Member Briefing Note – 20 mph Speed Limits

Background

At the Council Meeting on 9th December 2015 a motion is to be moved proposing that the Council resolves to use all appropriate avenues to press the County Council to reconsider its existing policies on speed limits and to support a Borough-wide 20mph speed limit on residential roads. If carried, the motion will be referred to the appropriate Cabinet Member at the County Council.

To assist Members in the debate, this briefing note provides a summary of current Department for Transport guidance to traffic authorities with respect to setting speed limits, and recent experiences with area-wide 20mph speed limits in other English local authorities.

Current Department for Transport Guidance

DfT Circular 01/2013, *Setting Local Speed Limits*[1] provides guidance to be used by English traffic authorities for setting all local speed limits on single and dual carriageway roads in both urban and rural areas. Paragraph 12 identifies that one of the key priorities for action is for traffic authorities to consider the introduction of more 20 mph limits and zones in residential areas to ensure greater safety for pedestrians and cyclists. This is clarified in Section 6.1 which states that 20 mph limits and zones can be introduced on "residential streets in cities, towns and villages, particularly where the streets are being used by people on foot and on bicycles, there is community support and the characteristics of the street are suitable". However, the guidance goes on to note that "general compliance needs to be achievable without an excessive reliance on enforcement". There should be no expectation on the Police to provide additional enforcement beyond their routine activities.

There is a difference between **20 mph limits**, typically covering individual or small numbers of streets and requiring signs only, and **20 mph zones**, typically covering larger areas and requiring both signs and markings. Originally, 20 mph zones required traffic calming such as road humps/chicanes, but the DfT relaxed this requirement in 2011 in order to reduce costs for traffic authorities, and to avoid the opposition which physical measures can attract (e.g. potential concerns regarding damage to vehicles and increased emergency services response times).

The Circular notes the clear evidence of the effect which reducing traffic speeds has on the number of collisions and casualties. There is a lower risk of fatal injury at lower speeds. Research shows that on urban roads with low average traffic speeds any 1 mph reduction in average speed can reduce the collision frequency by around 6%. The benefits of 20 mph

[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/63975/circular-01-2013.pdf

schemes include quality of life and community benefits, and encouragement of healthier and more sustainable transport modes such as walking and cycling. These active travel modes can make a very positive contribution to improving health and tackling obesity, improving accessibility and tackling congestion, and reducing carbon emissions and improving the local environment.

Evidence from existing 20 mph schemes

Portsmouth was the first area-wide 20mph limit in the UK, commencing in 2008. Applied on approximately 94% of roads in the city which previously had a 30mph speed limit (410km out of 438km), the scheme cost approximately £573,000 to implement. Traffic speeds in most of the streets treated were relatively low (less than 20 mph) to start with. DfT evaluation[2] in 2010 suggests that traffic speeds were reduced by an average of 1.3mph (from 19.8mph to 18.5mph), but for streets with a "before" average speed of 24mph or higher, the average reduction was 6.3mph (but still insufficient to fall below the 20 mph limit). A 22% reduction in total casualties was recorded (compared to 14% nationally over the same period). Pedestrian casualties were reduced by 16% (compared to 13% nationally). However, KSI (killed or seriously injured) casualties rose by 6%, although the absolute increase was only 1.2 per year. Just under half of surveyed respondents were satisfied with the scheme. A small decrease in traffic volumes was recorded, but this may be due to other factors.

In **Bristol**, following a successful pilot scheme in 2010 a city wide 20mph limit was introduced in phases from July 2012, with completion in September 2015. All roads except dual carriageways, 40mph and 50mph roads were considered for the new limit. The scheme was funded by the Local Sustainable Transport Fund and cost £2.3million. Evaluation of the pilot scheme indicated small changes in accident numbers, but it was too early to draw conclusions. Traffic speeds reduced by an average of 0.9mph. There were negligible changes in emissions and noise, and the bus operator reported no impact on bus journey times and service reliability. Increases in pedestrian activity and cycling levels were observed, although this may not be solely due to the 20 mph limit.

Phase 1 of a 20 mph limit scheme was introduced in **Brighton & Hove** in April 2013, covering all residential and shopping streets in the centre of Brighton. In June 2014, Phase 2 was introduced which extended the 20 mph speed limit beyond the centre, but only on streets where the majority of respondents supported the proposals. Early monitoring from the first six months of Phase 1 in the city centre indicates a decrease in traffic speed on 74% on the roads, a 20% decrease in the number of collisions and a 19% decrease in the number of casualties (based on five months of 2013 data compared with the three year average for the same five months in the previous three years.)

Summary

The evidence for the benefits of reduced traffic speeds in terms of improved road safety is clear. In response, the introduction of 20mph schemes covering residential and shopping areas has become increasingly widespread amongst English traffic authorities. They are justified not only in terms of improving road safety but also in terms of health, social and environmental benefits.

The greatest impact in reducing traffic speeds is delivered by 20 mph zones featuring traffic calming, achieving a reduction in speeds of about 9mph on average[2] . However, the majority of new schemes introduced are now signed only 20 mph limits. These are much cheaper to implement and can avoid the opposition which physical traffic calming measures can attract, but generally lead to much smaller reductions in traffic speeds (about 1 mph on average). Some reduction in the number of collisions and severity of casualties has nevertheless been recorded in recent case studies of 20 mph limits.

Given competing priorities, it is likely that the resources available for Police enforcement of any 20 mph schemes introduced in Maidstone would be limited. To be effective, such schemes would need to be generally self-enforcing. 20 mph limits are therefore unsuited to streets where average traffic speeds are high (i.e. mean speeds above 24mph) and where pedestrian/cyclist movements are low (with little potential to increase).

[2] http://www.20splentyforus.org.uk/UsefulReports/20mph_Steer_Davies_Gleave.pdf