
Tonbridge Town wide 20mph zone trial

To: Tonbridge Joint Transportation Board, 22 November 2021

By: Tim Read – Head of Transportation, Kent County Council

Classification: Unrestricted

Summary

This paper provides an update on the Tonbridge town-wide 20mph limit trial that was funded by the Department for Transport's Emergency Active Travel Fund.

This report is intended to enable discussion and to consider and debate the officer recommendation.

1.0 Background

- 1.1 Kent County Council (KCC) was awarded £1.6 million from the Department for Transport's (DfT) Emergency Active Travel Fund (EATF) (tranche 1) to invest in walking and cycling initiatives across the County. This was in response to the Covid 19 pandemic and the social distancing restrictions that were in place, which reduced the capacity of public transport and sought to promote more active travel.
- 1.2 Demand for cycling has been growing nationally, with cycling retailers experiencing high demand over the past 18 months. There has been an increasing demand across the County for area wide 20mph schemes. In response to the opportunity that the EATF presented a decision was made, by the KCC Cabinet Member for Highways and Transportation, to progress East Kent and West Kent town-wide trials. The project would enable KCC to assess how these schemes work for large scale areas before similar schemes are considered elsewhere. Tonbridge and Faversham town were chosen as the trial areas.
- 1.4 Due to the 'emergency' nature of the fund, the DfT informed all highway authorities that works must be started within four weeks of providing the funding, and then completed within eight weeks which meant the "go live" date for the trial needed to be in place by 18 September 2020. This was particularly challenging and took place during the height of the pandemic.
- 1.5 The trial was introduced through an Experimental Traffic Regulation Order (ETRO) which can be utilised for 18 months if required. This allows for changes to the highway to be implemented quickly with consultation taking

place throughout the trial, whilst the public are experiencing the change. It also means KCC can test the impact and monitor to see how it performs. Another benefit of using an ETRO is that it allows for changes to be made during the trial as long as additional roads are not added, as these would not have been consulted on.

- 1.6 The trial 20mph zone was agreed following discussion with the Leaders and respective portfolio holders of both KCC and Tonbridge and Malling Borough Council (TMBC). The zone was defined on the ground using signing and road markings alone. No traffic calming measures such as buildouts or road cushions/humps were installed.
- 1.7 The aim of the town-wide 20mph speed limit is to encourage active travel by reducing vehicle speeds, which helps to support the sharing of road space with cyclists, especially where dedicated measures cannot be provided due to a lack of available highway land and other constraints. This scheme can support walking and cycling, as part of a range of network improvements which will be confirmed in the forthcoming borough Active Travel Strategy.
- 1.8 Supporting walking and cycling especially for local journeys can also help to improve physical and mental health, reduce traffic congestion, contribute towards improved air quality and compliment ongoing infrastructure upgrades which include the recently opened cycle hub at Tonbridge Station.
- 1.9 The success of the trial will be determined by analysing several sources of information, which include pre, during and post-trial surveys and other monitoring data:
 - Consultation feedback (1,123 responses received)
 - Attitudinal surveys (face to face questionnaires – approx. 600).
 - Pedestrian counts in certain locations
 - Cycle counts in certain locations
 - Average speeds in certain locations
 - Crash collision data although this needs to be over a longer period, usually 3 years.
- 1.10 It should be noted that the trial has been implemented in an extremely unusual year for collecting and analysing data, compared with previous years due to the pandemic, the restrictions that have been introduced and the implications these have had for travel demand and commuting patterns. In most cases only 8–10 months' worth of data has been collected, the majority through the autumn, winter and spring months which historically do not encourage take up of walking and cycling in England due to inclement weather. Despite having similar climates some other European countries currently have a higher propensity to cycle year-round and have better networks to support this.

1.11 A plan of the 20mph zone can be seen in **Appendix A**. The buff-coloured shading shows the extent of the trial area, the existing 20mph roads are highlighted in green and the extents of the arterial routes into and out of Tonbridge included in the 20mph zone are highlighted in blue.

2.0 The Consultation Report and feedback

2.1 KCC commissioned Project Centre to analyse the feedback received from the consultation. The full report by Project Centre can be seen in Appendix D of the Agilysis report.

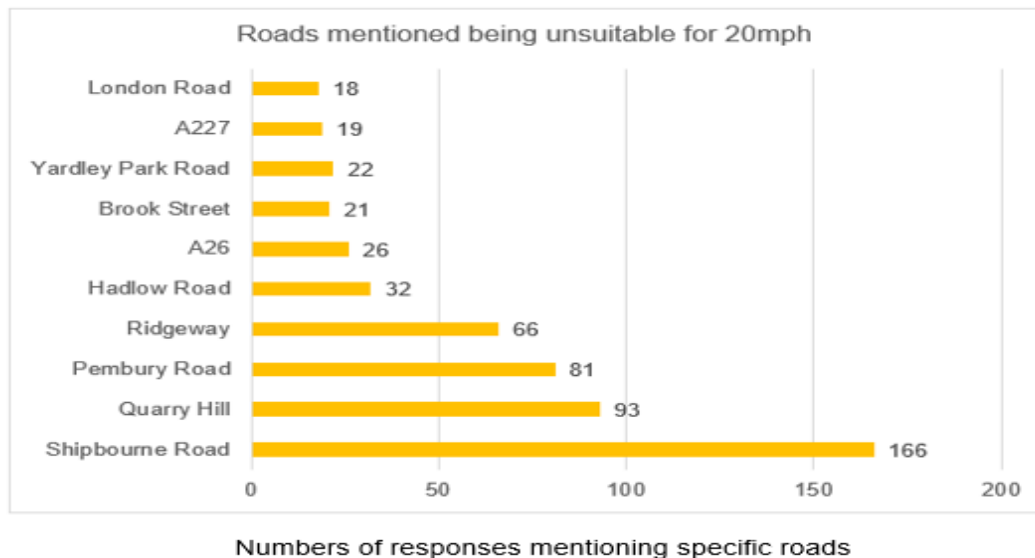
2.2 A consultation report was produced and discussed at the September 2021 Joint Transportation Board.

2.3 The consultation received 1,123 responses. The key findings are:

- The majority of the people who responded to the questionnaire object to the idea of a town-wide 20mph scheme, with 7.4 out of 10 people disagreeing with the scheme.
- The most common reason given for their objection was that the proposed area was too extensive and 20mph for major arterial routes was unsuitable, and likely to cause additional traffic and safety issues.
- Most people also disagreed that the 20mph limits will make Tonbridge healthier (64%), safer (56%) and cleaner (63%).
- Those who supported the idea primarily felt it would improve safety, while others also mentioned environmental benefits and noise reduction.

2.4 The diagram below highlights where there were concerns with some of the roads included within the 20mph zone. Namely with Shipbourne Road, Quarry Hill Rd, Pembury Road and the Ridgeway having a significant mention amongst respondents. Table 1 in paragraph 3.6 shows all the roads within Tonbridge that quite comfortably have average speeds below 24mph - green to yellow colour coded and roads where average speeds exceed 24mph – light and dark orange.

Consultation feedback on roads not being suitable for 20mph speed limit



3.0 Additional data analysis

3.1 KCC commissioned Agilysis Ltd to do an independent analysis of the mixture of qualitative and quantitative data collected and make recommendations. The full report investigates and compares the 2 Towns data. It also looks at other examples of large area 20mph speed limits nationally and their findings and other local emerging strategies and how a lower speed limit may assist in their implementation such as the Active Travel Strategy. The full independent report can be seen in **Appendix B**. A 'Tonbridge only' summary of that report can be seen in **Appendix C**.

4.0 Attitudes – Qualitative Survey Data

4.1 KCC commissioned Lake Market Research to conduct a research and evaluation study to monitor resident response in Tonbridge via a pre and post face to face survey. The full report can be seen as an Appendix H in the Agilysis report.

4.2 There was a mixed picture amongst Tonbridge residents in relation to 20mph zones and their impact. The majority however said that they would be willing to always drive to the set limit.

4.3 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.

4.4 The survey included pedestrian, cyclist and driver attitudes. There are positive attitudes that 20mph limits encourage more walking and cycling. This

was 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.

- 4.5 There were concerns that a blanket-imposition of 20mph zone 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 20mph 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. A significant percentage of residents felt 20mph limits are frustrating for drivers.

5.0 Speed Data

- 5.1 **Table 1** shows the locations of the traffic count and speed surveys along with the Ordnance Survey speed survey map. **Table 2** shows the average speeds both before and after implementation of the 20mph speed limit as well as the observed difference in average speeds. Traffic profiles and comparisons of data sources can be seen in Appendix A, B and F of the Agilysis report.

Average speeds for Tonbridge Town Centre and actual traffic counter survey locations

Figure 10- Tonbridge Average Speeds (April 2020 to March 2021)

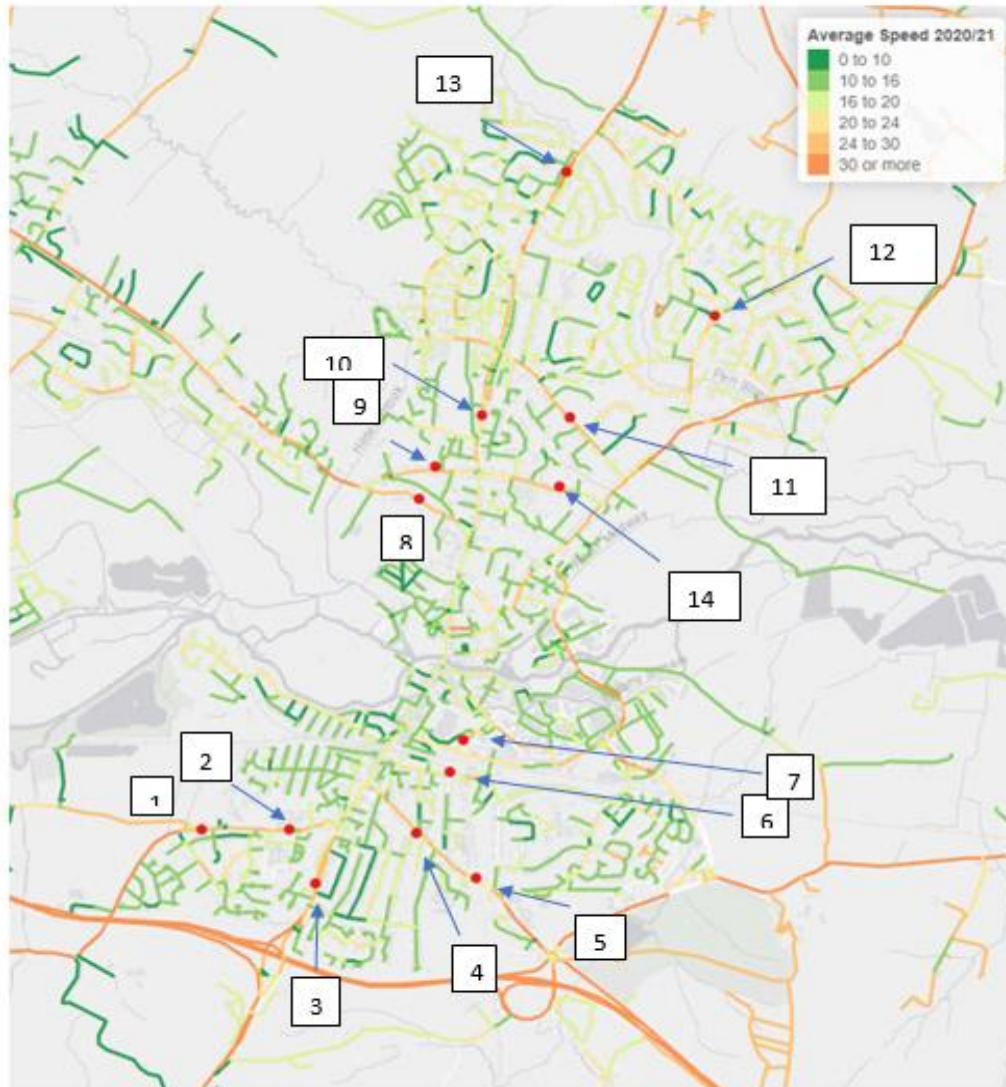


Table 1 – Ordnance Survey average speeds on all roads within Tonbridge Town Centre and the numbered locations of the counters collecting actual speeds

Location of ATC survey	July/August 2020 Speeds in mph	Jul-21 Speeds in mph	Difference In mph
Site 1 and 2 Brook Street	29.4	25.2	-4.2
Site 3 A26 Quarry Hill Rd	33.2	28.6	-4.6
Site 4 & 5 Pembury Road	31.4	26.9	-4.5
Site 6 Priory Road	25.1	23.7	-1.4
Site 7 Avenue Du Puy	23.7	22.7	-1
Site 8 B245 London Road	32.5	28.4	-4
Site 9 Dry Hill Park	27.3	23.2	-4.1
Site 10 A227 (Shipbourne Road south site)	25.9	23.2	-2.7
Site 11 The ridgeway	32.7	30	-2.8
Site 12 Higham Lane	26.8	24.7	-2.1
Site 13 Shipbourne Road	31.3	28.2	-3.1
Site 14 Yardley Park	30.1	28.2	-1.9

Table 2 – Comparison of actual average (mean) speeds pre and during trial period (September 2020 – November 2021).

5.2 The above table shows that all locations that were surveyed benefitted from speed reductions ranging from 1.0mph to 4.6mph.

6.0 Pedestrian and cycle counts

6.1 KCC commissioned PRMS to carry out pedestrian and cycle counts. The full report can be seen in Appendix I in the Agilysis report. Data was gathered from pedestrian and cyclist counts in July 2020, September/October 2020, December 2020 and May/June 2021.

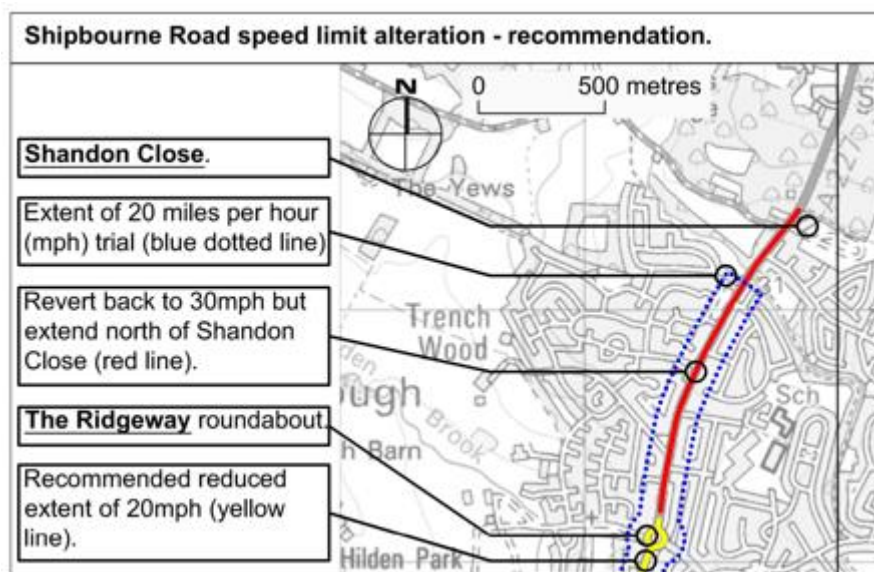
6.2 The main findings showed that there were recorded increases in pedestrian counts compared to the pre-trial baseline with Tonbridge recording a 46.9% increase between the July 2020 survey and the second survey in

September/October 2020, a 25% increase between July 2020 and December 2020 and an overall 3.4% increase between July 2020 and May/June 2021.

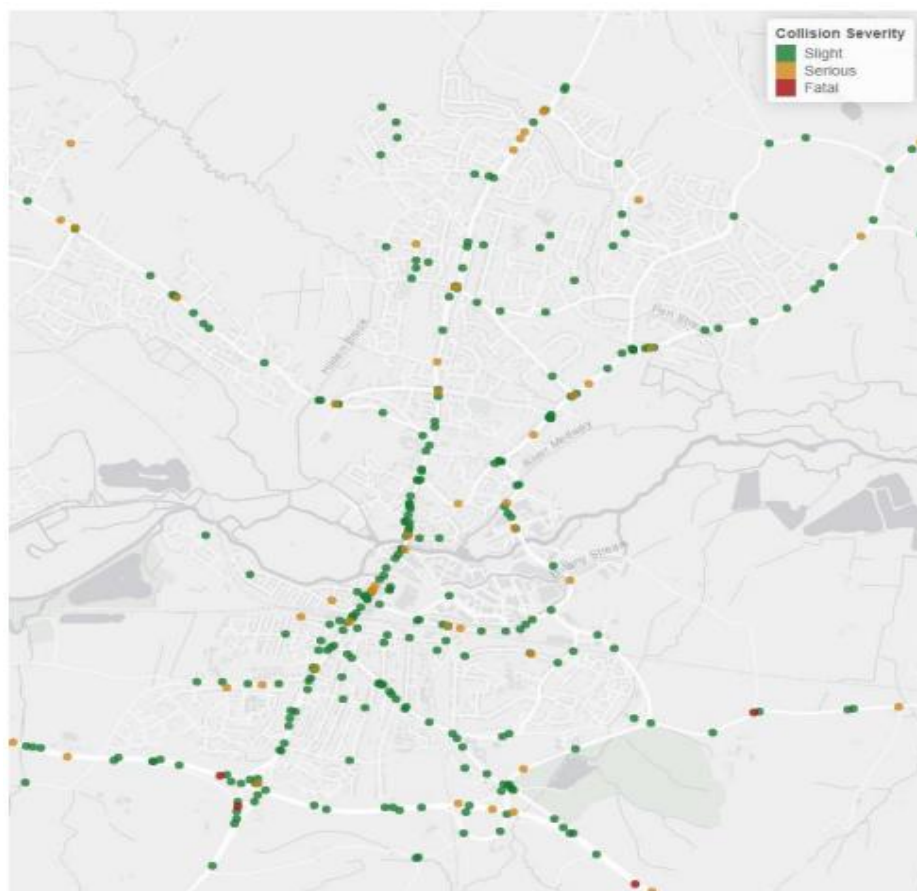
- 6.3 Cycling counts over the same periods decreased by 31.6% between the July 2020 survey and the second survey in September/October 2020, a 40.5% decrease between July 2020 and December 2020 and an overall 29.3% decrease between July 2020 and May/June 2021.
- 6.4 Cycling counts appear to be more affected by time of year and weather than pedestrian counts.
- 6.5 We have no direct evidence or proof that the 20mph trial resulted in improved feelings of road safety and/or propensity to cycling, although it would be a reasonable assumption.

7.0 Recommendations

- 7.1 The recommendation is to retain the full extent of the 20mph zone as per the trial except in Shipbourne Road where the 30mph limit should be reintroduced to a point approximately 50m north of the roundabout with The Ridgeway and Darenth Road. In addition it is recommended that the 30mph gateway on Shipbourne Road near Willow Lea is extended further north to cover Whistler Road, Cherry Tree Road, Horns Lodge Lane and Shandon Close. This would need a separate consultation as it does not form part of the 20mph trial. Shipbourne Road north of The Ridgeway is wide, benefits from cycle facilities, reasonably wide footways, central refuge islands and formal crossing points. See map below.



- 7.2 Overall the extended 20mph zone will contribute to improvements in road safety and will aid the implementation of Kent's Active Travel Strategy and emerging Vision Zero Strategy . The moderate speed reductions, increased pedestrian confidence and the small but significant self-reported uptake in active travel modes, suggest there is merit in retaining large parts of the zone without any further measures. However there is a need to achieve better compliance with the reduced speed limit on some roads, particularly those that have average speeds over 24mph. Therefore officers are recommending that investigations take place to see whether additional complimentary measures could be implemented to support this. These may include education, training & publicity or potential engineering interventions.
- 7.3 Appendix G in the Agilysis report provides pre-trial crash map information. The map is replicated below for ease and clearly shows the majority of incidents occur on the arterial/main routes into and out of Tonbridge Town as would be expected due to larger volumes and generally higher speeds than residential areas. Post-trial crash data is not available at present since analysis of crash data takes place over a minimum 3 year period to see whether a pattern is occurring at specific cluster locations or there are changes in rates and/or severity on routes.



Reported Injury Collisions in Tonbridge (2015-2019)

7.4 In order to achieve better compliance of the 20mph speed limit, it is recommended that the following roads should be further investigated to see if additional engineering or innovative measures could be introduced to achieve better speed compliance.

- Site 1 & 2 Brook Street –people and vehicles mix here regularly with significant pedestrian, cycle activity due to schools. 20mph is considered to be wholly appropriate.
- Site 3 A26 Quarry Hill Road – A busy main route into and out of Tonbridge with significant pedestrian/vehicle activity due to schools but lacking in any cycle facilities, meaning vulnerable road users are at risk if speeds are high. Whilst various options for cycle facilities have been investigated none have been acceptable to date.
- Site 4 & 5 Pembury Road – A main route into and out of Tonbridge with very heavy pedestrian flows at the start and end of the school day. With several schools in the vicinity and no cycle facilities this is an area where people and vehicles mix regularly and 20mph is considered to be wholly appropriate.
- Site 8 B245 London Road - A main route into and out of Tonbridge with high pedestrian flows from several schools in the vicinity. Again, with no formal or segregated facilities it is felt that a 20mph speed limit would provide a safer environment to vulnerable road users.
- Site 11 The Ridgeway – A wide distributor road with wide central hatching and straight in geometry. This route has moderate pedestrian flows and vehicle flows but average speeds have not reduced significantly due to the geometry. Additional interventions are required to improve compliance here.
- Site 14 Yardley Park Road – A busy distributor road. Standard width road and footway with moderate pedestrian and traffic flows but average speeds have not reduced significantly with signing and road markings alone so again it is recommended that more investigation is done to seek to improve compliance.

7.5 To support the existing and any future engineering measures proposed as well as contribute to positively changing behaviours in the longer term, a targeted behavioural change campaign is recommended which will aim to raise awareness, increase knowledge and positively influence intended behaviours. This is designed to promote the benefits of lower speeds to all road users and how a 20mph speed limit supports our collective progress towards Kent’s Active Travel and Vision Zero Strategies.

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Appendices

Appendix A - Plan of extent of town-wide 20mph trial area

Appendix B – Independent Evaluation and Review of 20mph Trials in Kent

*Appendix C – Independent Evaluation and Review of 20mph Trials Tonbridge
Summary*