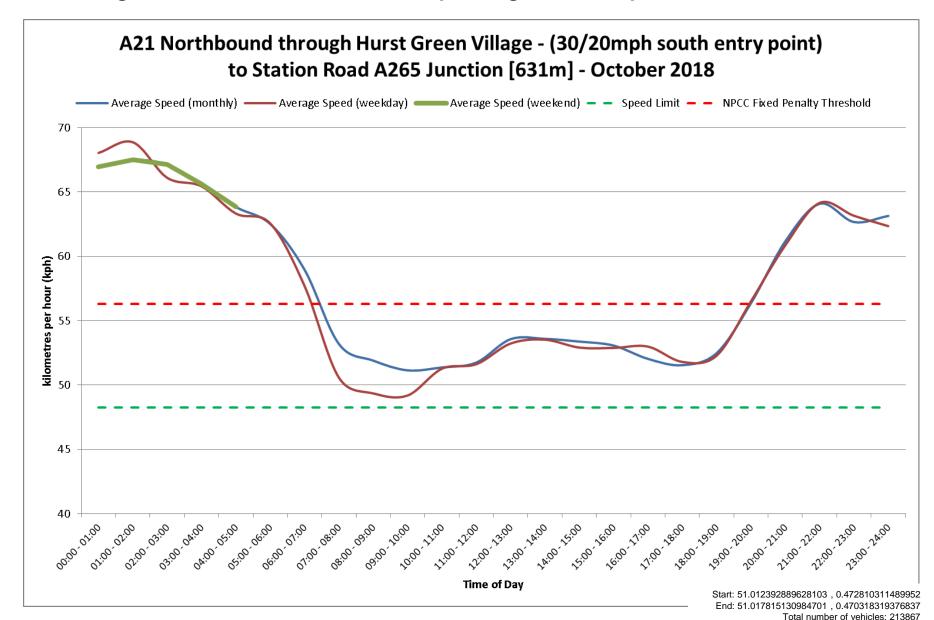
Version 5, based on data and data schemas published by Highways England and the National Traffic Information Service (NTIS).

For more information, please contact, Andrew Brown, Hurst Green Parish Councillor

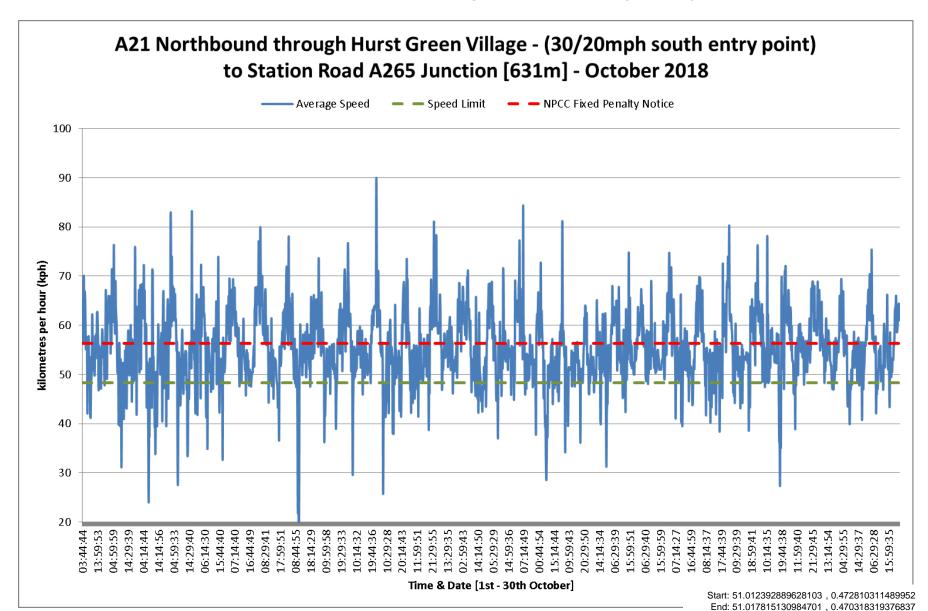
Introduction

- Highways England have sensors all along the A21. These exist in various different types, including
 induction loops embedded in the road, sensors on the roadside and number plate recognition cameras.
 You will recognise some of these as you drive past them, but there is no way to avoid being recorded.
- These sensors communicate back activity periodically, usually every 15 minutes and send all recorded data from the previous period in a burst transmission to a regional control centre run by the National Traffic Information Service (NTIS) on behalf of Highways England.
- Each data block contains a series of information, including information about which sensor the data has
 come from, its location, the location of the proceeding sensor etc. Also included is information about
 how many vehicles have used the section of road in the block, journey times, as well as a field called
 'fused average speed' which as name implies, uses data from the proceeding sensor to calculate this.
- This average speed is made up of an average of all the speeds of all the vehicles using the road since the last reporting period (block). As an example, using the A21 Southbound through Silver Hill, categorised by Highways England as "A21 southbound between A265 and A2100 near Battle (north)", picking a line at random from this dataset in a 40mph zone, the 23rd of October at 04.14am, the average speed from a transmission block representing 20 cars was 65mph. Of course some vehicles will have been travelling faster, and some slower, but the average figure gives us a good indication of general speeds through that section of the A21.
- In the charts that follow, each block of recording is represented by a blue dot, representing the average speed of vehicles during each ~15 minute block of recording, so each chart is made up of thousands of datapoints, representing the 21,500+ vehicles which used the road in October 2018.
- This data is published by Highways England and is available for anyone to download via data.gov.uk
- It is possible that sensor types deployed may also be capturing each vehicle's likely type (identified by each vehicle's length), but this is not yet known, and it is thought likely that the sensors on the A21 are not yet properly configured to record this data.

Analysis of northbound amalgamated average speed reporting blocks per hour shows not a single block reported within the speed limit and suggests that there is also a significant issue with excessive speeding between 8pm and 7am...

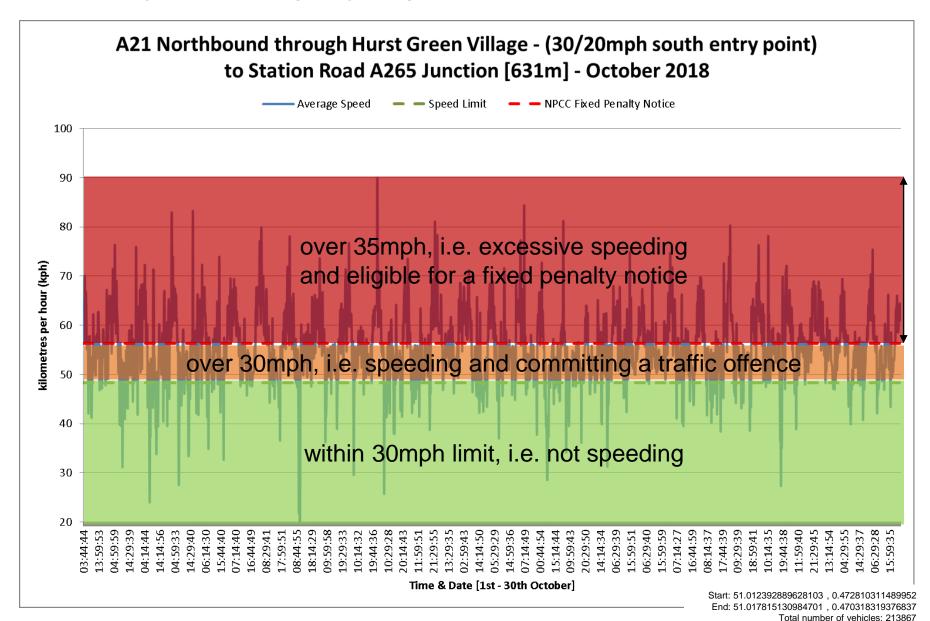


However, the previous chart has masked the true scale of the issue. This chart shows all 2043, 15 minute average speed reporting blocks over the month. It shows that there is a issue with excessive speeding 24 hours a day, 7 days a week...

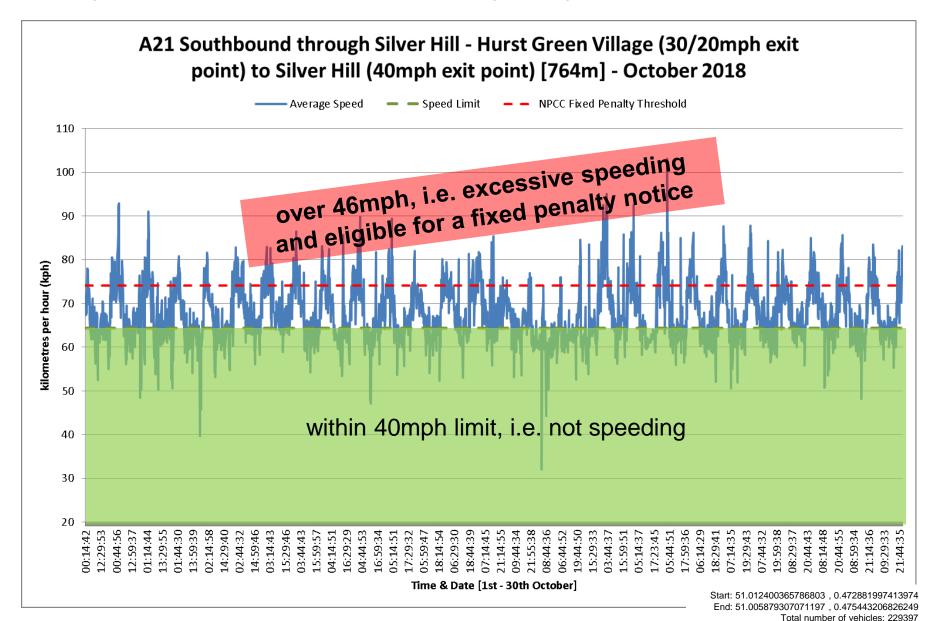


Total number of vehicles: 213867

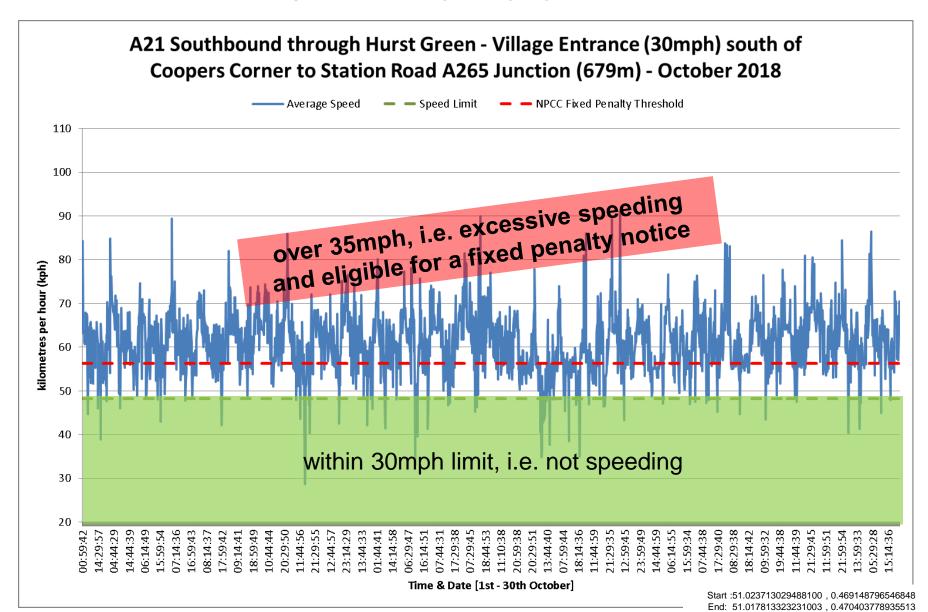
Put another way, the data shows that there is a issue with excessive speeding 24 hours a day, 7 days a week and that many, many fixed penalty notices would be issued every hour were Highways England's sensors linked to Sussex Police...



Taking another section of road in the parish, this time a 40mph limit leaving the village through Silver Hill... it shows motorists travelling at speeds eligible for fixed penalty notices, i.e. over 46mph occur virtually all day...

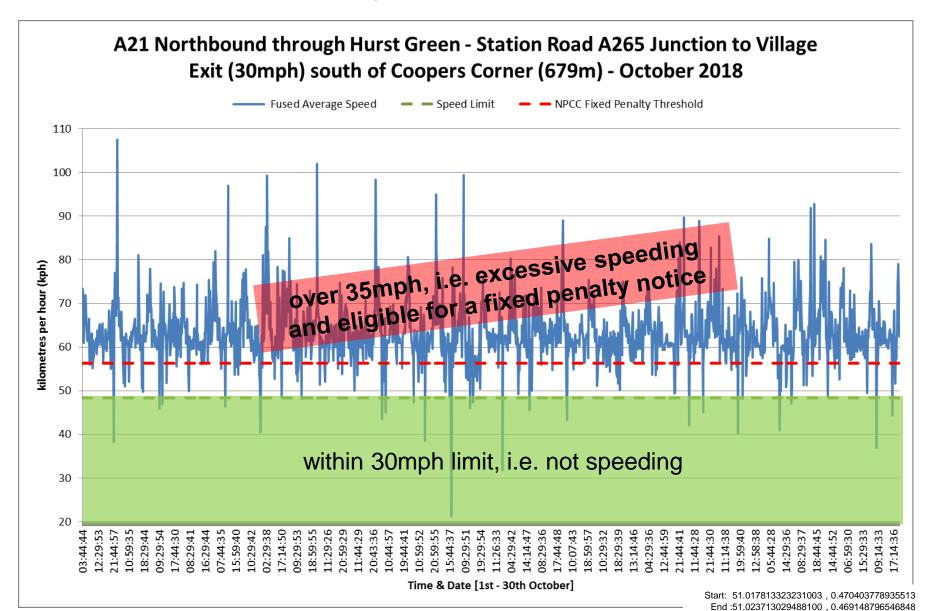


Taking another section of road in the parish, this time southbound from Coopers Corner, a 30mph limit through the village to Station Road... it shows motorists without exception breaking the law all day, everyday....



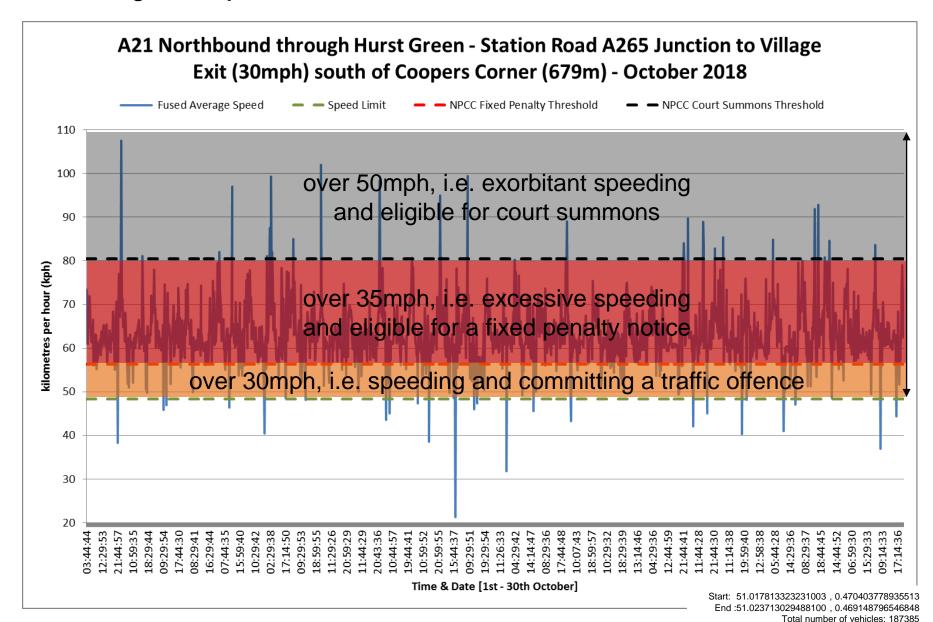
Total number of vehicles: 228259

Taking this same section of road, but travelling northbound to the village exit at Coopers Corner from the Station Road junction, a 30mph limit ... it shows motorists almost without exception speeding...



Total number of vehicles: 187385

In fact this narrow, unlit and badly maintained stretch of the A21 through Hurst Green, passes many houses, businesses, a church and several side roads, sees virtually noone driving at the speed limit and introduces the NPCC Court Summons Threshold....



Historically, surely this speeding problem must be a recent thing, or Sussex Police and Highways England would have introduced measures to combat this mass lawbreaking? Comparing the northbound data from October 2015, there's little difference...

