

## **REGENERATION, CULTURE AND ENVIRONMENT OVERVIEW AND SCRUTINY COMMITTEE**

**15 JUNE 2017**

### **REPORT ON POSSIBLE INTRODUCTION OF 20sPLENTY SCHEME IN MEDWAY**

Report from: Richard Hicks, Director of Regeneration, Culture,  
Environment and Transformation

Author: Ruth Du-Lieu, Assistant Director Front Line Services

#### Summary

This report provides a response to a petition referred to the former Regeneration, Community and Culture Overview and Scrutiny Committee in December 2015, on the possible introduction of a 20's Plenty scheme for residential roads in Medway either as a pilot or Medway-wide.

#### **1. Budget and Policy Framework**

1.1 Implementation of a defined or blanket 20mph zone would be within the Council's policy framework as Transport Objective 5 of the Local Transport Plan 2011 – 2026 covers matters dealing with traffic calming aimed at reducing casualties. Any associated costs would need to be met within existing budget provision, otherwise the decision to proceed would be a matter for full Council as the Leader and Cabinet cannot take any decision which is contrary to or not wholly in accordance with the budget approved by full Council.

#### **2. Background**

2.1 At the former Regeneration, Community and Culture Overview and Scrutiny Committee meeting on 10 December 2015, the Committee requested that the Integrated Transport Service report back on the '20's Plenty' campaign, including successes of the scheme within other local authorities and the estimated costs involved should the Committee wish to recommend to Cabinet the implementation of a pilot scheme in Medway. This followed a petition received for a 20 mph speed limit in the Darland area of the Watling Ward.

2.2 The petition expressed concerns about speeding in Watling Ward but the committee also noted the possibility of introducing a blanket 20mph speed

limit in line with the national '20's Plenty' Campaign. Therefore, the Committee agreed to investigate national and local policy including case studies, and from there to consider the possibility of making a recommendation concerning the next steps for Medway.

- 2.3 The national '20's Plenty' Campaign was set up by Rod King MBE in Autumn 2007 in response to a developing social consensus that the default limit of 30mph in urban areas was no longer appropriate, and should be lowered.
- 2.4 20 mph schemes are now relatively wide-spread, with more than 2,000 in operation or planned in England (the majority of which are 20 mph zones) covering 14 million people. These schemes have been credited to varying degrees with reducing Personal Injury Accidents (PIAs) and other collisions, promoting modal shift to walking and cycling, and reducing vehicular traffic flows.
- 2.5 The Department for Transport (DfT) Circular 01/2013, 'Setting Local Speed Limits' states:

*"...there is clear evidence of the effect of reducing traffic speeds on the reduction of collisions and casualties, as collision frequency is lower at lower speeds; and where collisions do occur, 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% (Taylor, Lynam and Baruya, 2000). There is also clear evidence confirming the greater chance of survival of pedestrians in collisions at lower speeds.*

### **3. 20mph 'limits' and 'zones'**

- 3.1 There has traditionally been a clear distinction in the UK between areas or roads subject to a 20mph 'zone' and those subject to a 20mph 'limit'.
- 3.2 20mph zones usually cover a number of roads. Zones are aimed at reducing injury collisions, bringing about a modal shift towards more walking and cycling, and reducing vehicular traffic flows. They are predominantly used in residential areas and town centres, "though they should not include roads where motor vehicle movement is the primary function" (*DfT Circular 01/2013*). Typically, zones include signs at the entry point followed by calming measures throughout the scheme.
- 3.3 20mph limits are signed and do not require traffic calming measures. They are similar to other local speed limits and normally apply to individual or small numbers of roads, but are increasingly being applied to larger areas.
- 3.4 Historically, the DfT required any point within a 20mph zone to be within 50 metres of a traffic calming device, and any point within a 20mph limit to be within 50 metres of a 20mph repeater sign. The DfT also required that the traffic calming devices used within 20mph zones had to be physical features such as speed cushions. This often resulted in significant scheme costs. However, this requirement was subsequently relaxed in 2013 when the DfT revised its guidance to state that repeater signs, carriageway roundels and

mini-roundabouts could also be classed as traffic calming devices, although 20mph zones still have to include at least one physical calming device.

- 3.5 This report considers national and local policy governing the introduction of 20mph schemes, identifies relevant case studies from elsewhere in the UK, and makes a recommendation on the way forward for Medway.

#### **4. National Policy**

4.1 In line with the Government's overall approach to devolution and localism, the DfT's 2013 speed limit guidance (contained within Circular 01/2013) is non-prescriptive in nature and seeks to enable local authorities to introduce 20mph zones and limits where they consider it appropriate to do so.

4.2 DfT Circular 01/2013 states the following in summary:

- Zones should not include roads where motor vehicle movement is the primary function.
- 20mph limits are only recommended where existing mean speeds are already below 24mph.

4.3 DfT Circular 01/2013 states that local authorities can introduce 20mph speed limits on major roads *"where there are – or could be - significant numbers of journeys on foot, and/or where pedal cycle movements are an important consideration, and this outweighs the disadvantage of longer journey times for motorised traffic"*.

#### **5. Local Policy**

5.1 Local government is the main delivery agent of road safety; local authorities have a statutory duty under Section 39 of the 1988 Road Traffic Act, to "take steps both to reduce and prevent accidents".

5.2 Within Medway there are eight 20mph zones, as listed below:

- White Road Estate, Chatham – This was a primarily casualty reduction led scheme intended to reduce the likelihood of further personal injury collisions. A significant number of the casualties in the area were children. The scheme also supported the Safer Routes to School approach, encouraging users to walk and cycle for the school journey.
- Kings Street, Rochester – This was a Safer Routes to School scheme aimed at increasing accessibility and modal shift by facilitating a safer route to the school.
- Christmas Street, Gillingham – A Section 106 contribution was received by the Council to make improvements at Christmas Street. An appropriate way deliver the improvement was to introduce a 20mph zone.
- Higham Road, Wainscott – A Section 106 contribution was received by the Council to introduce traffic calming on nearby roads. An appropriate way to deliver the improvement was to introduce a 20mph zone.
- Lower Rainham Road, Rainham – This was an environmental improvement to help address the use of this route rather than the main east-west route at this point. Traffic calming was introduced to work with the existing priority working

on this road. A 20mph zone was an appropriate way to deliver the traffic calming measures.

- Meresborough Road, Gillingham – This was an environmental improvement to help address the use of this route rather than the main alternative north-south route. Vertical traffic calming such as speed humps were introduced, a 20mph zone was an appropriate way to deliver the traffic calming measures.
- Grange Road (part), Gillingham – This 20mph zone and associated traffic calming was constructed as part of the residential development at this part of Grange Road.
- Doust Way, Rochester – This is associated with the development of Rochester Riverside.

There may also be other zones, such as housing developments that may not be adopted roads at present.

- 5.3 Accident data held on the existing zones will need to be used to establish a baseline for assessing the effectiveness of the approach in each location to feed into this study longer term.

## **6. Case Studies**

- 6.1 As has been noted, 20mph schemes are now in existence across the UK, although in most cases it is too early to draw firm conclusions as to their effectiveness in reducing vehicle speeds, improving road safety and promoting modal shift to walking and cycling. There are nevertheless a number of themes emerging from schemes that have been implemented that warrant consideration in this context.

- 6.2 Case studies of 20mph for the following authorities have been reviewed and are summarised below:

- Bristol has seen a speed reduction of 0.9mph and small changes in accident number but recognise that it is too early to draw any conclusions, in summary there has been little change since implementation.
- Edinburgh has seen a speed reduction of 1.9mph amongst 28 locations where the speed limit was changed from 30mph to 20mph; however, no conclusions have been drawn in relation to accident reduction, where a modest decrease is anticipated.
- In Brighton, there has been the greatest reduction in traffic speeds with a 74% decrease, where casualties have fallen by 19%. However, the 'after' data is limited, where further monitoring is required before more robust conclusions can be made.
- In Portsmouth, better accident reduction figures have been achieved as self-enforcing (traffic calmed or existing low speed roads) zones were implemented, with an average reduction in traffic speed of 6.3mph for sites with a before average speed greater than 24mph. However, the difference here is attributable to the physical interventions which are very expensive to implement and maintain.

- 6.3 In neighbouring Kent, in response to a petition submitted to the Maidstone Joint Transportation Board (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.

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. Speeds outside the schools were surveyed prior to implementation, after three and nine months. After three months the initial results were in line with Government advice that 20mph limits without traffic calming generally reduce mean speeds by about 1mph. After 9 months any benefits had mostly disappeared and perversely in most locations overall speeds had actually increased.

The results of this trial are similar to those seen elsewhere in the country.

- 6.4 Research undertaken by Steer Davies Gleave in 2014 detailed case studies for the Boroughs of Islington, Camden and Kingston upon Thames, where the latter has not adopted a blanket approach to 20mph. The results are summarised below:

- The London Borough of Islington has seen a speed reduction of 1mph and has yet to draw conclusions in relation to accident reduction, where further monitoring is required.
- The London Borough of Camden has not reported on either speed reduction or accident data, where further monitoring is recognised.
- Similarly, Kingston upon Thames recognises that reviews need to be undertaken to determine the impact of the 20mph limits/zones.

## **7. Other implementation Issues**

- 7.1 In early 2014 the Automobile Association (AA) conducted a survey amongst 25,000 panel members into opinions on a variety of issues related to 20mph zones. The overriding message is that Councils and local authorities should consider the views of residents before imposing 20mph speed limits on their streets. A selection of responses is shown in Table 1 overleaf.

Table 1 - AA survey responses

Statement	Agree	Disagree
1. 20mph speed limits across residential neighbourhoods offer such a great road safety benefit that residents' views need not be taken into account.	32%	47%
2. Residents should be consulted before a 20mph speed limit is set on their road.	69%	18%
3. 20mph zones should not include any roads where there are no houses, shops or schools.	75%	12%
4. It is OK for 20mph speed limits on local neighbourhoods to be enforced by a speed camera system.	41%	38%
5. Speed camera enforcement should only be used in 20mph speed limit zones when a specific problem emerges.	61%	21%

7.2 The challenge is understanding the local traffic context and managing it appropriately. A blanket 20mph speed limit imposed on main roads removes the incentive to stay on faster moving routes and instead divert through neighbourhoods. This could contribute to quieter streets being used as 'rat-runs' which in turn may require physical traffic calming measures, the cost of which may make the piloting prohibitive.

## 8. Options

8.1 There are a number of options open to the Council at this initial stage of researching how best to proceed:

- Option 1 - Do Nothing. The advantages of 'Do Nothing' are that there will be no capital or revenue cost implications to Medway Council. Further, current journeys throughout the Authority will likely remain unaltered.
- Option 2 - Implement a blanket 20mph speed restriction on residential roads that is either not enforced through traffic calming or that has traffic calming in some areas. The main advantage of a blanket zone without any traffic calming is cost although even without any engineering interventions the cost is estimated to be in the region of £750k. 20mph zones that are not self-enforcing (no traffic calming) may result in complacency around adhering to speed limits and may result in little accident reduction benefit. Journey times across Medway may increase as speed is restricted on a large scale. If traffic calming was included in all or part of the blanket zone, although it may have more of an effect on slowing traffic, the cost would rise extensively. Either option would require a considerable capital investment and consultation with residents and those affected.

- Option 3 –Using the existing 20mph zones within Medway to monitor the effectiveness of a zone based 20mph speed restriction on a residential estate at a local level. By establishing a baseline for speed and casualty data in the existing zones we can review effectiveness over a 12 -18 month period. The advantage of this option is that we will not have to spend additional capital to implement a new pilot zone.
- Option 4 - Monitor the success of existing blanket 20mph wide speed restrictions on residential roads in other authorities and compare commonalities. This will allow us to add to data sets of the effectiveness of blanket 20mph zones at other local authorities. Further, there is an expectation that DfT will publish research into the effectiveness of blanket 20mph wide speed restrictions, which will prevent abortive costs.

## **9. Advice and analysis**

- 9.1 Self-enforcing 20mph zones with physical traffic calming measures reduce mean traffic speeds more than a signed-only 20 mph limit zone. This is likely to be attributable to the greater reductions in average speed (in the order of 9mph) achieved by 20mph zones. However, 20mph zones that are self-enforcing have high capital implementation costs.
- 9.2 Blanket 20mph speed limits generally reduce traffic speeds by 1mph, where Portsmouth and Brighton & Hove have seen a significant reduction in accident levels. However, the accident reduction achieved in London and other Boroughs is still being monitored, as the difficulty that arises when attempting to monitor the speed and road safety impacts of 20mph zones and limits, and hence evaluate their effectiveness, is that it can be difficult to isolate the impact of 20mph from changes caused by other factors or random fluctuations.
- 9.3 The exact costs of implementing a blanket 20mph zone are unknown, however, estimates based on previous experience indicate that this will exceed £750,000 for which the Council would need to identify funding. This does not take account of engineering for example, speed humps
- 9.4 Further, before implementing any 20mph limits/zones the overriding message is that the local authorities should consider the views of residents before imposing 20mph speed limits on their streets.
- 9.5 While there is evidence suggesting that 20mph zones are effective in reducing collisions and speeds, it is recognised that there is an evidence gap on the effectiveness of 20mph speed limits. The DfT is to commission research into the effectiveness of 20mph speed limits in order to “support and inform future policy development on 20mph speed limits and zones”. The final report was anticipated in early 2017. However, at the time of writing there has been no formal release.
- 9.6 This report is not making any recommendation for a policy or service change and, therefore, a Diversity Impact Assessment has not been completed.

## 10. Consultation

- 10.1 No consultation has been undertaken. However, if the Council decided to introduce a blanket 20mph zone this would first need to be consulted upon with local residents, businesses, schools and all those potentially affected. This would prove difficult with the current level of information we have available on the effectiveness of 20 mph zones.
- 10.2 Consultation has been carried out with the Portfolio Holder Cllr Phil Filmer who feels the cost of a blanket pilot scheme would prohibit it being taken forward.

## 11. Financial implications

- 11.1 Kent County Council has made recent estimated cost predictions for the physical implementation of the two different ways of implementing a 20mph speed limit (please note that these figures do not include design fees or consultation: some Councils that have now introduced 20mph speed limits spent the same on consultation as they did on physical implementation):
- 1km 20mph limit (signs only) £1,400
  - 1km 20mph zone £60,000
- 11.2 The detailed costs of implementing a Medway-wide speed limit are unknown, as there would very likely be site constraints. However, it is estimated that the Traffic Regulation Order to legally implement the speed limit changes would be £15,000.
- 11.3 Whilst it is recognised that an area-wide approach to implementing 20mph is likely to be more cost effective and quicker to implement than taking each urban area at a time, the following needs to be taken into account when determining costs:
- Decide which arterial routes remain at 30mph or above.
  - Install 20/30mph terminal signs at the speed limit boundaries and light as required.
  - Install traffic features or 20mph speed limit repeater signs and maintain these features.
- 11.4 Further, many local authorities that have implemented 20mph restrictions have spent a similar amount on consultation and education as they have on physical implementation. A very general cost has been calculated by the 20's Plenty group of £3 per head to cover the whole process, based on the total cost of consultation, education and implementation divided by the total population of the area concerned, equivalent to a cost of £750,000 for Medway. Note this does not include speed reduction engineering.
- 11.5 There is no budget available for the implementation of a 20mph pilot or Medway-wide scheme



## **12. Legal implications**

- 12.1 There are currently no legal implications in respect of this report. However, if there is subsequently a decision by the Council to proceed with a blanket or pilot 20mph speed limit, then in accordance with the Road Traffic Regulation Act 1984, a legal speed limit order would need to be advertised so that people have an opportunity to comment on the proposals if they wish to.

## **13. Recommendations**

- 13.1 The Committee is requested to recommend
- a) that the Director of Regeneration, Culture, Environment and Transformation monitor the current blanket 20mph zones that have been implemented in London and other Boroughs to determine their cost effectiveness and their ability to reduce casualties.
  - b) that the Director of Regeneration, Culture, Environment and Transformation establish a baseline for the 8 existing schemes in Medway and review the speed of vehicles and the casualty figures over the coming 12- 18 months to assess the effectiveness of each scheme.
  - c) that no action to be taken at this stage in recommending to Cabinet that a blanket 20mph zone is implemented or piloted.

### **Lead officer contact**

Bryan Shawyer – Road Safety Manager  
Integrated Transport  
Tel no: 01634 331544  
Email: bryan.shawyer@medway.gov.uk

### **Appendices**

None

### **Background papers**

Department for Transport (DfT) Circular 01/2013, 'Setting Local Speed Limits' - [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/63975/circular-01-2013.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/63975/circular-01-2013.pdf)

Steer Davies Gleave, 'Research into the impacts of 20mph speed limits and zones', 2014 - [http://www.20splentyforus.org.uk/UsefulReports/20mph\\_Steer\\_Davies\\_Gleave.pdf](http://www.20splentyforus.org.uk/UsefulReports/20mph_Steer_Davies_Gleave.pdf)