Warnford Parish Meeting Report on Deployment of Speed Indicating Device, March/April 2022

Summary

The Speed Indicating Device (SID) hired from Corhampton & Meonstoke PC was used on the A32 in Warnford for two week periods in both March and April 2022, the first facing traffic heading towards Alton (northbound) approaching the Wheely Down Road junction and the second facing traffic heading towards Fareham (southbound) approaching the Hayden Lane crossroads. (See Appendix 1 for details). A further two deployments are planned in July and August this year.

The SID measures and records the speed of vehicles approaching it. If the speed is close to the speed limit the speed is displayed. If the speed limit is exceeded a flashing "SLOW DOWN" sign is shown. The speed limit at both deployment locations is 40mph.

The immediate effect of the sign was clear, in that vehicles approaching it visibly braked and the speed display reduced. According to Hampshire County Council (HCC) this only lasts for about three weeks after which regular users of the road become accustomed to it and the impact lessens.

The data collected by the SID can be analysed and displayed via a set of charts. Three of these for each direction have been selected and are presented in the accompanying file with explanatory notes below.

A summary of the results is as follows:

- Flows in the middle of the day are between 150 and 200 vehicles per hour in each direction
- Northbound flow peaks at about 8am, with about 400 vehicles per hour.
- Southbound flow peaks between 4pm and 6pm with about 300 vehicles per hour
- Average speed is at or below the speed limit, except between 3am and 7am northbound.
- The 85th percentile speed northbound (see note¹ below) is higher than the 40mph speed limit at all times, exceeds 45mph between 7.30pm and 8.30am, and exceeds 50mph between 5:30 and 6.30am
- Except between 1pm and 3pm the 85th percentile speed southbound is higher than the speed limit. It exceeds 45mph between 10pm and 7am.
- A few vehicles each morning and afternoon approach the village at or above 60mph northbound and at or above 55mph southbound

Implications

The implications of these figures need to be considered for the high risk locations in the village, particularly the Hayden Lane crossroads and the Wheely Down Road junction where serious accidents (including one fatality) have occurred in the recent past. Both locations have restricted sightlines for some traffic moves. There are similar issues at the main exit from Warnford Park

¹ 85th percentile speed means that 85% of vehicles passed at or below this speed. This is considered important by highway safety engineers as it gives an idea of the speed that the majority of drivers think is safe for the road. However it also highlights risk. If the 85% speed equals the speed limit of 40mph, 15% (roughly one vehicle in seven) will be exceeding it.

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(which also provides access to the church), at the Lippen Lane junction and at the exit from the George & Falcon.

A particularly serious problem for local people is crossing the A32 from River Lane to Hayden Lane on foot. (This is also the route of the Monarch's Way long distance footpath). By the most obvious pedestrian route across the crossroads, keeping to the side away from the George & Falcon exit, there is a sightline of approximately 50 metres to traffic approaching from the West Meon direction. A vehicle travelling at the speed limit of 40mph takes less than three seconds to cover this distance. According to the results summarised above, there is at least a 15% (about 1 in 7) chance that the vehicle will be travelling faster than this, at any time of day. For a vehicle travelling at 50mph the time taken to cover the 50 metres would be just over two seconds and the stopping distance would be over 60 metres. The implications are obvious and it is suggested that as a minimum the risk should be highlighted to Hampshire County Council.

Derek Chapman

15th May 2022

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Notes - see attached charts

Traffic Volume (Charts 1 and 2)

Charts 1 and 2 show the average hourly traffic volume by time of day.

The flows in the middle of the day are between 150 and 200 vehicles per hour in each direction.

The peak flow is northbound (towards Alton) in the morning and southbound (towards Fareham) in the evening. The morning peak is much sharper, with maximum flow of nearly 400 vehicles per hour around 8am. The evening peak is lower but lasts longer, with flows of over 300 vehicles per hour between 4pm and 6pm.

Night time traffic is very low, with less than ten vehicles per hour between midnight and 5am.

Speed (Charts 3 and 4)

Charts 3 and 4 show speed over the whole time the SID was deployed, by time of day.

The blue line is the weekday average (mean) speed of vehicles passing the SID during the previous hour. The brown line is the 85th percentile speed – i.e. 85% of vehicles passed slower than this speed and 15% higher.

In the Northbound direction the average speed is on or below the speed limit, except between 3am and 7am. However the 85% speed exceeds the 40mph speed limit throughout all the 24 hour period, exceeds 45mph between 7.30pm and 8.30am, and exceeds 50mph between 5:30 and 6.30am

In the Southbound direction, the average speed is at or below the speed limit for virtually the whole 24 hours. However the 85% speed exceeds the 40mph speed limit throughout the 24 hour period, except between 1pm and 3pm. Between 10pm and 7am the 85% speed exceeds 45mph.

Speed Distribution (Charts 5 & 6)

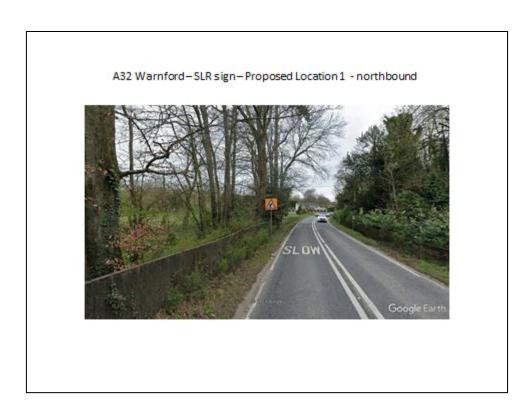
The previous charts looked at average and 85% speeds, but that doesn't tell the whole story. These charts give an idea of speed distribution around the average, by time of day. The blue line in each case is the average, for each half-hour period. The vertical brown line shows the range between the fastest and slowest vehicles during that half hour, with a blob indicating the number of vehicles passing at that speed. These charts have been drawn for an example weekday.

Northbound, the chart shows that a significant number of vehicles are passing at 50mph or more throughout the day, with occasional vehicles at up to 65mph. Between 7am and 9am the number of vehicles exceeding 50mph is highest, with several passing at 60mph or more.

Southbound, there is a smaller (but still significant) number exceeding 50mph and the maximum speed detected was 60mph. However there are occasional vehicles passing at 55mph and between 4.30pm and 6.30pm a small number passing at 60mph.

Appendix 1 – SID deployment locations as approved by HCC





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