



REGENERATION AND ENVIRONMENT SCRUTINY COMMITTEE – 17TH SEPTEMBER 2013

SUBJECT: THE IMPLEMENTATION OF 20 MPH SPEED LIMITS IN CAERPHILLY COUNTY BOROUGH

REPORT BY: ACTING DEPUTY CHIEF EXECUTIVE

1. PURPOSE OF REPORT

- 1.1 To review the current adopted policy for the appraisal and implementation of 20mph speed limits and zones in Caerphilly County Borough, and to consider their widespread use in residential areas in response to a Member request.

2. SUMMARY

- 2.1 The Council's adopted Speed Management Strategy is an evidence based approach that seeks to implement 20mph speed limits and zones in accordance with national guidance and best practice.
- 2.2 The recent experience of other local authorities has been reviewed, in particular Portsmouth City Council who implemented widespread use of signage only 20mph speed limits in residential areas. The independent evaluation of the Portsmouth project showed no appreciable benefit for this approach. All the other local authorities implemented 20mph speed limits and zones in accordance with national guidance and best practice with significant benefits.
- 2.3 Within Caerphilly County Borough, most personal injury collisions are not within residential areas. The approach to date has realised significant improvements in casualty reduction and in 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 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 To work towards a safer environment through 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. 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 May 2009, based on national guidance and best practice, that 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:
- **20pmh speed limit:** a proposal satisfies the criteria for a 20mph speed limit by signing only where the existing recorded mean traffic speed is 24mph or less.
 - **20mph zone:** these schemes require engineering measures (e.g. speed cushions) to change the speed limit to 20mph and be self enforcing where the existing recorded mean traffic speed is more than 24mph.
- 4.3 As agreed with members 20mph speed limits or zones are only considered for implementation in a fairly localised area around a school. 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. The main benefit of a 20 mph speed limit outside schools is that it encourages sustainable travel and also educates drivers about the area in which they travel being in close proximity to a main attractor of vulnerable road users.

Experience of Other Local Authorities

- 4.4 When considering the request to widely implement 20mph speed limits in residential areas, a review of the available data and outcome analysis from other local authorities was considered. A report produced by Atkins (transportation consultants) for the Department for Transport in September 2010 evaluated information available 2 years after Portsmouth City Council (PCC) implemented 20mph signage only speed limits across a number of its residential areas. The report also includes a review of the experiences of Transport for London (TfL) and Hull City Council (HCC) local authorities however, only PCC has implemented 20mph speed limits on a widespread basis and has been the most publicised. TfL and HCC were the next closest in terms of coverage but only used 20mph zones with traffic calming features extensively, prioritising schemes to areas of deprivation and where there were a minimum number of road traffic collisions with speed as the main cause (and used set criteria based on casualty numbers). PCC mainly considered areas where a request had been received from the public.
- 4.5 Table 1 below shows the different approaches in determining where 20mph speed limits and zones were implemented. The table shows how TfL, HCC and PCC determine where speed limits were changed to 20mph. Further background information is included in Appendix 1 on PCC's scheme.

Table 1. – Qualitative comparison between Portsmouth, London & Hull

	TfL 20mph Zone	HCC 20mph Zone	PCC 20mph Speed Limit
Source of Funding	TfL - £10m/year	Local Transport Plan - £0.750m + small contributions from local ward fund	Local Transport Plan - £0.57m
Funding criteria	More than 100% FYRR – special consideration given to deprived areas	4 PICs in 3 years or 3 PICs in 1 year & speed is main cause	Public requests
Average Speeds before implementation	More than 25 mph	29 -33 mph	18.2 – 23.9 mph
Average Speeds after implementation	17 mph	17 -21 mph	16.4 – 22.2 mph
Public support	Yes but some opposition from emergency services	Yes but some opposition from bus operators	Yes
Areas of application	Residential areas – majority containing schools	Residential areas, mainly council estates (& SRTS)	Residential areas

Acronyms

FYRR- First Year Rate of Return

PIA – Personal Injury Collisions

SRTS – Safe Route to Schools

4.6 Conclusions to be noted from Table 1:

- 20mph zones with traffic calming features require a large commitment of funding.
- The main criteria for implementing zones in TfL and HCC focuses on casualty reduction. (FYRR is calculated from anticipated reductions in collisions). This differs from PCC where 20mph speed limits are recorded as being in response to public requests. Whilst cheaper to install they still need to be maintained to remain legal.
- The recorded average speeds reduce to a lower level where traffic calming was installed.
- There needs to be public support for 20 mph speed limits and the needs of the emergency services/public transport considered, especially where there are vertical features.
- Both of the TfL and HCC zones are prioritised to areas where there are main attractors of vulnerable road users i.e. schools.

4.7 Similar approaches to TfL and HCC have been/are being progressed by Bristol City Council and Cardiff County Council.

Issues to Consider

4.8 There are limitations in making comparisons, as there are many differences in residential settlements throughout the country/local authority areas. The nature of Local Authority settlements in England has resulted in areas of greater population density that record higher volumes of traffic and collisions. For instance in 2012 Hull had a population density of 3,600 persons per square kilometre giving it one of the highest population densities outside of London. In comparison Caerphilly County Borough Council had a population density of 646 persons per square kilometre. Consequently, in residential areas in English local authority areas, a greater number of people are exposed to risk and there are far greater numbers of collisions and injuries to support the reduced speed limits.

4.9 Implementing lower speed limits 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 business and bus companies. 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 probability of the event occurring if the cause of the collision was speed related.
- 4.11 In terms of the selection of areas for treatment most English authorities with widespread 20mph speed limits and zones focus on the suburbs of the densely populated areas where there is greater exposure of vulnerable road users to traffic conflicts. Distribution of traffic is also considered and 20mph speed limits tend to avoid main routes/principal roads into/away from commercial centres.
- 4.12 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

- 4.13 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/obey speed limits.
- 4.14 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.
- 4.15 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

4.16 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 Funding, Policy and Guidance

4.17 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.

4.18 The former Minister for Transport, Carl Sargeant speaking during road safety week in November 2012 highlighted the Welsh Government’s commitment to reducing the number of people that are killed or seriously injured on our roads – drawing attention to the significant impact that 20mph zones can have on making our roads safer. The recently published Welsh Government Road Safety Framework highlighted there are approximately 560 20mph speed limits and zones in Wales partly funded by Welsh Government. The strategy notes 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.

4.19 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 There have been 870 personal injury collision records received from Gwent Police for roads in the County Borough since 1st January 2009 as of 17th May 2013. This breakdown as follows:
- 76% occurred on the classified network and 24% on the unclassified network.
 - 18%(156) occurred on local roads within the 30mph speed limits.
 - The number of collisions occurring in residential areas within the 30 mph limit on unclassified roads within our borough averages at 35 per year.
- 4.21 During this same period 1237 casualties were recorded throughout the County Borough road network of which 15% were pedestrians and 4% were cyclists.
- The casualties recorded on local roads within the 30mph speed limit for this period amount to 205 (16% of all casualties).
 - Vulnerable road user casualties on local roads in residential communities make up 3.3% of all pedestrian injuries and 1.4% of all cycle injuries during this period.
- 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.

Current Funding Availability

- 4.23 There are currently two main sources of grant funding that might be used for 20mph speed limits; Road Safety Grant and Safe Routes in Communities Grant.
- 4.24 In previous years Welsh Government has allocated Road Safety Grant (RSG) to Local Authorities and permitted them to determine where the grant should be spent. However the grant is now distributed via the South East Wales Transport Alliance (Sewta) on a regional approach for which a business case must be prepared and submitted to Welsh Government. Schemes are prioritised across all 10 Local Authorities in the Sewta region with projects that have the highest casualty reduction potential/personal injury collision record ranking highest. A robust RSG business case must be submitted to Welsh Government that includes schemes that evidence personal injury collisions. Available funding via RSG has significantly reduced over the last two years so consequently fewer schemes are being prioritised in a forward programme for the Sewta region each year. Welsh Government has clarified that RSG is provided to progress schemes that are aimed at casualty reduction. Sewta scheme prioritisation methodology specifies that schemes should not be submitted for consideration if there are no casualty records.
- 4.25 Safe Routes in Communities (SRIC) Transport Grant requires officers to produce a bid that is assessed by Welsh Government. The grant's main aim is modal shift, therefore evidence of and a commitment to walk and cycle together with measurable targets are 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. Travel Plans are a conditional requirement and must be developed by schools/communities. 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, parents and residents. 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.
- 4.26 Over recent times the available funding for RSG and SRIC projects has significantly reduced. Officers continue to submit 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.

- 4.27 RSG and SRIC grant provide 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.
- 4.28 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. A different approach would require Caerphilly County Borough to prioritise significant officer time/funding from its own resources.

5. EQUALITIES IMPLICATIONS

- 5.1 This report is for information purposes, so no full Equalities Impact Assessment has been undertaken however, reducing the speed limit in residential areas, whilst benefitting everyone in those communities in terms of increased road safety, is of particular significance for younger children, older people and people with disabilities.

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 an indication 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 Committee 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 which is included in the adopted Speed Management Strategy (May 2009).

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 Welsh Government 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 Welsh Government 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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Appendices:

Appendix 1 Summary of Portsmouth City Council's Approach/Scheme Development

Background Papers:

Interim Evaluation of the Implementation of 20 mph Speed Limits in Portsmouth, Atkins Transport Planning and Management, September 2010
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