



Independent Evaluation and Review of 20mph Trials – Tonbridge Summary

Provided to Kent County Council



RESEARCH SERVICES

agilysis

Tanya Fosdick
Dr Craig Smith
Momina Kamran
Samuel Scott

SUMMARY OF TONBRIDGE 20MPH TRIAL

This report summarises the findings of an independent review and evaluation of two experimental traffic orders (ETOs) implemented as two separate town-wide 20 mph trials in Kent, with this summary focusing on **Tonbridge specifically**. The full report sets out the analysis of the trials in Faversham and Tonbridge in detail.

Speed reduction plays a key role in a number of policy areas, and it is therefore important to determine if these trials have been effective in achieving their aims. Speed has a direct influence on the likelihood, and severity, of road collisions occurring. Nilsson's 'Power Model' "shows that a 1% increase in average speed results in approximately a 2% increase in injury crash frequency, a 3% increase in severe crash frequency, and a 4% increase in fatal crash frequency" (International Transport Forum, 2018, p. 5). Therefore, reducing speed by a few miles an hour can greatly reduce the likelihood and severity of road collisions. In addition to increasing actual risk, inappropriate speeds can influence road users' perceptions of risk, reducing their likelihood to engage in active travel modes, as cyclists and pedestrians are more vulnerable in the event of a collision.

Kent's Vision Zero Strategy uses a Safe System approach to strive to have no road fatalities or life changing injuries on its roads by 2050. Furthermore, it seeks to encourage walking and cycling as the safe and easy choice. A fundamental element of the international best practice of the Safe System is 'Safe Speeds'. A 2020 YouGov survey of Kent residents found that the perception of safety was a key influence on the likelihood to use active travel modes, with 56% feeling that traffic is too fast to cycle on the roads. Kent's road safety strategy emphasises community engagement to address concerns and improve safety and quality of life.

Both Faversham and Tonbridge are developing their Local Walking and Cycling Infrastructure Plans (LCWIPs).

Achieving speed reductions is therefore a central pillar of these strategies, with this report setting out findings from the trials and providing recommendations for future actions.

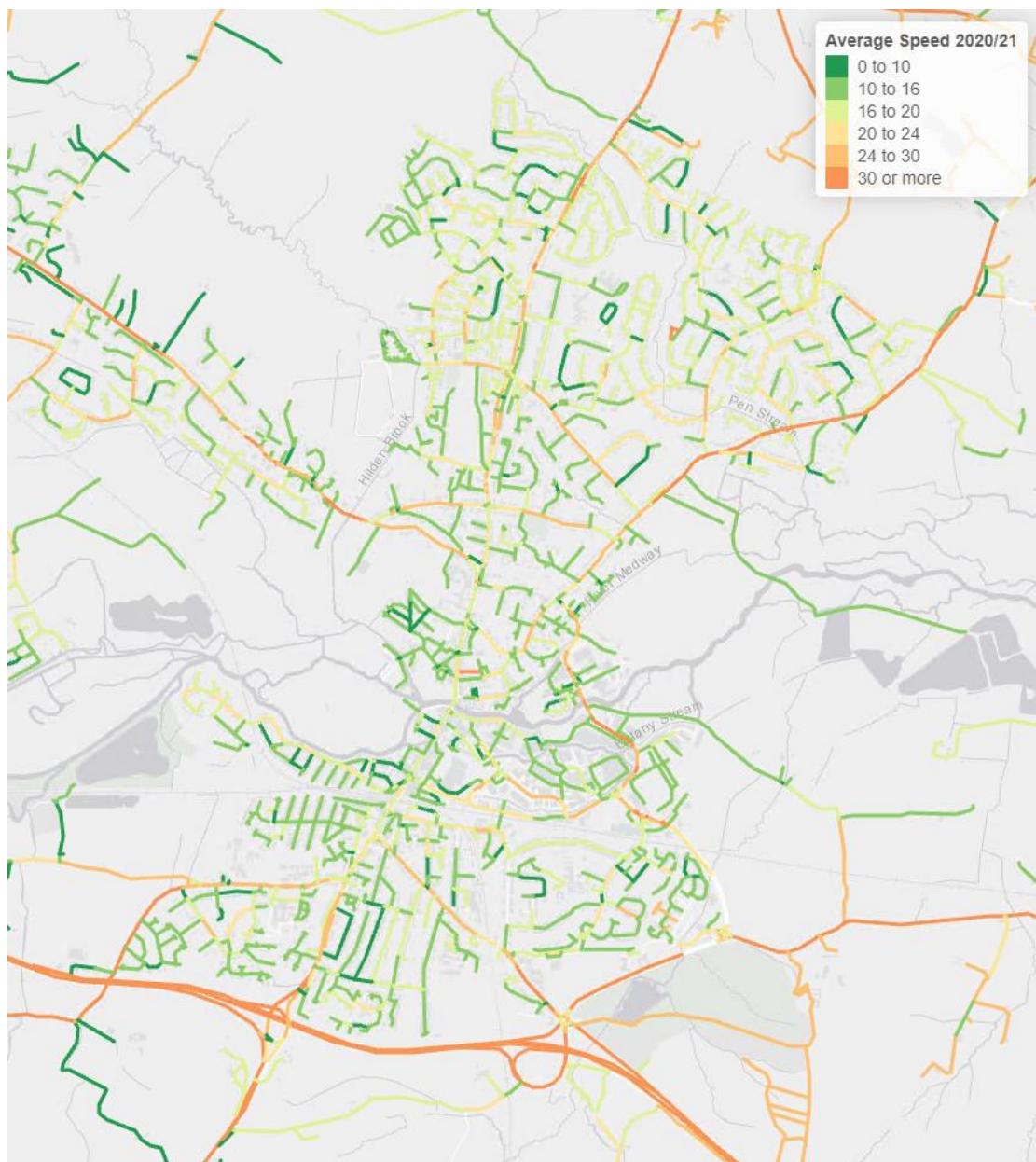
Both qualitative and quantitative data have been used to understand the impact of the introduction of 20mph limits in these two towns. These sources are:

- Behavioural surveys comprising the outputs of c. 600 face to face surveys with questionnaires (1,800 respondents in total)
- Pre-existing research studies and historic case studies.
- Consultation evidence received by KCC between 31st July 2020 and 3rd March 2021 on the experimental traffic orders for both trial areas
- Road user counts and vehicle speed measurements from automatic traffic counters
- Road user counts and vehicle speed measurements from Vivacity Artificial Intelligence sensors
- In-vehicle telematics data (highways network speed) from Ordnance Survey

The town-wide 20mph zones implemented in Tonbridge were part of plans to increase walking and cycling and was delivered in the context of the COVID-19 pandemic, where rapid solutions were required to encourage social distancing when travelling and active travel schemes were being funded and promoted. The scheme relied on interventions including road markings, signs, gateways, and awareness campaigns to inform road users of the new limit.

Kent County Council completed formal consultations on the trials with residents. Online consultations were conducted between July 2020 and March 2021, with responses from 1,123 individuals for the Tonbridge consultation. In this consultation, only 26% of Tonbridge respondents were in favour of the 20mph zone, with objections focusing on the 20mph trial being too extensive and inappropriate for major routes. There were concerns about worsening congestion from slower speeds, safety issues and the impracticality of enforcement.

Figure 1 - Average speeds in Tonbridge (April 2020 - March 2021)



Analysing the traffic count data, Tonbridge had higher average speeds before implementation and therefore greater reductions in observed speed were achieved, as expected. The average speed reduction in Tonbridge was 10.3% (-3mph). Only four of the 12 sites in Tonbridge were lower than 24mph post-trial. None of the sites in Tonbridge had average speeds below 20mph in July 2021.

Figure 1 shows telematic data for the whole of Tonbridge, with many roads achieving average speeds below 20mph. Many roads in Tonbridge saw reductions in average speed of up to 5mph, particularly in the north of the town. It should be noted that telematics data tends to show lower speeds as they are measured over a stretch of road, rather than an individual location. Furthermore, it is an average over a year, rather than a week.

There was a mixed picture amongst Tonbridge residents in relation to 20mph zones and their impact. Support was lower in Tonbridge than in Faversham and opposition to 20mph zones increased after the trial. There were complaints that a blanket-imposition of 20mph zones is not welcome (28% of respondents), and some felt that 20mph zones 'slow down traffic and journey time increases.' Post-trial, there were decreases in agreement that speed limits are appropriate and that most drivers obey them. There were also increases in the proportion of Tonbridge residents who thought it was acceptable to exceed 20mph limits and those who were willing to do so. However, the majority of respondents said that they would be willing to always drive to the set limit and this actually increased in Tonbridge.

More positively, residents did agree that the main benefits of local traffic initiatives are increased road safety for pedestrians and cyclists. Reasons for implementing 20mph zones were that they are 'better for children', 'needed in residential areas' and 'increasing safety' for Tonbridge residents. Furthermore, post-trial, there were increases that speed limits were safe for children to walk and cycle.

These positive attitudes towards walking and cycling were reinforced by reported and observed behaviour. Over 10% of respondents said that their levels of walking and cycling had increased after the 20mph limits were installed and over 20% felt that there was more walking and cycling occurring in their area. There were also increases in pedestrian counts in the town. Walking and cycling was less common amongst Tonbridge residents than those from Faversham, both before and after the trial.

The full report details the individual speed data for each road, allowing Kent County Council and Tonbridge and Malling Borough Council to review each site and to determine if additional measures are required to encourage compliance with 20mph (or if limits should return to 30mph).

RECOMMENDATIONS

- The 20mph zone will contribute to the strategic road safety and active travel objectives set out locally but consideration is required as to how to improve acceptability and compliance in specific locations. The speed reductions, coupled with small but significant self-reported uptake in active travel modes, suggest there is merit in retaining zones where compliance was achieved and assessing roads where the average speed is above 24mph.

- For Tonbridge, it is recommended that a road-by-road review is undertaken, with the purpose of identifying where 20mph is effective; where complementary measures could be adopted to support the 20mph zone; or where a return to 30mph might be appropriate. It might be beneficial to undertake further engagement with the community in Tonbridge to gather their feedback on these individual roads.
- Scheme opposition and concerns around ‘area-wide’ impositions may be alleviated through the use of an incremental or ‘section by section’ approach if the zone is considered in other towns.
- A much greater focus should be given to associated and complimentary activity in Tonbridge (such as more interaction and co-ordination with pro-campaign groups) in order to achieve greater support levels for 20mph and to highlight their benefits as part of the LCWIP.
- Enforcement remains an important issue for residents post implementation. Authorities, in conjunction with the Police, should focus on ‘compliance benefit messaging’ as oppose to punitive enforcement. This shifts the narrative so as to generate public support through changing individual mindsets. Addressing driver behaviour is key to cultivating safe environments for active travel modes. A lack of driver consideration for other roads users is one of the issues where the limits reviewed here have not reduced people’s concerns significantly.
- Shared responsibility is a key imperative within the Safe System philosophy adopted within Kent’s Vision Zero Strategy. Communication to work with road users and increase that sense of responsibility could be key to increasing acceptance of 20mph zones.
- To keep alignment with the authorities’ wishes for the zones to be self-enforced, compliance messaging should be produced which articulates the evidence presented here that 20mph schemes can have a positive effect on average speeds and active travel, even when signed only, without additional engineering or enforcement.
- Longer-term commitment, sustained public engagement, articulated messaging through a tailored marketing mix, and the maintenance of intergrated policy approaches towards 20mph schemes are all more likely to yield success moving forward with the schemes.



27 Horsefair | Banbury | Oxfordshire | OX16 0AE
+44 1295 731810 | info@agilysis.co.uk | www.agilysis.co.uk

An associated company of Road Safety Analysis
A company registered in England, Company Number: 10548841
VAT Reg No: 260474119

agilysis