

Bath & North East Somerset Council

MEETING:	Communities, Transport & Environment Policy Development & Scrutiny Panel
MEETING DATE:	11th March 2019
TITLE:	Review of the Department for Transport's Research into 20mph Speed Limits
WARD:	All
AN OPEN PUBLIC ITEM	
List of attachments to this report: 20mph Research Study, Atkins, AECOM & Prof M Maher for the Department for Transport (November 2018)	

1 THE ISSUE

- 1.1 At its meeting on 17th July 2017, the Panel asked to be advised of the outcome of the Department for Transport's (DfT) review into 20mph speed limits. This report is a summary of the main findings of that research.

2 RECOMMENDATION

The Panel is asked to:

- 2.1 Note the findings of the research.
- 2.2 Comment on the suggested future approach to 20mph speed limits detailed in section 13 below.

3 RESOURCE IMPLICATIONS (FINANCE, PROPERTY, PEOPLE)

- 3.1 None. This report reviews and summarises the findings of the national research. Any future 20mph limits would require funding to be allocated for their implementation and maintenance.

4 STATUTORY CONSIDERATIONS AND BASIS FOR PROPOSAL

- 4.1 The Council has powers under Sections 81 to 84 of the Road Traffic Regulation Act 1984 to implement and amend speed limits. The DfT's guidance to local

authorities on setting speed limits is contained in the document Circular 01/2013 'Setting Local Speed Limits'.

5 BACKGROUND TO THE RESEARCH

- 5.1 The objectives of the study for the DfT included looking at the effectiveness of signed only 20mph limits (ie those without traffic calming), to help inform future policy and to provide guidance for local authorities.
- 5.2 It looked at 12 case study areas in England. The evidence used in the research included questionnaire surveys with residents, interviews with non-resident drivers and user groups, speed data from surveys and GPS vehicle data, and analysis of road collision statistics.

6 HOW AND WHY 20MPH LIMITS WERE INTRODUCED

- 6.1 The researchers grouped reasons for introducing the speed limits as follows:

Transport-related: casualty reduction, reduce impact of vehicles

Community/politically driven: concerns about safety and environment

Health-related: to encourage walking and cycling, and improve health and well-being.

- 6.2 It was noted that the cost of introducing schemes varied widely because of the large variation in the size of schemes included in the case study areas. Most of the schemes were funded from local authority budgets although in one case a former primary care trust contributed and in another case developer contributions were used.
- 6.3 Factors identified as helping to enable 20mph schemes included early engagement with stakeholders and communities to achieve buy-in, and having supportive campaign groups. Common factors seen as barriers were funding and staff resources (especially in relation to being able to undertake effective engagement), opposition in some cases from anti-lobby groups, confusion by the media and others about police enforcement, and political change causing delay.
- 6.4 In terms of lessons learnt, the researchers highlight the need for objectives and outcomes from 20mph schemes to be stated clearly and delivered to ensure their effectiveness and to demonstrate value. They also point to the need to link schemes with wider policies on transport, health, environment and the local economy. They state that there is still an evidence gap in terms of the impact of 20mph limits on the local economy, health and environment/air quality.

7 SUPPORT FOR 20MPH LIMITS

- 7.1 Amongst user groups, post implementation levels of support were found to be as follows: cyclists 81%; residents 75%; non-resident drivers 66%; motorcyclists 29%.
- 7.2 Reasons for being supportive of 20mph speed limits included a perception that they create a safer environment, they reduce the severity of injuries and put cyclists under less pressure from drivers.

- 7.3 The main concern was related to compliance and a common view that the likelihood of being caught exceeding a 20mph speed limit was low.
- 7.4 It was found that there was higher support amongst residents living in larger residential area-wide schemes compared to smaller scale and city centre schemes. In the two city centre case study areas the schemes included some A and B-class roads as well as minor roads. Comments from the focus groups made reference to the unsuitability of 20mph limits on main roads, although some felt the benefits to be gained from doing so would be greater. There was very strong support for 20mph limits near schools.

8 IMPACT ON SPEEDS AND DRIVER BEHAVIOUR

- 8.1 The researchers had access to over 18 million vehicle kilometres of 'before' and 'after' GPS-derived journey speed data, as well as 410 spot speed site surveys.
- 8.2 Prior to the introduction of the 20mph limits, 44% of drivers in the residential areas and 59% in the city centre areas were already travelling below 20mph. After the introduction of the 20mph limits this increased to 47% in residential areas and 65% in city centre areas.
- 8.3 The DfT guidance on setting speed limits (Circular 01/2013) states that 20mph limits are most appropriate where speeds are already below 24mph. In the residential study areas, 70% of drivers travelled below 24mph and 86% in city centre areas, after 20mph limits were introduced.
- 8.4 The study identified that as well as there being better compliance in city centre 20mph schemes than those in residential areas, there was also greater compliance on minor local roads compared to 'important' local roads.
- 8.5 The researchers believe there is evidence that the character of a road has a bigger influence on driver speed than the speed limit itself, and that "changing the look and feel of the street ... may therefore result in higher levels of compliance."
- 8.6 The GPS-derived journey speed data showed that overall speeds (calculated as median speeds) fell by 0.7mph in residential areas and 0.9mph in city centre areas following the introduction of 20mph limits. In four of the study areas, spot speeds (calculated as mean speeds) fell by between 0.9mph and 2.3mph. In three other study areas there was no significant change in before/after spot speeds. The greater change in speeds was where 'before' speeds were higher.
- 8.7 Speeds were assessed on other 30mph roads over the same period where 20mph limits had not been introduced in order to strengthen the evidence. The researchers commented that existing DfT data had already shown that from 2011 to 2016 average speeds on local A-class roads had dropped by 1.9mph. When this was taken into account they concluded that the reductions in speed in the study areas was partly due to the introduction of the 20mph limits and partly due to this background trend of falling speeds.
- 8.8 Despite the measured speed reductions, when asked if they had noticed a change in speed as a result of the 20mph limits, around two-thirds of residents and just over half of non-resident drivers did not perceive there to be fewer vehicles driving at excessive speed. However, more than two-thirds of residents

and non-resident drivers said they agreed that ‘the 20mph limit makes it more acceptable to drive at a lower speed.’

9 PERCEPTIONS ABOUT WALKING & CYCLING IN 20MPH LIMITS

- 9.1 The study refers to previous research which found that fear of collisions may suppress walking and cycling, and that improving the behaviour of drivers could have a positive impact on this.
- 9.2 From their own study, the researchers state that 20mph limits are perceived to be beneficial for cyclists and pedestrians, and that this is likely to be related to benefits from slower speeds rather than a belief that drivers are being more considerate.
- 9.3 Slightly more than half of residents taking part in the research agreed that 20mph limits provide a more pleasant environment for walking and cycling. But only 28% agreed that it is now a safer environment for children.
- 9.4 When asked about the importance of 20mph limits on the perceived quality of the walking and cycling environment, residents taking part in focus groups tended to state it was only one factor amongst others, with safe crossings, considerate driver behaviour and suitable cycle infrastructure being seen as other requirements.

10 IMPACT ON COLLISION AND CASUALTY RATES

- 10.1 The study looked at comparator 30mph areas so that background factors that may affect collisions, such as technology improvements, road type and weather, could be taken into account. The difference between the change in collisions in the study areas and the background trend was then assumed to represent the effect of the 20mph limits, using ‘before’ and ‘after’ collision data.
- 10.2 In the residential study areas, the researchers found there was not enough evidence to state there was a statistically significant change in collisions and casualties following the introduction of 20mph limits. It is important to note that the ‘after’ data availability ranged from 17 to 44 months, which is a relatively short period of time.
- 10.3 The number of collisions and casualties had fallen since the introduction of 20mph limits, but there had also been a reduction in the comparator 30mph areas.
- 10.4 One of the city centre study areas did record a statistically significant reduction in collisions (-18%) and casualties (-29% pedestrian casualties; -51% casualties aged 75 and over). The researchers comment on this particular scheme in some detail in their report, where they note that the area already had a downward trend in collisions prior to the 20mph limit. The area affected covered a number of more major, higher flow city centre A and B-class roads, where 20mph limits had been applied. Their conclusion was that based on the evidence available that there was a significant reduction in collisions and casualties following the introduction of the 20mph limits, even after taking account of the background trend.
- 10.5 Overall, the researchers stated that in most of the case studies there was no evidence of a statistically significant change in collisions or casualties, and

that due to the small size of the data sample and the fact that collision rates are known to fluctuate from year to year, further data would be needed once the schemes have been in for longer in order to assess the impact further.

11 IMPACT ON ROUTE CHOICE, JOURNEY TIMES & MODE USE

- 11.1 Although the researchers advised that journey times increased by 3% in residential areas and 5% in city centre areas, since the distance a driver travels on these roads would be relatively short, the real impact would only be a few seconds delay.
- 11.2 It appears that the 20mph limits have not affected the routes drivers use. Only 8% of non-resident drivers said they avoided driving in the study areas.
- 11.3 Nearly all residents in the study areas who took part in surveys said they are walking and cycling about the same amount as they did prior to the 20mph limits being introduced. But a small number with children did state that their children are cycling locally more often now. It is important to note that this information on mode use was based on asking residents rather than any data on levels of walking and cycling.
- 11.4 Residents and drivers were asked for their views about benefits from the 20mph limits on social interaction in the street, children playing outdoors and whether people are avoiding the area and consequently affecting local shops, but very few believed the speed limit had affected these. No data was collected as part of the research into impacts on health or the environment.

12 RESEARCHERS' CONCLUSIONS

- 12.1 20mph limits are generally supported despite residents and drivers perceiving that vehicle speeds have not changed.
- 12.2 In the study areas, the majority of drivers were already travelling under 20mph before the speed limits were implemented, but there has been a small increase in the proportion since.
- 12.3 Speeds have fallen by 0.7mph in residential areas and 0.9mph in city centre areas.
- 12.4 Larger speed reductions have been seen on faster roads carrying higher volumes of traffic, but the actual reduction was only about 1mph. Where average 'before' speeds are above 24mph signage alone is unlikely to lead to compliance.
- 12.5 The character of a road has more influence on the speed at which people drive than whether it is a 20mph or 30mph speed limit.
- 12.6 Changing how drivers behave and think about driving through residential areas or roads with high levels of cyclists and pedestrians needs to be taken place to help improve compliance.
- 12.7 20mph limits have the potential to deliver a range of transport and other benefits, particularly relating to health and community.
- 12.8 The most common concern from the public is about compliance.

- 12.9 There was no significant change in collisions or casualties other than in one city centre location. The data available was limited and this requires further research in the future.
- 12.10 Further evidence is needed to examine the relationship between 20mph limits and the impact on walking and cycling activity.
- 12.11 The DfT's guidance on setting speed limits could be strengthened to encourage local authorities to work with partners such as those in the police, environment, health and communities to deliver 20mph limits as part of an integrated approach, and also to address public concerns about enforcement.

13 FUTURE APPROACH TO 20MPH SPEED LIMITS IN BATH & NORTH EAST SOMERSET

- 13.1 Whilst the research for the DfT has identified modest impacts on reducing vehicle speeds and, based on data currently available, have little or no impact on collisions, it has identified that 20mph limits can have a positive influence on encouraging more journeys to be taken by walking and cycling. Even though other factors such as safe crossings and appropriate cycle infrastructure are cited as being important in encouraging such behaviour, 20mph limits are one element of this.
- 13.2 The majority of residential roads in the district, whose primary purpose is not as a through route for traffic, already have 20mph limits. There are some villages and other residential areas which do not have the limit in place.
- 13.3 It is suggested that future requests for 20mph speed limits are considered and prioritised in the same manner as requests for other speed limit changes and traffic management measures. This includes consideration of cost and ongoing maintenance of signs/lines, likely benefits, and with reference to other transport priorities. There is no additional funding available and 20mph speed limits would have to be addressed within current budgets and work programmes.
- 13.4 If funding is allocated to investigate the feasibility of a 20mph limit in a particular road as part of a future work programme, it would be assessed against current DfT speed limit guidance. It appears likely that as a result of the research the DfT will review that guidance.

14 CONSULTATION

- 14.1 None undertaken for this report. Any speed limit change requires the making of a Traffic Order, which includes local consultation.

15 RISK MANAGEMENT

- 15.1 A risk assessment related to the issue and recommendations has been undertaken, in compliance with the Council's decision making risk management guidance.

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Background papers	None
Please contact the report author if you need to access this report in an alternative format	