

## **Cabinet**

**17<sup>th</sup> December 2014**

### **Review of Current Policy on 20 mph Zones and Limits**



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#### **Report of Corporate Management Team**

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#### **Purpose**

1. To assess the evidence regarding the effectiveness of 20mph speed zones and limits within the county, following the recommendation of scrutiny to Cabinet that this should be considered in line with new Department for Transport guidance; and to recommend options for future policy.

#### **Background**

2. In County Durham, overall serious casualty numbers are low in comparison to other areas, but the Council and its partners would like to reduce them further, and get more people active through walking and cycling. Changing behaviours and attitudes around speed can contribute to these aims.
3. In recent years many local authorities have introduced a range of 20 mph zones and limits (see appendix 6), with the aim of improving the safety of road users and reducing accidents, casualties and fatalities. Encouraging cycling and walking to improve wellbeing, and changing public attitudes towards speed are often secondary aims of such schemes.
4. The introduction of such schemes has often been driven by accident statistics, these show that a pedestrian knocked down by a vehicle travelling at 40mph has only a 5% chance of surviving; at 30mph it is 45% but at 20mph the chances of surviving rise to 95%.
5. In considering such schemes, it is particularly important to be clear about the distinction between 20mph limits and zones, even though many organisations use the terms interchangeably which creates confusion:

- a. 20mph limits comprise speed limit and repeater signs only, without any physical traffic calming measures. Highways authorities may also implement part-time 20mph limits with flashing warning lights, for example this may be more appropriate on a major route.
- b. 20mph zones consist of a 20mph zone sign together with a range of physical traffic calming measures, such as road humps or narrowing, which 'self-enforce' the 20 mph zone.

### **Current Policy**

6. The County Council's current policy on 20 mph zones/limits was approved by Cabinet in 2003. The policy recommends that 20 mph zones are considered in three specific areas: around schools, in areas where there are above average accidents particularly child accidents, and in areas adjacent to facilities for vulnerable road users where demand is significant enough (such as adult day centres). The policy recommends that 20mph limits should not be introduced on their own, based on the available evidence at the time.
7. Two 20 mph zones and one 20mph limit only scheme have been introduced in the county area in the past 10 years (see appendix 6).

### **Current County Durham road casualty trends**

8. Overall, road casualties across the County are lower than national benchmarks per 10,000 population, and have a general downward trend. Although 2013 saw the fewest number of road casualties since detailed records began in 1979, concerns remain about the level and severity of injuries to vulnerable road users and the level of child casualties, specifically those killed or seriously injured.
9. Against this backdrop, the Safer and Stronger Communities Scrutiny Committee in July 2013 decided to undertake a review of road safety programmes following concerns about the number of children killed or seriously injured (KSI) in road traffic collisions during 2007-2011. As a result of the review a specific recommendation was made to Cabinet, and accepted, to assess evidence around 20 mph limits and zones in light of new national guidance published in the 2013 Department for Transport (DfT) circular and the feasibility of implementing schemes in County Durham.
10. It is important to note that the vast majority of accidents result in slight injuries; and that when considering statistics on children killed or seriously injured, as county wide numbers are small, 1 or 2 incidents can lead to a spike in numbers in a particular year, so we need to look at data averaged over three years or more to assess long term trends (see appendix 2 for further details).

11. Causal factors show that the majority of child casualties relate to children crossing the path of vehicles, indicating a failure to look (see appendix 3 for 2013 data). This has led to a range of road safety initiatives being supported such as Child Pedestrian Training, Bikeability Training and Safety Carousels, a full list is given at appendix 4.

### **Location of child road casualties**

12. Analysis of locational data (2008-2012) for all child casualties in County Durham show that the majority of incidents occur within the child's local neighbourhood; with 91.8 % of all pedestrian casualties and 88.9 % of cycle casualties occurring within 30 mph limit areas
13. In recent years the County Council took part in a government initiative entitled Safer Routes to Schools; as part of the process dedicated staff worked with every school in the County to consider the safety of journeys to school as part of a wider travel planning initiative. Of the 232 schools who participated in the programme less than 20 requested some form of engineering works to address road safety concerns. Requests to install cycle shelters, additional footpath links and parent waiting areas were by far the most common requests.
14. There is no evidence of any problems specifically associated with speeding around the "school gate". However, this still generates concern from parents and schools alike; and schools remain a crucial focus for the delivery of road safety initiatives.
15. Analysis has been undertaken to look at patterns of accidents focused on their proximity to schools. This shows that 86% of accidents involving children and young people occur within a 600 metre radius of a school. As most child pedestrian and cycle casualties occur in urban areas this result arguably simply indicates that our schools provide an excellent coverage of our town centres, but it also shows that providing 20mph zones or limits 600 metres around schools would result in good coverage of child accident sites.
16. Further analysis of child accidents using schools as a reference point shows that the mean number of collisions involving a pedestrian or cyclist within a 600m radius of a school is 3.58. Furthermore, there are 33 schools within County Durham that experience collisions of more than twice the mean within this radius (see appendix 7).
17. Most of the child accidents within the 600m radius occur on the principal routes and local distributor roads, rather than the often more minor roads directly outside of the school.

### **National Guidance on 20mph**

18. The principal piece of national guidance (Transport Circular 01/2013) from the Department for Transport (DfT) has changed since the Council's current

policy was developed and now supports consideration not only of 20mph zones but also 20mph limits where conditions are suitable.

19. The guidance includes a specific objective relating to 20 mph speed limits that local authorities should:

*Consider the introduction of more 20 mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists.*

20. The circular goes on to outline that:

*Successful 20 mph zones and 20mph speed limits are generally self-enforcing, i.e. the existing conditions of the road together with measures such as traffic calming or signing, publicity and information as part of the scheme, lead to a mean traffic speed compliant with the speed limit. To achieve compliance there should be no expectation on the police to provide additional enforcement beyond their routine activity, unless this has been explicitly agreed.*

21. The National Institute of Health and Care Excellence (NICE) provide evidence based national guidance and advice to improve health and social care. NICE have systematically reviewed the available evidence on 20 mph limits/zones and recommends:

*Introduction of engineering measures to reduce speed in streets that are primarily residential or where pedestrian and cyclist movements are high.*

### **Evidence of the effectiveness of 20mph zones and limits**

22. The available evidence suggests that 20mph zones are effective in reducing speeds and casualties, with research suggesting that the number of collisions involving children could be reduced by up to two thirds.
23. There is weaker evidence of the effectiveness of 20mph limits, which only lead to a small reduction in average speed. DfT therefore recommends 20 mph limits only in situations where the average speed is already at or below 24mph.
24. The DfT state that as a general rule, for every 1mph reduction in average speed, collision frequency reduces by around 6% (based on research by Taylor, Lynam and Baruya, 2000).
25. Important benefits of 20mph schemes include quality of life and community benefits, and encouragement of healthier and more sustainable transport modes such as walking and cycling (Kirkby, 2002);
26. The Council's Public Health team collaborated with Durham University to undertake an umbrella review of published evidence on 20mph schemes.

This review concluded that 20mph zones and limits are effective in reducing accidents and injuries, but did not differentiate between limits and zones.

27. Sitting alongside the academic research, members may be aware of national campaigns and media coverage, both for and against the use and effectiveness of 20mph limits (see appendix 5).
28. The British Social Survey (2012) interviewed a representative cross sample of the British public on road safety. In relation to 20 mph speed limits, 72% were in favour in residential streets with 11% against. However, the support for zones that include traffic calming is much lower, with 51% being against physical zones. In Durham there is evidence of demand for 20mph limits/zones with 37 public enquiries regarding the potential for schemes received between 2006 and 2014, an average of 5 per year.

### **Options for future policy change**

29. In developing options, the potential of wider schemes to raise the profile of the need for lower speeds with drivers, and the potential for wider community benefits in terms of promoting healthier travel choices of walking or cycling were considered alongside formal evidence of reductions in collisions. The strong public support for limit only schemes is an important factor, as is the change in Department for Transport guidance to promote consideration of limit only approaches.
30. A range of three options for future policy change are therefore proposed, ranging from maintaining the current demand-led approach of considering individual zone and limit schemes against a revised policy document, to proactive 20mph limits covering major settlements focused on areas surrounding the 33 schools with the highest child casualty rates. All options would continue to consider zone schemes on their merits as part of the revised policy document, where the evidence and public opinion supports physical traffic calming alongside 20mph limits.

### **Option One: Update the Current Policy in line with new Department for Transport guidelines.**

31. This would require that 20 mph zones and limits continue to be carefully considered based upon evidence of inappropriate speed. This is not expected to lead to a significant increase in 20 mph zones/limits; typically, the Council would expect to undertake a 20 mph zone/limit scheme every 3 years based upon schemes completed to date.

### **Option Two: Updated policy plus part-time 20 mph limits on main roads around targeted schools**

32. This option would lead to the introduction of part-time 20 mph speed limits at the 33 schools with the highest child casualty rates, including main roads and distributor roads outside of these schools, where road conditions make this a suitable option, and subject to consultation, design and development

of individual schemes.

33. The limits would be introduced on an enforceable basis where possible, but in some instances, where the average road speed is above 24mph, may need to be advisory in line with Department for Transport guidance.
34. This option is in addition to the updated policy in option 1, which will continue to consider zone schemes as well as limit schemes, based on evidence of need, costs, and public views.

**Option Three: Updated policy plus part-time 20mph limits on main roads around targeted schools, plus education and awareness raising.**

35. This option would, in addition to Options 1 and 2, target proactive education and awareness raising programmes around the introduction of part-time speed limits. This would lead to the development of social marketing programmes alongside the new speed limits, to incorporate:
  - a. Ongoing safety education for children including road awareness and cycling
  - b. Health promotion initiatives to encourage cycling and walking amongst school children and the wider population
  - c. Speed awareness amongst drivers and the wider population
36. Options 2 and 3 would both involve consideration of 20 mph limits in smaller or larger targeted areas of the following main towns, depending on evidence of collisions:
  - a. Bishop Auckland
  - b. Chester le Street
  - c. Consett
  - d. Durham City
  - e. Newton Aycliffe
  - f. Peterlee
  - g. Seaham
  - h. Spennymoor
  - i. Stanley

**Costs and Benefits**

37. The estimated initial capital costs and ongoing annual revenue costs for the range of three options are summarized in the table below.

Estimated costs (actual costs may vary depending on final scheme design).

	<b>Initial Capital Cost</b>	<b>Annual Revenue Cost</b>
<b>Option 1</b> Revise current Policy – demand-led zones and limit schemes	£80,000 (cost of 1 scheme)	£0

<b>Option 2</b> Option 1 plus Part Time 20 mph limits on main and distributor roads around 33 schools	£952,850 (limits only)	£66,000
<b>Option 3</b> Option 2 plus education and awareness raising.	£952,850 (limits only)	£66,000 (maintenance) plus £50,000 (education)

38. Existing research shows an average speed reduction of 1.3mph with the introduction of 20mph limits, where it is known that mean average traffic speeds were at or below 24mph before the change. Research further suggests a 5% reduction in collisions associated with each 1mph reduction in speed, so this may indicate a 7% reduction in collisions associated with the introduction of a 20mph limit. However most collisions result in slight and not serious injuries, and a majority of serious injuries occur on rural roads with higher speeds.
39. This means that the introduction of 20mph limits on their own are unlikely to reduce serious injuries or deaths, although the change may give some reduction in slight casualty figures.
40. The primary benefit of the wider limits proposed for County Durham is likely to be in terms of awareness raising and promotion of healthy lifestyles. It is therefore vital that any 20mph limits are introduced as part of a wider social marketing package of work to slow traffic on all routes with higher collision rates, including education and awareness raising.

### Options Consideration

41. It is generally accepted that a blanket introduction of a 20 mph speed limit across all roads in our urban areas would be both time consuming and costly, and it is likely to be difficult to get public support for such a broad approach. There are no other county areas which have implemented such a wide scheme, and given the above considerations this approach was discounted.
42. The issue of reassurance and local acceptability should not be overlooked, and evidence indicates a good level of potential public support for limits focused on urban and residential areas. Members are therefore recommended to adopt Option 3, part time 20mph limits for schools with the highest accident rates in their vicinity together with linked social marketing measures, alongside the existing, ongoing, demand-led consideration of zone schemes.
43. This will allow the option of physical traffic calming to be considered as an expansion to the proposed limit schemes, subject to evidence of potential effectiveness and public support. However physical traffic calming measures have not been costed, and will require the identification of additional local funding sources for example through AAPs or local councillors. The ongoing revenue costs are relatively small and it is hoped

that the proactive introduction of part-time limits together with social marketing will have wider benefits in terms of education, awareness raising, and encouraging cycling and walking.

### **Consultation / Engagement / Decision Making Process**

44. It is important that we have the general support of the wider public before we introduce any 20 mph limits into local communities. In advance of any formal consultation we should look to engage with a wide range of stakeholders; including the police and the local PACT teams, local members, AAPs, schools and their governing bodies and any community or residents organisations representing the areas concerned. Local interest groups will need to be consulted and engaged in the design and development of individual schemes.
45. The formal procedure for introducing a 20mph limit follows the statutory process of making a 'Speed Limit Order' under the Road Traffic Regulation Act (RTRA) 1984. This is necessary for it to be legally enforceable (in the same way as any other speed limit).
46. The Order making process includes a statutory consultation, with a requirement to formally publish our intentions and invite comments from the public and key stakeholders. Under the Council's constitution, any objections to making an Order would be reported to the Council's Highways Committee for consideration. The Highways Committee allow both sides to present their case before making a recommendation to the Corporate Director, who ultimately has the delegated authority to proceed in making the Order.
47. The programme of work will be taken forward on a prioritised basis and will be subject to an annual review. It is anticipated it could take up to three years to complete the work in all locations.

### **Conclusion**

48. National guidance in relation to 20mph zones and limits has been amended to encourage limits without associated physical traffic-calming where average speeds are below 24mph.
49. Although Durham's casualty numbers continue to fall, there is an opportunity to introduce wider measures to limit speed in built up areas, subject to public and partner engagement. It is therefore proposed that part-time 20mph limits be introduced on main roads around the 33 schools in the county with more than double the average accident rate in their local area, alongside proactive social marketing, as well as updating the existing demand-led approach.
50. It is important to note that the impact of the scheme is most likely to be on slight casualties and on general public awareness and wellbeing, as most

serious casualties occur on non-urban roads where speeds are much higher.

51. This review of policy meets the recommendation, accepted by Cabinet, of the Safer and Stronger Communities Overview and Scrutiny Committee to review the existing policy.

## **Recommendations**

52. That Cabinet agree:

- a. The adoption of Option 3 above: part-time 20mph limits on main and distributor roads around 33 schools with the highest accident rates, subject to local consultation and scheme design with associated education and awareness raising work, plus a revised policy statement on 20mph zones and limits, to encompass future evidence-led consideration of limits as well as zones on a demand-led basis.
- b. That consultation and engagement plans are developed in relation to 20mph speed limit proposals considering local circumstances, views and solutions whilst also including dialogue with local members, AAP's, schools and their governing bodies and community residents associations representing the areas covered.
- c. That the final revised policy statement be delegated for agreement by the Corporate Director of Regeneration and Economic Development, Corporate Director of Neighbourhood Services and Director of Public Health, in consultation with relevant Cabinet members.
- d. That the work will be taken forward on a prioritised basis and for an annual review to be held.

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## **Appendix 1: Implications**

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### **Finance -**

Whilst it is not possible to currently identify the final specifications of projects which may be forthcoming it is expected that delivery of capital works and revenue costs of education/awareness raising will be facilitated from within existing budgets.

Where physical traffic calming measures are to be introduced as an expansion to the proposed limit schemes, this will require the identification of additional local funding sources for example through AAPs or local councillors.

### **Staffing -**

Existing staff supported by current supply chain would deliver any projects.

### **Risk -**

Potential risk of objections causing delivery delays.

### **Equality and Diversity / Public Sector Equality Duty -**

None.

### **Accommodation -**

None.

### **Crime and Disorder -**

None.

### **Human Rights -**

None.

### **Consultation -**

All changes to speed limits need to be consulted upon and any objections considered by Highways Committee.

### **Procurement -**

Works to be delivered by Highway Services.

### **Disability Issues -**

None.

### **Legal Implications -**

The creation of Traffic Regulation Orders requires the Council to follow statutory procedures.