



REGENERATION AND ENVIRONMENT SCRUTINY COMMITTEE – 15TH SEPTEMBER 2015

**SUBJECT: CONSIDERATION OF IMPLEMENTING 20MPH SPEED LIMITS IN
CAERPHILLY COUNTY BOROUGH**

REPORT BY: CORPORATE DIRECTOR - EDUCATION AND COMMUNITY SERVICES

1. PURPOSE OF REPORT

- 1.1 To consider the implications of implementing widespread signage only 20mph limits across Caerphilly County Borough in residential areas.

2. SUMMARY

- 2.1 The Council's adopted Speed Management Strategy is an evidenced based approach that seeks to implement 20mph speed limits and zones in accordance with national guidance and best practice.
- 2.2 Experience of 20mph limit schemes in other local authorities is still at an early stage. For those in England and Scotland that have undertaken trials/changes there is no conclusive evidence of improvements. Signage only 20mph limits appear to be more suited to high density urban areas with high percentages of pedestrians and cyclists. Most rural or semi rural local authorities who have considered the proposal decided that it was not suitable for their particular circumstances.
- 2.3 Within Caerphilly County Borough, most personal injury collisions are not within residential areas. The Council's approach to date has realised significant improvements in casualty reduction and is exceeding Welsh Government targets. Therefore the widespread use of signage only 20mph speed limits in residential areas is not recommended.

3. LINKS TO STRATEGY

- 3.1 To work towards the Council's corporate objective of improving peoples' living environment through targeted actions, regulation, information and advice.
- 3.2 Engineering Services Division Objective: To provide safe and efficient transport and land drainage infrastructure through quality services delivered by means of cost effective management, maintenance and improvement of the networks.
- 3.3 Engineering Services Division Objective: To work towards a safer environment though positive measures to reduce road accidents and particularly by protecting and providing for vulnerable road users.

4. THE REPORT

- 4.1 In order to set a lower speed limit than 30mph in urban areas that have street lighting, a formal Traffic Regulation Order (TRO) must be promoted (including statutory consultations) to comply with highway law (under the Road Traffic Regulation Act 1984). The process of traffic regulation benefits from technical guidance, best practice and legal requirements that informs and governs highway authorities' work whilst assessing and implementing restrictions along the highway network. Compliance with the law is mandatory and compliance with best practice/guidance is strongly advised to ensure a level of consistency and protection for society and from legal challenge.
- 4.2 The Authority adopted an evidence based Speed Management Strategy (SMS) in 2009 that was subsequently reviewed in 2014. It is based on national guidance and best practice and includes the current traffic management policy/approach to the implementation of 20mph speed limits and zones in residential areas. The implementation of 20mph speed limits can be through signage only or combined with engineering measures as described below:
- A proposal satisfies the criteria for a 20mph speed limit by signing only where the existing recorded mean traffic speed is 24mph or less.
 - Other schemes require engineering measures (e.g. speed cushions) to change the speed limit to 20mph in order to be self-enforcing where the existing recorded mean traffic speed is more than 24mph.
- 4.3 As previously agreed with members through the Council's SMS, 20mph speed limits or zones are only considered for implementation in a fairly localised area around a school or locations of main attractors of vulnerable road users. The SMS requires the school to have a travel plan as this provides useful information and evidence about problems and also secures additional benefits such as a commitment to travel more sustainably and community support. The main benefit of a 20 mph speed limit outside schools is that it encourages sustainable travel and also educates drivers (and future drivers) about the area in which they travel being in close proximity to a main attractor of vulnerable road users.
- 4.4 To date 38 20mph limits have been introduced around school sites within the county borough i.e. over half of the school within the borough. Each year schools continue to develop school travel plans and at present the Engineering Services Division is working with 16 schools to develop their Travel Plans and action plans, some of which will result in further 20mph limits.
- 4.5 Through the SMS the Division responds to on average 180 requests/complaints each year related to concerns over excessive speed. Many of these request traffic calming or 20mph limits but only approximately 10% satisfy the criteria for intervention (through the use of vehicle activated signs or safety camera unit enforcement). None have so far meet the intervention criteria (that is based on recorded vehicular speeds and the personal injury collision history for a given site) for physical traffic calming.

20's Plenty for Us Campaign

- 4.6 This is a national campaign that claims to be a not for profit organisation campaigning for 20mph to become the default speed limit on residential and urban streets across the UK.

This organisation has engaged widely and some councillors have taken up that cause. As a result, a Members' seminar was held on 26 March 2015 to explain CCBC's approach and present a summary of the experiences of other Local Authorities, the outcome of which was for officers to further review any available information and prepare a report for the Regeneration and Environment scrutiny committee.

Experience of Other Local Authorities

- 4.7 Refer to Appendix 1. This shows a wide mix of initiatives mostly in England but also in Scotland. There is very little analysis of these initiatives so it is hard to draw any firm conclusions and there are differences of opinion however, there does appear to be a split between city and non-city environments where 20mph limits appear to have shown some

benefits in cities but have largely been rejected elsewhere. It is considered that this is because:

- There are higher levels of walking and cycling for short journeys in city centres.
- There are higher numbers of vulnerable road users (e.g. pedestrians and cyclists) in cities.
- The population densities per km² in cities is considerably higher (Hackney=12977; Portsmouth=5100; Cardiff=2505; Caerphilly=646).

4.8 Because of these factors, there is a stronger evidence base to justify 20mph speed limits in city centre environments where traffic volumes are greater and there is a higher exposure to risk.

Issues to Consider

4.9 Implementing lower speed limits and measures to reduce vehicle speeds through residential streets is generally supported, provided there is a justified case. This will ensure acceptance/support by the wider community including local businesses, bus companies etc. The emergency services support 20mph speed limits if they are able to gain reasonable access for emergencies. A balanced view must be taken in terms of how traffic calming restricts and controls vehicular access and the requirements of the ambulance and fire services that are dependent on response times for a positive outcome. Therefore decisions on policies that change this balance must be justified.

4.10 The use of 20mph speed limits without physical features is more acceptable to emergency services. The major benefit of 20mph speed limits if obeyed is that slower impact speeds reduce the severity of collisions and reduces the probability of the event occurring in the first place if the cause of the collision was speed related.

4.11 In terms of new road design, Manual for Streets advocates that new residential areas are designed to keep vehicle speeds at or below 20mph on residential streets unless there are overriding reasons for accepting higher speeds and also recommends the minimum use of highway design features necessary to make the streets work properly. This is applied within Caerphilly County Borough to new residential developments.

Police Enforcement

4.12 The police view on the enforcement of 20mph speed limits is important, as they are a statutory consultee within the Traffic Regulation Order process and are required to carry out enforcement action to ensure that motorists respect and obey speed limits.

4.13 Gwent police would expect that 20mph speed limits would not be reliant on special enforcement from local police to ensure compliance. When schemes are promoted by the local Highway Authority to change the urban speed limit from 30mph to 20mph, and there is evidence of recorded traffic speeds above a mean speed of 24mph, the Police would expect any proposal to include engineering measures to reduce the average speed of vehicles to within an acceptable range for the new 20 mph speed limit i.e. 24mph or less. This is also consistent with recent Welsh Government advice on settling local speed limits.

4.14 The Association of Chief Police Officers clarified the national policing authorities position in terms of the enforcement of 20mph speed limits and zones in a response to a Freedom of Information request by MPs in March 2013:

“20mph zones are predominantly introduced in residential areas where road safety has been raised as an issue by those who live locally. The approach of neighborhood policing teams in every community is built around ensuring that local crime and disorder issues and concerns are identified, so that a police force delivers an appropriate policing response. This applies to enforcement of 20mph zones as to any other area of policing.

Police and Crime Commissioners are now responsible for setting strategic policing priorities for each police force and in areas where 20mph zones are a local concern, may include enforcement within local policing plans.

In most cases, 20mph limits will follow Department of Transport guidance and include 'road calming' features such as speed bumps or traffic islands designed to slow traffic. Wherever possible, we agree with the Department of Transport that 20mph zones should be 'self enforcing' through the use of such features. The guidance states:

"Successful 20mph 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."

RoSPA Position

4.15 20mph zones are very effective at preventing injuries and RoSPA (Royal Society for the Prevention of Accidents) would like to see their use in residential areas. RoSPA evaluated the use of 20mph zones and limits across the country and 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 speed limits although they have generally been positive at reducing traffic speeds. They do not reduce traffic speeds as much as zones.

Welsh Government Policy and Guidance

4.16 Welsh Government has provided and commended guidance to local Highway Authorities in Wales called 'Setting Local Speed limits in Wales' Circular No 24/2009 Oct 2009. This states:

- Highway authorities may implement 20mph speed limits and zones where appropriate, particularly in residential areas, and this is encouraged and supported by the Welsh Government. Such limits may either be full time or restricted to specified hours of the day.
- To be successful, 20mph speed limits and zones should ideally be self enforcing. Highway authorities should take account of the level of police enforcement required before installing either of these measures and must always formally consult the police when considering their use.
- Where highway authorities introduce 20mph speed limits for part of the day (e.g. around school hours), care should be taken to ensure that signing is clear and unambiguous to drivers.
- 20mph speed limits should only be used for individual roads or for a small network of roads. Research indicates that 20mph speed limits should only be used where mean vehicle speeds are 24mph or below or where traffic calming measures are planned as part of the speed management strategy.
- 20mph zones have a proven casualty reduction benefit and are usually used in town centres, residential areas and in the vicinity of schools. Their purpose is to create conditions in which drivers naturally drive at around 20mph largely due to vulnerable road user activity.

4.17 At the time the Welsh Government Road Safety Framework was published in July 2013 it highlighted there are approximately 560 20mph speed limits and zones in Wales partly funded by Welsh Government. The strategy noted the contribution that reduced vehicle speeds make to the severity of an injury, how lower vehicle speed encourages more people to walk and commends the introduction of 20mph schemes where there is evidence to support them.

4.18 In the most recent statement from the Minister for Economy, Science and Transport, Edwina Hart AM, in December 2014 she stated:

“I am committed to improving the safety on Wales’ trunk road network and improving conditions for those who live, work and go to school on or nearby trunk roads. The evidence shows that 20mph speed limits can improve driver behaviour and reduce speeds around schools, however enforcement is key to the success of the speed limit.

However due to the nature of the trunk road network and some of the long distance journeys undertaken we need to balance the need of the drivers and that is why I have decided to introduce part-time 20mph speed limits, around when pupils are travelling to and from school. As well as improving safety I hope this will encourage more children and young people to walk or cycle to school.”

4.19 The new national road safety targets focus on those who are killed or seriously injured in a collision and specific road user groups that have been identified as an issue in Wales. The targets are as follows:

- A 40% reduction in the total number of people killed and seriously injured by 2020 compared to the average figure between 2004 and 2008.
- A 25% reduction in the total number of motorcyclists killed and seriously injured by 2020 compared to the average figure between 2004 and 2008.
- A 40% reduction in the total number of young people killed and seriously injured by 2020 compared to the average figure between 2004 and 2008.

Road Safety Performance in Caerphilly

4.20 Having reviewed the personal injury collision records received from Gwent Police for roads in the County Borough over the last 5 years to May 2015 there are:

- 1005 recorded personal injury collisions (11 fatal, 147 serious and 847 slight).
- 1416 casualties.
- 81% of the total number of casualties involved motorised vehicles.
- 14 % involved pedestrians.
- 13% involved children.
- 9% involved older persons (of pensionable age).
- 5% involved cyclists.
- 36% of collisions occurred on A class roads (97km).
- 28% on B class roads (65km).
- 10% on C class roads (152km).
- 26% on Unclassified roads – residential roads (834km).
- Only 9% of personal injury collisions recorded excessive speed as a contributory factor.

Key conclusions:

- 64% of all recorded collisions occurred on A & B class roads (14% of the total length of highway network in the borough).
- The vast majority of these collisions did not occur within residential estates.

4.21 When CCBC’s performance is measured against the WG targets (4.18 above):

- Based on the 5 years between 2008 and 2013, CCBC achieved a 45% reduction in Killed and seriously Injured (KSI).
- This is the largest reduction for all Welsh Local Authorities.
- The median for Wales was 18%.

This compares favourably with the more densely populated authorities:

- Cardiff – 28% reduction (ranked 7th).
- Newport – 21% reduction (ranked 12th).
- Swansea – 18% reduction (ranked 13th).

- 4.22 From the analysis it can be seen that few collisions (and fewer casualties) occur within areas of the borough that lend themselves to a change of speed limit to 20mph on an area wide basis i.e. along local roads in residential communities. Also the current approach to road safety and casualty reduction within the county borough is performing well. A detailed report is also being brought to the Scrutiny Committee.

Department for Transport (DfT) Research

- 4.23 The DfT has commissioned research into the effectiveness of 20mph speed limits in order to “support and inform future policy development on 20mph speed limits and zones”. In the tender document for the commission, 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”. The new research sets 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”. In the tender, the DfT says that while monitoring data from 20mph speed limit schemes in Portsmouth and Bristol “indicate potential benefits, the evidence from these studies is inconclusive”. 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 that commenced in mid 2014 and the final report is anticipated in mid 2017.

Current Funding Availability

- 4.24 With no direct funding by CCBC, there are currently two main sources of grant funding that might be used for 20mph speed limits; Road Safety Grant (RSG) and Safe Routes in Communities (SRIC).
- 4.25 In previous years Welsh Government (WG) has allocated RSG to Local Authorities and permitted them to determine where the grant should be spent. However the grant is now distributed between Local Authorities based on competitive bids that must be prepared and submitted to WG for assessment against their road safety priorities. Schemes are prioritised across all Local Authorities in Wales with projects that have the highest casualty reduction potential/personal injury collision record ranking highest. A robust RSG business case must be submitted to WG that includes schemes that evidence personal injury collisions. Available funding via RSG has significantly reduced over the last four years so consequently less funding is being awarded to Local Authorities. WG has clarified that RSG is provided to progress schemes that are aimed at casualty reduction.
- 4.26 SRIC grant requires officers to produce a bid that is assessed by WG. The grant’s main aim is modal shift, therefore evidence of and a commitment to walk and cycle together with measurable targets is required for an application to be successful. Schemes are developed for projects from evidence provided from the community in the form of a Travel Plan. As they are usually the main attractor of vulnerable road users in our communities the travel plan identifies problems/barriers to walking and cycling and risks in partnership with pupils and parents. Schemes are then developed that address the identified barriers and risks to walking and cycling modes and encourages modal shift for short community/school journeys.
- 4.27 Over recent times the available funding for RSG and SRIC projects has significantly reduced. Officers continue to bid successfully for the grants as the projects match well with the main criteria for selection. Whilst there is little opportunity to develop/fund 20mph speed limits or zones as part of the casualty reduction schemes via RSG (as the main aim is casualty reduction based on personal injury collisions), SRIC projects provide more options. However the need for a 20mph speed limit or zone must be identified by the school/community in the Travel Plan and in this way support for the initiative is evidenced/justified.
- 4.28 RSG and SRIC funding provides the main funding sources that might be used for 20mph speed limits and zones in residential communities. Nevertheless, these grants have specific requirements and therefore would not support their widespread development as they can only

be successfully promoted if the projects satisfy the criteria. To ensure that these funding opportunities are utilised when applicable, the current holistic approach to speed management ensures that all criteria for funding is considered in the appraisal of schemes. This approach also offers additional benefits by engaging with communities via the school, providing additional road safety ETP (Education Training and Publicity) and most importantly using the best approach to speed management that is supported by the emergency services.

- 4.29 To provide a rolling programme of 20mph speed limits in all residential areas would be high cost both in terms of infrastructure and delivery and add additional maintenance costs to limited budgets. Officers already consider 20mph limits where applicable and traffic calming where justified on an evidence based approach. A different approach would require Caerphilly County Borough to prioritise significant officer time and funding from its own resources, when evidence of the benefits of the outcomes is not deemed achievable.

5. EQUALITIES IMPLICATIONS

- 5.1 This report is for information purposes, so the Council's Equalities Impact Assessment process does not need to be applied, however 20mph Speed Limits have a significant positive impact on people who fall under some of the protected characteristic groups, in particular children, older people and people with disabilities such as mobility or visual impairments.

6. FINANCIAL IMPLICATIONS

- 6.1 None at this time. However, should Members wish to pursue 20mph speed limits and zones in residential areas then the following gives some idea of the costs involved:
- For example a medium size 20 mph zone treating approximately 1300 metres of road in 2011/12 cost £60k.
 - A 20mph speed limit along approximately 260 metres of road including a priority working to slow traffic cost £40k.
 - A 20mph speed limit order to implement a limit without traffic calming in 2012/13 along approximately 1200 metres of local roads cost £6k.
 - All types of schemes require maintenance from existing budgets into the future.

7. PERSONNEL IMPLICATIONS

- 7.1 None.

8. CONSULTATIONS

- 8.1 All comments received have been incorporated in the report.

9. RECOMMENDATIONS

- 9.1 It is recommended that the Members support the Authority's existing approach to progressing additional 20 mph speed limits and zones. That the appraisal of additional 20mph speed limits/zones should continue to be consistent with the current policy that is included in the adopted SMS.
- 9.2 The Council should consider the forthcoming DfT research report on the effectiveness of 20mph speed limits and Scrutiny committee consider if they wish to consider this matter further as part of their work programme.

10. REASONS FOR THE RECOMMENDATIONS

- 10.1 The current evidenced based approach to speed management in Caerphilly County Borough is the appropriate sustainable policy for its settlements and is proven to reduce casualties.
- 10.2 The current policy recognises the WG priorities and provides some limited opportunities to access RSG and SRIC funding when appropriate.
- 10.3 There is no evidence that changing the way that Council considers and applies 20mph speed limits and zones would secure additional grant funding from WG or casualty reduction benefits at this time.

11. STATUTORY POWER

- 11.1 The Department for Transport, (1999), Highway (Road Humps) Regulations 1999, Statutory Instruments SI 1999/1025. HMSO, 1999;
Department of the Environment, Transport and the Regions, (1999b), Statutory Instrument 1999 No 1026. The Highways (Traffic Calming) Regulations 1999. HMSO, 1999;
The Road Traffic Regulation Act (Amendment) Order 1999, Statutory Instrument No 1999/1608 - 20mph Speed Limits;
Traffic Signs Regulations and General Directions 2002;
Road Traffic Act 1988;
Road Traffic Regulation Act 1984;
Highways Act 1980;
The Local Authorities' Traffic Orders (Procedure) (England and Wales) Regulations;1996, Statutory Instrument 1996, No.2489.

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Trish Reardon – HR Manager
Mike Eedy – Finance Manager
David Thomas – Senior Policy Officer (Welsh Language and Equalities)

Background Papers:

Speed Management Strategy, Caerphilly County Borough Council (2009)
Regeneration Scrutiny Committee report: 20mph speed limits and zones, 1st April 2008
Regeneration Scrutiny Committee report: 20 mph speed limits and zones, update report, 17th February 2009
Regeneration Scrutiny Committee report: Overview of Road Safety Issues and Services in Caerphilly County Borough, 18th May 2010
Regeneration Scrutiny Committee report: Update on Road Safety Delivery in Caerphilly County Borough, 6th June 2011
Regeneration and Environment Scrutiny Committee report: Speed Management Strategy evaluation and review, 1st April 2014

Appendices:

Appendix 1: Summary of 20mph initiatives considered by other Local Authorities