

# **20 MPH**

## **An examination of the County Council's Current Speed Management Strategy**

**23<sup>rd</sup> and 24<sup>th</sup> October 2013**

**Report of the Overview and Scrutiny  
Committee**

**Contents**

1.0	Purpose of Report	3
2.0	Recommendations	3
3.0	Background	4
4.0	Conclusions	5
5.0	Members and Witnesses	10

Appendix 1 Scoping Document

Appendix 2 Traffic and Environmental Scheme Costs

## REPORT OF THE OVERVIEW AND SCRUTINY COMMITTEE (OSC) INTO 20MPH ISSUES

### 1.0 Purpose of Report

- 1.1 This is the report of the OSC investigation into 20mph issues.
- 1.2 The Topic Group addressed the following questions:
  - How does the current County Council strategy compare to the Department for Transport Circular 01/13 – Setting Local Speed Limits.
  - Should 20mph areas be self enforcing? How do we ensure all the locality where a request is received actually want a 20mph zone
  - How effective are 20mph areas in relation to road safety?
  - What are the benefits of 20 mph areas:  
in areas where speeds are already low?  
in areas where the speeds have been reduced?
  - What are the costs of putting in different types of speed reducing measures?
  - What are other highway authorities doing nationally?
- 1.3 The scoping document can be seen at Appendix 1. The papers issued to members along with the minutes can be seen at [http://www.hertsdirect.org/your-council/civic\\_calendar/overviewscruity/17931564/](http://www.hertsdirect.org/your-council/civic_calendar/overviewscruity/17931564/)

### 2.0 Recommendations

- 2.1 To endorse the proposal to use mean speeds for determining all speed limits rather than 85<sup>th</sup> percentile speeds as in the current strategy. (4.1)
- 2.2 To support the expansion of 20mph zones/limits in Hertfordshire, where possible without the need for physical measures such as bollards, speed tables, chicanes etc. (4.2)

- 2.3 To ask Environment to look again at all Traffic and Environmental Scheme costs provided in an extract from the Highways Locality Budget 'Menu of Costs' (See Appendix 2) and provide a report to OSC. If appropriate to follow this report with a scrutiny of Traffic and Environmental Scheme costs. (4.3)
- 2.4 To ensure there is a robust process in place when assessing whether to implement a 20mph zone that ensures a majority of residents/interested parties are supportive of proposals. (4.4)
- 2.5 To be kept informed of progress across Hertfordshire in implementing 20mph zones/limits. (4.13)

### 3.0 Background

- 3.1 The County Council's Speed Management Strategy (SMS) was adopted in November 2009 and reviewed and re-issued in March 2012 following the adoption of Local Transport Plan 3 in 2011.
- 3.2 The SMS was developed and agreed in conjunction with nominated representatives from the political parties in Hertfordshire, the police and officers prior to endorsement at the Highways and Transport Panel and adoption by the Council. It was developed with consideration to the DfT guidance document Circular 01/06 'Setting Local Speed Limits.
- 3.3 The current SMS can be viewed on line at:  
<http://www.hertsdirect.org/services/transtreets/tranpan/ltp/LTP3/17758213/>
- 3.4 It includes the County Council's current approach to 20mph speed limits and zones which states

- 20mph Speed Limits

*When considering a 20mph speed limit current guidance suggests that roads that are being considered should have mean speeds of 24mph or below (the average speed at which all vehicles travel). For Hertfordshire the 85<sup>th</sup> percentile speeds will be used to ensure that the level of non compliance does not trigger excessive requests for enforcement.*

*20mph speed limits will only be considered where the 85<sup>th</sup> percentile speeds are recorded at 25mph or below. Once 20mph signs are introduced it is accepted that the signage should have a speed reducing effect of approx 1mph, which would bring the speeds down to the required level of 24mph, the 85<sup>th</sup> percentile*

- 20mph zones

*With regard to 20mph zones, these should be designed with self enforcing speed reducing measures to ensure that the maximum 85<sup>th</sup> percentile speed is 24mph, or less once they are implemented*

NB. 85th percentile speed refers to the speeds at or below 85% of all vehicles are observed to travel under free flowing conditions. This is a nationally recognised method of assessing traffic speeds and is supported by the Association of Chief Police Officers (ACPO).

- 3.5 The County Council's definition of a 20mph speed limit from the draft SMS strategy is *a single road with a 20mph speed limit with or without physical measures.*
- 3.6 The County Council's definition of a 20mph zone from the draft SMS strategy is *two or more adjacent roads with a 20mph speed limit with or without physical measures.*
- 3.7 Traffic calming measures such as speed tables, speed cushions and parking areas are used when mean speeds exceed 24mph.
- 3.8 The County Council began introducing 20mph zones in town centres and residential areas across the county in the mid 1990s. There are now over 290 roads in Hertfordshire subject to a 20mph speed limit. Out of 530 schools 48 are close to, or within, a 20mph zone.

#### **4.0 Conclusions**

- 4.1 Members were advised that the existing approach of the County to the measuring of speeds, the 85<sup>th</sup> percentile detailed at 3.4, although supported by ACPO is not what is recommended in Department for Transport (DfT) guidance. Their guidance recommends the use of mean average speeds i.e. the average speed of all vehicles. Members were advised that the Highways and Waste Panel on 12 September 2013 had agreed to consult on a change to the existing strategy which would result in mean speeds being used to determine all speed limits in the County. This will mean that once a 20mph limit has been implemented mean vehicle speeds should be 24 mph or below. Members endorsed the proposal to use mean speeds for determining all speed limits rather than 85<sup>th</sup> percentile speeds as in the current strategy and welcomed the public consultation underway. (Recommendation 2.1)
- 4.2 Members also supported the consultation on the basis that it would result in a higher number of roads being eligible for 20mph limits where there is public support and without the need for physical measures i.e. they are self enforcing. They heard that the Police had agreed that within a proposed zone 90% of the total number of roads will have existing mean speeds of 25mph or below, and up to 10% of the total number of roads within a proposed zone, 27mph or below. They noted

that the current strategy states that 100% of roads would need to have existing 85<sup>th</sup> percentile speeds below 25mph. Members asked that in measuring mean speeds officers take account of the odd rogue driver speeding excessively e.g. there could be a situation that one driver goes at 70 mph on a road, another twenty travel at 24mph and the actions of the one driver speeding could push the mean speed up to a level that results in the road not qualifying for a 20mph limit. (Recommendation 2.2)

- 4.3 Members expressed concern at the cost of work to implement traffic calming schemes. (See Appendix ii) They felt many were excessive, including design fees which in some cases were greater than the cost of the works. Members asked that Environment carry out an exercise to try and reduce these prices and provide a report to OSC which members expected to show reductions in the charges made to implement schemes. They asked that this report include information on the costs and types of road markings that could be used in Hertfordshire i.e. any low cost physical interventions that might assist in reducing speed limits. It was also noted that leaving spaces for a few vehicles to park on a road that otherwise would have no parking is increasingly being used to slow traffic and was thus a very low cost traffic calming measure. OSC would then consider the report and dependent on what it says might then add a scrutiny of Traffic and Environmental Scheme costs to their work programme. They noted that some costs occurred because of meeting legal requirements e.g. the publication of Traffic Regulation Orders (TROs). Members asked whether it was possible to do a TRO for the whole County and so reduce costs (Recommendation 2.3)
- 4.4 Members noted that the introduction of 20mph zones may not be popular with all residents. They felt it was important that it was supported by a majority of local residents not simply a 'vocal' minority. They requested that Environment ensure there is a robust process in place, when assessing whether to implement a 20mph zone, which ensures a majority of residents/interested parties are supportive. Members asked that as part of the consultation it be made clear to residents that the Police would expect any 20mph zone to be self enforcing and that there would be minimal monitoring of compliance undertaken by the Police. Members felt in some cases they and/or borough/district/town/parish councils could be used to undertake the consultation in line with County Council procedures. (Recommendation 2.4)
- 4.5 Members took evidence from Cambridge City Council who in partnership with Cambridgeshire County Council (The Highway Authority) is introducing 20mph limits within the city. Key points made in the presentation were:
- That for the initiative to be a success it is vital that residents buy into it otherwise the limits will not work.

- A and B roads were initially excluded from the project but following County Council consultation it is possible some of these roads could be included where speeds were 24mph mean or below.
- Using DfT figures for the cost of accidents, a scheme such as that in Cambridge costing c£600k pays for itself very quickly requiring only a small reduction in the number of serious accidents (savings are in costs of treatment of injuries, reduced burden on society etc not in savings to the local authority).
- The environment has to be right to effectively introduce a 20mph area e.g. the cost will be prohibitive on a wide straight road where people are used to driving at 50mph to introduce a 20mph limit.
- The City Council are driving this project and will be paying the County Council to maintain the signage and physical speed enforcement measures.
- In places (not Cambridge) the NHS has funded 20mph limits.

4.6 Members took evidence from a range of external witnesses. Key points to emerge from this evidence included:

- Support for larger scales 20mph limits/zones across residential areas.
- That 20mph limits are popular but enforcement is often felt to be insufficient and compliance can be low where the environment is not appropriate.
- Improvements to road safety and so reduce the risk of death and injury due to road traffic accidents and the costs to society of these events.
- The effectiveness of the implementation elsewhere. In Portsmouth, the largest area in the UK with a 20mph limit, there has been a 21% reduction in casualties in the two years following implementation (nationally the reduction in the same period is 14%). In Bristol where a 20mph programme was introduced on 500 roads covering 30,000 households 65% of roads saw a reduction in mean speeds with small, but significant reductions in average day time speeds. Support for the scheme to be implemented in the whole city in the two pilot areas was 66% prior to implementation, 86% post implementation.
- Better quality of life and improved public health.
- The involvement of schools in helping publicise 20mph limits – children are a great influence on their parents.
- The importance of social marketing to achieve behaviour change.

- The importance of low cost physical street interventions to complement the legal and social aspects of 'sign-only' schemes.
  - The introduction of drive safe schemes in residential areas.
  - The use of interactive signs e.g. those that flash up the speed of a vehicle and the registration number. Although it is early days evidence collected by Twentys Plenty has shown it to be very effective on modifying driver behaviour. However it is not clear whether their effectiveness would be reduced if it became widely known that they were not linked to fines and points on licences. Members noted that criteria for the use of interactive signs were set out in the SMS.
- 4.7 Members took evidence from the Police. They heard that the Police welcomed the proposed SMS and plans that 20mph limits would be primarily self enforcing. Guidance from the DfT also states that 20mph limits should be largely self enforcing. Members felt there should be a level of checking for compliance by the Police. The Police advised that the local Priority Setting Forum should be the meeting that would decide if local enforcement was needed on a particular road. Members agreed that it was important they attend this meeting and input to decisions.

Members also noted the ACPO guidance on 20mph limits:

*As with all limits if the site does not look like, or feel like, the limit imposed then there will be larger scale offending and routine prosecution is seen as inappropriate and quite simply over the top. It is for local authorities to appropriately sign and if necessary engineer a limit leaving the Police to target the persistent and deliberate offender, together achieving the very highest level of compliance and safety for other road users.*

- 4.8 Members heard from Public Health who advised that on balance the evidence available is tending to show that in areas with high rates of road casualty's speed limits at 20mph are interventions which can be effective. However members were advised these limits will not work on all roads. The Royal Society for the Prevention of Accidents (ROSPA) data shows that there are 8% adult pedestrian fatalities when hit by a vehicle travelling at 30mph. This reduces to 1.75% adult pedestrian fatalities when a vehicle is travelling at 20 mph, though this figure is dependent on the effectiveness of the engineering associated with the particular limit.
- 4.9 Members were also advised inactivity is an increasing concern. It is estimated to place a £166M burden on the economy each year of which 12 – 22 percent falls to the NHS. 20mph limits and zones can help to reduce inactivity by encouraging people to cycle and walk. In Bristol there was a 23% increase in walking and a 20.5% increase in



cycling in the pilot areas. Members noted that inactivity has been identified as a key concern by the Health and Well Being Board. Accordingly of their nine priorities three could be helped by the provision of further 20 mph limits. They are:

- Increased physical activity.
- Healthy weight.
- Mental Health.

- 4.10 Members were advised of the Active Travel Strategy, a key component of the County Council's Local Transport Plan (LTP). They noted that in this context 'Active Travel' refers to those who are cycling or walking. Its aim is:

*To increase the proportion of journeys made by walking or cycling to improve individual health, quality of life, the environment and the economy*

It looks at ways to increase the number of people undertaking short journeys on foot or bicycle, address the perception that safety and security is reduced when not using a car and to increase Active Travel amongst school children. One way of doing this is deter inappropriate speeds of other vehicles on routes for Active Travel. This can include ensuring that transport schemes give high priority to pedestrian and cycle access and signing, and supporting the introduction of 20mph zones where applicable.

- 4.11 Members were provided with information on casualty data. They noted that 43% of child pedestrian casualties and 14% of total pedestrian casualties occurred on journeys to and from schools though not necessarily outside schools. By far the largest number of casualties is the 17-25 year olds. As a result road safety priorities are young drivers, powered two wheelers and pedestrians/cyclists. Members were advised that issues outside schools were not usually speed, which at pick up and drop off times is usually self enforcing, but accidents caused by poor parking, parents reversing on to main roads and being distracted by their children.
- 4.12 Members noted that bus travel was a key component of the LTP. They were advised that bus operators had concerns when particular traffic calming measures are introduced on bus routes with road humps not being viewed as acceptable for buses to negotiate. Members heard that there is anecdotal evidence that traffic calming measures can reduce the attractiveness of a bus route due to the measures slowing the bus's journeys. They also noted that ambulances find road humps problematic particularly when transporting those with spinal injuries. Bus operators had also advised Environment that where

speed limits are reduced to 20mph bus speeds can commonly be below 10mph.

4.13 Looking back over the evidence members concluded that:

- The evidence they had heard suggested the way forward would be to support larger self enforced 20mph areas.
- Any move to develop zones/limits should involve other partners such as borough/district/town/parish councils and the Police.
- It may be possible to use other sources to help fund 20 mph zones/limits such as councils, the NHS, S106 monies and Highways Locality Budgets, particularly where physical traffic calming measures would not be necessary.
- There are community benefits with more people cycling/walking and a lower risk of serious injury in collisions with vehicles.

## 5.0 Members and Witnesses

### Members of the Committee

Malcolm Cowan (Vice Chairman)  
Tony Hunter  
Anne Joynes  
Emmanuel Mensah  
Michael Muir  
Leon Reeve (Vice Chairman)  
Alan Searing (Chairman)  
Fiona Sparks  
Andrew Stevenson  
Sandy Walkington  
William Wyatt-Lowe

### Witnesses

Kevin Ambrose	Twentys Plenty
Ben Bishop	Project Officer, Cambridge 20mph Project, Cambridge City Council
Nigel Bringham	Sustrans
David Burt	Strategy Programme Manager, HCC
Mike Clarke	Hitchin Forum
Raymond Coffey	Bushey Heath Resident and Chair of Warren Green Residents Association
Carina Helmn	County Officer, Hertfordshire Association of Town and Parish Councils (HATPC)
Peter Jeffree	Councillor, Watford Borough Council
Rod King MBE	National Spokesperson Twentys Plenty

Trevor Mason	Safe and Sustainable Journeys Manager, HCC
Tom May	Health Improvement Advanced Practitioner, Public Health
John Metcalfe	CycleHerts
Andrew Preston	Project Delivery and Environment Manager, Cambridge City Council
Ray Shakespeare – Smith	Councillor, North Herts District Council
Brendan Sullivan	Scrutiny Officer North Herts District Council
Andy Summers	Senior Engineer Transportation Policy Team, HCC
Rupert Thacker	Team Leader Forward Planning and Rail Liaison, HCC

Other Members in Attendance on 23<sup>rd</sup> Oct

David Andrews  
Roger Beeching  
Terry Douris  
Peter Ruffles  
Richard Smith

Other Members in Attendance on 24<sup>th</sup> Oct

Terry Douris  
Fiona Hill  
Seamus Quilty  
Peter Ruffles  
Richard Smith

Officers

Fiona Corcoran	Democratic Services Officer
Tom Hawkyard	Head of Scrutiny

## Scoping Document

Appendix 1**OBJECTIVE:**

To consider the County Council's current 20mph strategy as set out in the reviewed 2012 speed management Strategy.

**QUESTIONS TO BE ADDRESSED:**

1. How does the current HCC strategy compare to the Department for Transport Circular 01/13 – Setting Local Speed Limits.
2. Should 20mph areas be self enforcing? How do we ensure all the locality where a request is received actually want a 20mph zone
3. How effective are 20mph areas in relation to road safety?
4. What are the benefits of 20 mph areas:
  - a) in areas where speeds are already low?
  - b) in areas where the speeds have been reduced?
5. What are the costs of putting in different types of speed reducing measures?
6. What are other highway authorities doing nationally

**OUTCOME:**

Clear guidance for consideration in the review of the Speed Management Strategy

**CONSTRAINTS:**

Legislation  
Funding, maintenance and policies

**EVIDENCE & WITNESSES:**

Public Health	Tom May Health Improvement Advanced Practitioner
Cambridgeshire County Council	Ben Bishop 20mph Project Officer
Herts Police ACPO and Herts Police view on 20mph areas	Chief Inspector Richard Hann, Head of the Tri Force (Beds, Cambs & Herts) Roads Policing Unit.
20's plenty and local representatives	Rod King MBE, Kevin Ambrose

## APPENDIX C

District and Borough Councils	Alf Cuffaro, Broxbourne Borough Council Ray Shakespeare Smith, Brendan Sullivan, North Herts District Council Peter Jeffree, Watford Borough Council
Hitchin Forum	Mike Clarke

<b>METHOD:</b> Whole Committee Scrutiny 2013	<b>DATE:</b> 23 and 24 Oct
---	----------------------------

**MEMBERSHIP:** Caroline Clapper  
Malcolm Cowan (Vice Chairman)  
Maxine Crawley  
Tony Hunter  
Anne Joynes  
David Lloyd  
Emmanuel Mensah  
Leon Reeve (Vice Chairman)  
Jon Reynolds  
Alan Searing (Chairman)  
Fiona Sparks  
John Sloan  
Sandy Walkington  
David Wolstenholme-Williams

**SUPPORT:**  
**Scrutiny Officer:** Tom Hawkyard  
**Lead Officers:** Rupert Thacker  
**Democratic Services Officer:** Fiona Corcoran

**HCC Priorities for Action: how this item helps deliver the Priorities**

1. Support economic well being
2. Reduce carbon emissions
3. Promote safe neighbourhoods
4. Be a leading council

**CfPS ACCOUNTABILITY OBJECTIVES:**

1. Transparent – opening up data, information and governance
2. Inclusive – listening, understanding and changing
3. Accountable – demonstrating credibility

**Appendix 2****2.3 Menu C – Traffic & Environmental Schemes**

<b>Description</b>	<b>Approximate Works Cost (£)</b>	<b>Approximate Design Fee Cost (£)</b>	<b>Est. TRO Advert Cost (£)</b>	<b>Approx Total Cost (£)</b>
Concrete Bollards (each)	£180	£20	£ nil	£200
Metal Bollards (each)	£250	£30	£ nil	£280
Dropped Kerb (per pair)	£1,600	£400	£ nil	£2,000
Ditto with Tactile Paving	£1,700	£900	£ nil	£2,600
Speed Limit (Simple)	£1,500	£2,000	£1,500	£5,000
Speed Limit (Complex)	£5,000	£7,500	£1,500	£14,000
Parking Lay-by (for 5 cars)	£11,000	£4,000	£ nil	£15,000
Waiting Restrictions Order	£1,500	£4,500	£1,500	£7,500
Disabled Parking Space	£600	£3,400	£1,500	£5,500
Pedestrian Refuge (norm)	£5,500	£4,500	£ nil	£10,000
Pedestrian Refuge (solar)	£3,200	£4,300	£ nil	£7,500
Mini Roundabout	£8,500	£6,500	£ nil	£15,000
Village Gateway	£5,500	£2,500	£ nil	£8,000
600mm VAS Sign (solar)	£7,500	£2,500	£ nil	£10,000
600mm VAS Sign (norm)	£6,500	£2,500	£ nil	£9,000
750mm VAS Sign (solar)	£8,500	£2,500	£ nil	£11,000
750mm VAS Sign (norm)	£7,500	£2,500	£ nil	£10,000
Zebra Crossing	£18,000	£12,000	£ nil	£30,000
Road Humps (per 400m)	£77,000	£24,000	£1,500	£102,500
Ditto with P+I Resurfacing	£125,000	£28,500	£1,500	£155,000
Speed Cushions per 400m	£50,000	£23,000	£1,500	£74,500
Three Way Speed Table	£28,000	£10,000	£1,500	£39,500
Four Way Speed Table	£47,000	£12,500	£1,500	£61,000
Pelican Crossing	£55,000	£25,000	£ nil	£80,000
Toucan Crossing	£65,000	£25,000	£ nil	£90,000
Small 20 MPH with Humps	£30,000	£16,500	£1,500	£48,000
Large 20MPH with Humps	£140,000	£37,000	£3,000	£180,000
Simple 20 MPH Limit Only	£5,000	£4,500	£1,500	£10,000
Complex 20 MPH Limit	£19,000	£9,500	£1,500	£30,000