
**UPDATE ON THE COUNTY COUNCILS CURRENT POLICY
FOR 20MPH LIMITS AND ZONES**

To: **Joint Transportation Board – 11 December 2014**

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

Classification: **Unrestricted**

Ward: **ALL**

Summary: **This report updates the board on the County Councils current policy for 20mph limits and zones in Kent.**

For Information

1. Background

- 1.1 In recent years the demand for the implementation of 20mph schemes has been increasing in response to both local and national campaigns. A number of petitions have been submitted in recent years to various Joint Transportation Boards requesting implementation of 20mph schemes. The Times newspaper has been running a national campaign encouraging local authorities to make 20mph the default speed limit in residential areas where there are no cycle lanes. This follows the tragic death of one of their reporters in a road traffic crash. There's a national campaign "20's Plenty Where People Live" which actively promotes 20mph limits in residential and urban areas. In the 2011 British Social Attitudes Survey 73% of the public favoured 20mph limits in residential areas. A number of Highway Authorities have adopted policies rolling out blanket 20mph limits in their town and cities and public health bodies have also promoted 20mph limits to encourage healthier lifestyles.
- 1.2 Over the years KCC has been implementing 20mph schemes in Kent and has over 50 schemes covering approximately 800 roads. In addition all new residential developments are designed to keep traffic at 20mph although they are not always signed as such to avoid unnecessary sign clutter.
- 1.3 At the October 2013 meeting of the County Councils Environment, Highways & Waste Cabinet Committee an updated policy on the implementation of 20mph limits and zones was approved. The updated policy was based on work and research carried out by the County's Highways & Transportation department including a trial of speed reduction measures outside primary schools in Maidstone which included both formal and advisory 20mph schemes. An updated policy was required to respond to updated Government guidance on the setting of local speed limits which was issued in January 2013 and campaigns both nationally and locally to introduce blanket 20mph in all residential areas and outside schools.
- 1.4 The updated policy set out that the County Council would fund the implementation of 20mph schemes where there was clear justification in terms of achieving casualty reduction as part of its on-going programme of Casualty Reduction Schemes. It would also identify locations for 20mph schemes which would assist with delivering targets set out in Kent's Joint Health and Well Being Strategy.

- 1.5 Any 20mph schemes that cannot be justified in terms of road safety or public health benefits but are locally important can be funded via third parties such as local County Councillors via their Combined Members Grant, developers via Section 106 & 278 agreements and local community groups such as Parish Councils however, all schemes must meet implementation criteria set out in the DfT Circular 01/2013.

2. Policy Framework

- 2.1 The DfT published new advice to local Highway Authorities on the implementation of 20mph schemes in its circular 01/2013 in January 2013 which contains guidance on the setting of local speed limits. There are two distinctly different types of 20mph speed restrictions; 20mph limits, which rely solely on signing, and 20mph zones which require traffic calming to reduce speeds. Highway Authorities also have the powers to introduce 20mph speed limits that apply only at certain times of day. These variable limits may be particularly relevant where a school is located on a major through road that is not suitable for a full-time 20 mph zone or limit.

- 2.2 The following is a summary of the Government's guidance on the implementation of 20mph schemes:-

- Successful 20mph limits and zones are those that are generally self-enforcing.
- Self-enforcement can be achieved either, by the existing road conditions or using measures such as signing or traffic calming to attain mean speeds compliant with the speed limit.
- To achieve compliance there should be **no** expectation on the police providing additional enforcement unless explicitly agreed.
- The full range of options should be considered before introducing 20mph schemes.
- Zones should not include roads where motor vehicle movement is the primary function.
- While the Government has reduced the traffic calming requirements in zones they must be self-enforcing and include at least one physical traffic calming feature such as a road hump or build out.
- 20mph limits are generally only recommended where existing mean speeds are already below 24mph.

- 3.1 KCC's updated policy on 20s feeds in to the County's new Road Casualty Reduction Strategy for Kent 2014-2020 which has been adopted by the County to assist with meeting targets set out in Bold Steps for Kent and delivering the priorities set out in our integrated transport strategy Growth Without Gridlock (GWG). Within GWG road safety is stated as a constant priority for central and local government. The policy also assists with meeting targets set out in Kent's Joint Health and Wellbeing Strategy.

4. Primary School Speed Reduction Scheme Trials

- 4.1 In response to a petition submitted to the Maidstone JTB in 2010 requesting the implementation of blanket 20mph limits outside all schools and residential areas it was agreed to run a trial of low cost speed management schemes outside a number of Primary Schools in Maidstone. This trial, funded by local Members via their Highway Fund, included both formal and advisory 20mph schemes aiming to provide local

evidence as to whether 20mph schemes near schools could provide cost effective road safety benefits. The proposed trial was limited to primary schools within 30mph speed limits. When the trials began it was agreed that the success criteria would be a:-

- change of perception of the perceived road safety danger to children on roads adjacent to schools as perceived by various groups to include Members, general road users, residents, and school users;
- change of perception of the perceived traffic speeds adjacent to schools as perceived by various groups to include Members, general road users, residents, and school users;
- influence a modal shift of journeys to schools;
- manageable impact on traffic speed and Police enforcement requirements, and an
- increase in motorists' awareness to travel at appropriate speed outside schools.

5. Results of Primary School Speed Reduction Scheme Trials

- 5.1 Speeds outside the schools were surveyed prior to implementation, then after three and nine months. After three months the initial results were positive and in line with Government advice that 20mph limits without traffic calming generally reduce mean speeds by about 1mph.
- 5.2 After 9 months any benefits had mostly disappeared and perversely in most locations overall speeds had actually increased. The actual differences in speeds are very low and can be attributed to seasonal variation; both the '*before*' and 3 month '*after*' speeds were measured in the autumn and winter whereas 9 month '*after*' speeds were measured in the summer when speeds tend to be slightly higher due to better weather. It should be noted that actual speeds during school peak periods (8am to 9am & 3pm to 4pm) were between 6% & 20% lower than the overall daily average. The mean speeds at the schools at peak periods varied between 21mph to 25mph which would generally meet the DfT criteria for a signed only 20mph limit at school times.
- 5.3 Before and after questionnaires to capture the perception and opinion of respondents on the schemes were devised together with a local research company. A quantitative approach was adopted to the questionnaire design to allow easy codifying, although qualitative responses were received on some surveys and where practical these have been incorporated in the analysis.
- 5.4 The results were very mixed. In the majority of cases the feeling is that safety had been improved albeit very slightly from the *before* levels. The schools were originally identified to be part of the trials as the school or local community had raised concerns over the speed of the traffic. However the results of the perception surveys *before* and *after* tended to indicate that the main safety concerns were not with the speed of the traffic, but with parents parking and the congestion this causes which actually contributes to keeping overall speeds low at school times.
- 5.5 No conclusions can be made with respect to the personal injury crash records at the schools. In all but one of the schools in the three years prior to the implementation of the trials no personal injury crashes had occurred during school times.

6. Evidence of the effect of 20mph schemes

- 6.1 Evidence shows that schemes that combine 20mph limits with traffic calming measures to reduce speeds have proved very successful in reducing casualties by around 40% to 60%. When only signing has been used the overall benefits are significantly less.
- 6.2 A report published by The Royal Society for the Prevention of Accidents on the installation of 20mph schemes concluded “The evidence supports the effectiveness of 20mph zones as a way of preventing injuries on the road. There is currently less experience with 20mph limits although they have generally been positive at reducing traffic speeds. They do not reduce traffic speeds as much as zones.”
- 6.3 A review of the first 230 20mph zones in England, Wales and Scotland indicated that average speeds reduced by 9mph, annual crash frequency fell by 60%, reduction in child accidents was 70%, and there was a reduction in crashes involving cyclists of 20%. Traffic flow in the zones was reduced on average by 27%, but the flows on the surrounding roads increased by 12%. There was generally little measured crash migration to surrounding roads outside the zone.
- 6.4 The current safety record of the existing 20mph schemes in Kent which are a mix of both limits and zones shows that casualties recorded on 20mph roads in Kent as a proportion of all roads are 2% less than the national average.
- 6.5 The Department for Transport (DfT) has recently commissioned research into the effectiveness of 20mph speed limits in order to “support and inform future policy development on 20mph speed limits and zones”. The DfT says: “While there is evidence suggesting that 20mph zones are effective in reducing collisions and speeds (as well as leading to other benefits), there is an evidence gap on the effectiveness of 20mph speed limits”.
- 6.6 The new research will set out to “establish the effectiveness of 20mph speed limits, in a range of settings, which is robust enough to attribute any impacts to the scheme”. The project will set out to evaluate the effectiveness of 20mph speed limits in terms of a range of outcomes including speed, collisions, injury severity, mode shift, quality of life, community, economic public health benefits and air quality. It will also examine drivers’, riders’ and residents’ perceptions of 20mph speed limits and assess the relative cost/benefits to specific vulnerable road user groups including children, cyclists and the elderly. The study is a three-year project with a final report anticipated in early 2017.

7. Environmental Impact

- 7.1 There is no direct relationship between fuel economy and posted speed limits. The impact of 20mph schemes depends entirely on changing driver’s actual behaviour and speed. Research suggests that lower speeds can actually increase emissions and at best there is unlikely to be any effect. What is clear is that free flowing traffic makes for the best conditions for the lower emissions and maximum fuel efficiency. 20mph schemes that encourage modal shift to walking and cycling and encourage slower, smoother, more considerate driving should result in a reduction in carbon emissions. Schemes that introduce physical traffic calming measures are likely to reduce fuel efficiency and increase emissions as they can encourage stop / start driving.

8. Public Health

- 8.1 From 1st April 2013 KCC became responsible for a number of Public Health functions. One of these was the Health Improvement for the population of Kent – especially for the most disadvantaged. One of the areas identified in Kent’s Joint Health and

Wellbeing Strategy where Kent needs to do better and is performing worse than the national average is in obesity in adults. There is evidence that 20mph schemes do encourage healthier transport modes such as walking and cycling as in Bristol where preliminary results indicated increases in levels of walking and cycling of over 20%. An increase in the implementation of 20mph schemes could assist in the outcome of reducing obesity in adults and children in Kent and improving the overall health of the population.

8.2 The Department of Health asked the National Institute for Health and Clinical Excellence (NICE) to produce public health guidance on preventing unintentional injuries to those aged under 15 on the road. This guidance "NICE Public Health Guidance PH 31: Preventing unintentional road injuries among under-15" focuses on road design and modification. Recommendation 3 relates to measures to reduce speed and is targeted at Local highways authorities. In respect to 20mphs their recommendations were:-

- Introduce engineering measures to reduce speed in streets that are primarily residential or where pedestrian and cyclist movements are high. These measures could include;

speed reduction features (for example, traffic-calming measures on single streets, or 20 mph zones across wider areas);

changes to the speed limit with signing only (20 mph limits) where current average speeds are low enough, in line with Department for Transport guidelines.

- Implement city or town-wide 20 mph limits and zones on appropriate roads. Use factors such as traffic volume, speed and function to determine which roads are appropriate.

9. Legal implications

9.1 The 1988 Road Traffic Act (Section 39) puts a Statutory Duty on the local authority to undertake studies into road accidents, and to take steps both to reduce and prevent accidents. This duty is currently enacted as part of the county's Casualty Reduction Programme where Highways & Transportation analyse all crashes that have occurred in the last three years and implement measures targeted at those locations where the maximum reduction can be achieved for the lowest cost. The updated 20mph policy clearly aligns with this duty as 20mph schemes will be implemented at any location where such measures can be justified in terms of crash savings.

10. The Views of Kent Police on 20mph Schemes

10.1 Kent Police will not support 20mph speed limits unless the average speed of vehicles is 24mph or less as research has shown that signed only 20mph limits where natural traffic calming is absent have little or no effect on traffic speeds and did not significantly reduce accidents.

10.2 Kent Police will not support the introduction of 20mph zones without sufficient traffic calming measures being in place and of appropriate design, that reduce the speed of most traffic to 20mph or less thereby making them self-enforcing.

10.3 In regard to enforcing 20mph speed limits or zones, the Kent Police policy is not to routinely enforce them as they should be self-enforcing by design. The Police will respond on an intelligence led basis if there is a particular high risk issue identified,

such as a motorist who regularly drives at very high speed through the area, providing that the speed limit or zone has been implemented to the current guidance/legislation.

11. Financial Implications

- 11.1 The cost of any 20mph scheme will vary due to the location and objectives of the scheme. It is estimated that the typical capital cost of a 1km length of 20mph speed limit (signing only) is £1.4k and a 1km length of 20mph zone (including traffic calming) is £60k. The capital cost is made up of the installation of the signs, posts and associated traffic calming measures. There are revenue costs associated with any scheme that will need to be considered which include the Traffic Regulation Orders, design, consultation, engagement, marketing, monitoring, on-going maintenance of infrastructure and enforcement.
- 11.2 20mph schemes will be funded from the County's Casualty Reduction Measures Programme if they meet the criteria set out in the Councils Local Transport Plan for Kent. The total Casualty Reduction Measures Programme budget for 2013/14 for new schemes was £800k which went to fund many different types of safety engineering measures across the county. The CRM programme is assessed every year, based on the annual crash cluster site reviews and route studies, and funding is allocated to those schemes which are predicted to achieve the maximum casualty reduction for the lowest cost. Early indications from the 2014/15 cluster site analysis for the Dover area does not show any clusters of crashes that would be prevented by the installation of a 20mph scheme.
- 11.3 The County Council has provisionally budgeted £50,000 for next financial year (2014/15) for 20mph schemes that assist with delivering targets set out in Kent's Joint Health and Well Being Strategy. This funding is to be targeted at locations where public health data indicates problems with obesity and respiratory diseases such as asthma to encourage healthier lifestyles. Early indications show that there are a number of areas in Dover which warrant further investigations for the implementation of 20mph schemes.
- 11.4 County Councillors can also fund 20mph schemes via their Combined Member Grant providing they meet with current DfT criteria. The 2013/14 budget for the CMG is £2.1m of which each member gets £25k to spend on highway improvement or community schemes they deem necessary. In the last few years members have funded a number of 20mph schemes at a cost of £120k with further schemes currently in development.

12. Recommendation(s)

- 12.1 Members are asked to note the report.

Contact Officer:	Andy Corcoran, Traffic Schemes & Member Highway Fund manager, Kent County Council 03000 418181
Reporting to:	Tim Read, Head of Transportation, Kent County Council 03000 418181