

DERBYSHIRE COUNTY COUNCIL

**MEETING OF CABINET MEMBER – JOBS, ECONOMY AND
TRANSPORT**

18 June 2013

Report of the Acting Strategic Director – Environmental Services

**PETITION REQUESTING A 20MPH SPEED LIMIT IN
CHARLESWORTH**

(1) **Purpose of the Report** To inform the Cabinet Member of investigations undertaken following the receipt of a petition requesting that a 20mph speed limit is applied on all residential roads in Charlesworth.

(2) **Information and Analysis** At the meeting on 5 February 2013, the Cabinet Member – Environmental Services acknowledged receipt of a petition containing 294 signatures 9 (Minute No. 20/13 refers), which includes 64 email signatures via the '20s Plenty' website. The petition reads as follows:

"I hereby petition Derbyshire County Council for a default 20mph speed limit on all residential roads in Charlesworth."

A covering letter accompanying the petition is attached at Appendix A.

Officer Comment

In general, speed limits are set having regard to national criteria provided by the Department for Transport (DfT), the principal guidance being DfT Circular 01/2013 entitled "Setting Local Speed Limits". This national guidance ensures a consistent approach to setting speed limits throughout the Country.

A copy of the report considered on 13 December 2011, detailing the effectiveness of 20mph speed limits and zones, is attached to this report at Appendix B. It was recommended that such treatment carry the status "use sparingly" within Derbyshire County Council's Local Transport Plan Investment Protocol. It is important, with any road safety scheme or initiative, that the associated costs provide good rates of return in terms of collision savings. The concept of area wide 20 mph limits appears to have been successful in town and city centres where various local authorities have pedestrian casualty problems in their residential areas. It is worth noting that the '20s Plenty' campaign does not advocate use on the arterial roads leading into urban areas

(e.g. on the “A” class roads), which is consistent with Circular 01/2013 which states 20mph speed limits and 20mph zones *“should not, however, be considered on roads with a strategic function or where the movement of motor vehicles is the primary function.”* Clearly, this rules out consideration of a 20mph speed limit or zone on the A626 in Charlesworth.

Any new speed limits introduced must be done so in close liaison with the local Police authority that is responsible for the enforcement of them. Most Police forces take the view that any new limits must be reasonable and realistic in terms of the enforcement capabilities that can be provided. From experience, Derbyshire Constabulary is particularly concerned by the introduction of any reductions in speed limits that are not self-enforcing. Again, Circular 01/2013 states *“Successful 20 mph zones and 20 mph 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.”* Simply to make a Speed Limit Order alone and erect signs, does not always automatically ensure that speeds are reduced. Because the resources that the Police can commit to enforcing such traffic laws are limited, something more than the fear of prosecution is required to influence driver behaviour. The extra factor is the realisation by the majority of drivers that the speed limit has been imposed at a place which genuinely requires special protection and has been fixed at a level which is not unrealistically low. In addition, the Police are presented with a manageable enforcement task and drivers’ respect for the speed limit system as a whole is enhanced. It should always be remembered that speed limits govern maximum speeds and are not the speed to drive at constantly. Drivers still have an onus to drive with care and attention and at considerably slower speeds than the limit as and when circumstances dictate.

Bearing the above points in mind, along with the relatively good injury collision history in the village, it would be difficult to recommend a blanket 20mph speed limit in Charlesworth. As detailed previously, it would not be appropriate to lower the 30mph speed limit on the A626 through the village. In terms of the other roads in the village, Town Lane would be the only road which could realistically be considered for a lower speed limit without the need for further extensive traffic calming features and changes to the road environment. However, with 1 recorded injury collision over the last 5 years (none in the last 3 years), and speed surveys giving average speeds of 20mph and below, it is not easy to see where any benefit could be achieved by carrying out such a scheme. Extra signing would be required in the vicinity of the cenotaph to denote the 20mph zone and the “Max speed 20mph when lights flash” signs for the school would have to be removed as they would no longer be relevant.

A local community group from Charlesworth called SPEED (Safe Pedestrians, Equines, Environment and Drivers) is in regular contact with the County Council on a number of initiatives which has resulted in bids for funding being submitted for two separate highway improvement schemes in the village. SPEED is also keen to create an off-road circular equine route to enable horses to be ridden in the Charlesworth area with minimal reliance on the public highway. Derbyshire County Council has been working with the group to facilitate this and work is on-going to ensure safe road crossing points, etc. Such road safety initiatives should help to improve the safety of all road users within the village.

On the subject of road safety in general, Derbyshire County Council has invested considerably in traffic management measures in Charlesworth over the years. This has included School Safety Zone signs for St Margaret's School and Charlesworth Primary School, an interactive sign on Glossop Road, a traffic calming scheme through Charlesworth to realign the centre line and introduce parking bays to narrow the running lanes in a bid to influence traffic speeds, an electronic sign for the Coombes Lane junction, as well as many more signing and lining improvements over the years. Both Town Lane and Long Lane have had traffic calming schemes implemented involving road humps and School Safety Zone signing amongst other things.

A road safety scheme on the A626 through Chisworth and Charlesworth was carried out in 2007. This was as a result of there being 20 recorded injury collisions in the 4 calendar years prior to 2007 between the County boundary and the crossroads in the middle of Charlesworth; an average of 5 per year. Since 2007, there have been 3 recorded injury collisions along this same stretch. Clearly, there has been a significant improvement in terms of collision savings along this route which has yielded a good rate of return from the public money invested in the area.

Local Member Comments

Councillors Ellie Wilcox and Damien Greenhalgh have been consulted and made the following comment: *"We would like to see 20 is Plenty implemented across several areas of our division. We believe that there is value in providing strong visual deterrents, reminding drivers not to speed through our villages. However, we understand that there may be merit in looking at the scheme as a Derbyshire-wide strategy, instead of considering individual cases. It would be difficult to explain to constituents in areas such as Padfield and Tintwistle why the County Council has decided to implement a 20 is Plenty scheme in Charlesworth, when their communities have equal need, and have produced equally strong campaigns. Therefore, we would like to see the scheme reconsidered at County level before implementation is considered in Charlesworth."*

(3) **Financial Considerations** There are no financial considerations associated with this report.

In preparing this report the relevance of the following factors has been considered: legal, prevention of crime and disorder, equality and diversity, human resources, environmental, health, property and transport considerations.

(4) **Key Decision** No.

(5) **Call-In** Is it required that call-in be waived in respect of the decisions proposed in the report? No.

(6) **Background Papers** Held on file in the Traffic and Safety Section of the Environmental Services Department. Officer contact details – Steve Alcock, extension 38176.

(7) **OFFICER'S RECOMMENDATIONS** That:

7.1 The speed limits remain unchanged in Charlesworth until further consideration is given by the Local Area Committee.

7.2 The Authority continues to give fair consideration to the requests of SPEED (Safe Pedestrians, Equines, Environment and Drivers) and others in conjunction with the Parish Council and the local County Member.

7.3 The collision statistics continue to be monitored and remedial action be considered should the need arise.

7.4 The local Member and petitioners be informed accordingly.

Mike Ashworth
Acting Strategic Director – Environmental Services

Dear Councillors J and G Wharmby

Please find enclosed our 295 signature petition from the residents and visitors of Charlesworth & Chisworth.

We would like the council to reduce the speed of the roads within our villages to 20mph. Over the years there have been many fatal and serious accidents within the villages involving, cars, cyclists, horse riders and walkers. We believe that by reducing the speed on the roads many of these accidents can be avoided or the outcome not as serious.

Having 2 schools within the village spread over 3 sites, we find research, such as that by vision scientists at Royal Holloway, University of London very concerning. They have found that primary school aged children (6-11 years) may not be able to tell a car is approaching when travelling at speeds above 20mph.

The study, which is in press for the international journal Psychological Science, outlines how a speed illusion can mean that all pedestrians, and/or drivers at junctions, can under-estimate the speed of faster vehicles and may, in some cases, fail to see them at all. Professor John Wann who led the research suggests "This is not a matter of children not paying attention, but a problem related to low-level visual detection mechanisms, so even when children are paying very close attention they may fail to detect a fast approaching vehicle."

We are aware of the 20mph zone around the school sites but not all children who attend the schools live within these zones. Surely a 20mph limit all the way home would be safer.

We hope you will support us in our moves to make our villages a safer place to live, work and visit.

Many Thanks

Agenda Item No. 6(e)

DERBYSHIRE COUNTY COUNCIL

CABINET MEETING

13 December 2011

Report of the Strategic Director – Environmental Services

**THE EFFECTIVENESS OF 20MPH SPEED LIMITS AND 20MPH
ZONES (HIGHWAYS AND TRANSPORT)**

(1) **Purpose of the Report** To report to Cabinet the findings of a review of 20 mile per hour (mph) zones and limits, as requested by Council.

(2) **Information and Analysis**

Background

The use of 20mph speed limits in urban areas to reduce vehicle speeds and road traffic casualties has been well established across the country for a number of years. In Derbyshire, the first such speed limits were put in place in 2000 and, since then, some 25 schemes have been adopted across the County.

At its meeting of 7 September 2011, Council agreed a motion requiring Cabinet “to report back on the relative effectiveness of 20 mph. zones before the end of 2011, so that the 2012/13 budget could incorporate identified priorities.” In this context, 20mph “zones” are defined as areas of roads with 20mph limits introduced through Traffic Regulation Orders and, hence, enforceable by law. Usually though, these are accompanied by additional traffic calming measures that make the roads effectively self-enforcing. 20mph zones can be in place elsewhere without supporting engineering measures although in Derbyshire, only one such scheme is in place. This review does not cover advisory 20mph limits around schools, although Members should note that some of the County’s enforceable zones are around the schools.

Department for Transport (DfT) guidance for the implementation of 20mph limits has developed over time and currently stipulates that they should not be implemented on roads with a strategic function or on main traffic routes, and should be generally self-enforcing. This means that they will usually only be appropriate where speeds are already quite low or where a suitable package of measures can be used to enforce compliance. It is important to note, though, that the Strategic Framework for Road Safety, reported separately to this Cabinet meeting, signals Government’s intention to issue revised guidance which is expected to reduce the requirements for both traffic calming and signing within 20mph zones.

National Experience

Nationally, there have been a number of studies of 20mph zones comprising both traffic calming and 20mph limit signing. These show them to be quite effective, producing reductions in average speed of the order of 9mph and casualty reductions for recent schemes of around 40% after adjusting for background casualty reductions. Studies of London schemes show that for areas with high casualty histories, the benefits of implementing 20mph zones was greater than the cost, but for low casualty areas (less than 1 casualty per km per year in the previous 3 years), the costs were greater than the benefits.

The use of 20mph limits with no traffic calming is much less common. The most prominent scheme has been in Portsmouth which, in 2007, adopted 20mph zones limits across virtually all its roads, a total of 410km, some 94% of the City's road length. The nature of the roads in the City itself meant that most roads already had an average speed of 24mph or less because of on-street parking and the narrowness of the roads. Effectively, most of the roads were already self enforcing and no additional burden was expected to fall on the Police who did not actively enforce the 20mph limit. An independent report published in 2009 showed that the 20mph scheme had:-

- Increased the number of sites where speeds were 20mph or less.
- At sites where average speeds were higher than 24mph before introduction of the limit brought about significant reductions, an average of 6.3mph.
- Brought about an average reduction of mean speeds across the city of 1.3mph.
- Resulted in casualty reduction of 22%, compared to a national reduction of 14%, but with killed and seriously injured (KSI) casualties rising from 19 to 20 per year.

Since this report, a number of other local authorities have begun the process of implementing similar schemes but, as yet, few have reported the results.

Cabinet will wish to note that attempts have been made to identify the impacts of 20mph zones and limits on other outcomes, such as noise, air quality and congestion, but that it is currently difficult to draw clear conclusions. There is evidence that the introduction of traffic calming measures increases long term road maintenance costs, so there are implications for asset management of the introduction of any 20mph zone. In Derbyshire, experience suggests that the operational life of the road immediately adjacent to traffic calming features is typically reduced by 30%-50%.

Traffic calming also imposes some restrictions in winter; whilst it is possible to grit traffic-calmed roads, it is generally impossible to plough them effectively. A further issue to be taken into account is that a 20mph zone will generally increase the overall level of signing within the area covered, which must be considered against the overall objective of reducing 'clutter'.

Derbyshire Experience

In respect of casualty reduction in Derbyshire, evidence shows that 20mph zones and limits have been effective. For schemes with engineering measures, a reduction from 102 collisions before to 68 after implementation has been achieved, comparing three-year periods before and after implementation of 20mph zones. These schemes compare well with other casualty reduction engineering measures, although they have not been the most effective of those used:-

Engineering scheme type	% reduction in collisions
20mph zone	33
Vehicle activated sign (VAS)	43
Speed limit review speed reductions	28
Individual traffic calming schemes	27
Improvements to signing and lining	35

Clearly, these interventions are most appropriate in different circumstances and many factors will contribute to selecting the type of scheme suitable for local circumstances.

With regard to KSI collisions, the effect of 20mph zones has been a reduction of 59%, suggesting that they are likely to be most effective within areas that have a higher proportion of serious collisions. It must be noted, though, that there was an increase in collisions associated with three schemes, signalling that care must always be taken in selecting these schemes that they are genuinely likely to address the types of driver behaviour which are causing problems. Details of individual schemes' effectiveness are included in Appendix 1.

The one scheme in the County with no engineering enforcement, in Edale village, had one casualty in the three years before implementation and none in the three years after. With such little data available, it is difficult to draw any conclusions as to the effectiveness of non-traffic calmed schemes elsewhere in Derbyshire. It would therefore be appropriate to present a further report to Cabinet once the Government's revised 20mph guidance has been considered.

In Derbyshire, traffic calming has generally been necessary for 20mph zones to be self-enforcing and the costs of implementation can therefore be significant. Each scheme is sensitive to local circumstances and it is not possible to identify typical costs. However, a recent 20mph zone in Dronfield (minute 236/10 refers) illustrates the typical issues involved, where a scheme with an initial estimate of £45,000 increased, following design and extensive consultation, to £75,000. In addition, with schemes of this nature, the design and consultation costs can represent an extra 20% of the construction costs. It is important to consider whether 20mph zones are applicable to areas which should be identified as priorities for intervention. The Casualty Report 2010

identifies that during that year, some 60% of 'slight' casualties and 52% of KSI occurred on urban roads (those with 30mph and 40mph limits). Not all of these roads, of course, would be suitable for lower limits, although a significant proportion of the County's casualties could potentially be addressed by schemes in urban areas.

In conclusion, 20mph limits and zones can certainly be effective as casualty reduction measures and have been so in Derbyshire and elsewhere. Their use, though, is not guaranteed to reduce casualties and they will be appropriate only where there is an existing casualty record and where it is clear that they represent the most appropriate solution. At present, the Local Transport Plan's Investment Protocol, as approved by Cabinet at its meeting of 11 April 2011, identifies 20mph zones as appropriate to be 'used sparingly', and it is recommended, on the basis of this assessment, that this remains the case.

(3) **Financial Considerations** None associated directly with this report.

(4) **Property Considerations** None.

In preparing this report the relevance of the following factors has been considered: legal, prevention of crime and disorder, equality and diversity, human resources, environmental, health and transport considerations.

(5) **Key Decision** No.

(6) **Call-In** Is it required that call-in be waived in respect of the decisions proposed in the report? No.

(7) **Background Papers** Report to Cabinet of 11 April 2011 approving the Investment Protocol of the Local Transport Plan. Officer contact details – Jim Seymour, extension 38557.

(8) **OFFICER'S RECOMMENDATION** That Cabinet notes the content of the report on the effectiveness of 20mph zones and 20mph speed limits and, on this basis, approves their current status of 'use sparingly' within the Local Transport Plan's Investment Protocol.

Ian Stephenson
Strategic Director – Environmental Services

Appendix 1 - Derbyshire 20mph Limit and Zone Collision Analysis

Location	Scheme Coverage	Collisions			Collisions involving KSI		
		3 Years Before	3 Years After	Savings as % Change	3 Years Before	Up to 3 Years After	Savings as % Change
Hathersage	Back Lane, Oddfellows Road, Crossland Road etc	0	0	N/A	0	0	N/A
New Mills	Market Street, Union Road and adjoining streets	2	5	-149%	0	0	N/A
Long Eaton	College Street area (bounded by the Erewash Canal, Derby Road, Petersham Road and Longmoor Road	26	18	31%	3	2	33%
Staveley Town Centre	High Street, Church Street, Duke Street, Market Street	0	1	N/A	0	0	N/A
Hasland, Chesterfield	Gorse Valley Road - Talbot Street area	3	2	33%	2	1	51%
Old Whittington, Chesterfield	Holland Road, Prospect Road etc	1	1	0%	0	0	N/A
Brimington	Foljambe Road, High Street, John Street	0	0	N/A	0	0	N/A
Boythorpe	Chesterfield, William Rhodes School Safety Zone	1	5	-406%	0	1	N/A
Chesterfield	Christchurch Primary School Safety Zone	2	0	100%	0	0	N/A
Brimington	Devon Drive, Dorset Drive area	5	7	-40%	1	1	0%
Ripley	Argyll Road, Alfred Street, Fletcher Street and adjoining roads/streets	5	0	100%	0	0	N/A
Clowne	Ringer Lane, Ridgeway, Church Lane, Church Street etc	6	1	84%	1	0	100%
Dronfield	High Street, Soaper Lane, Church Street, Lea Road, Chesterfield Road	17	10	41%	2	0	100%
Chesterfield	Gloucester Rd, Gloucester Ave, Highfield Rd	2	1	51%	1	0	100%
Edale Village	Grindsbrook Booth Road	1	0	100%	0	0	N/A
Tapton,	Lockoford Lane, Swaddale Avenue etc	0	0	N/A	0	0	N/A
Danesmoor, Clay Cross	Springvale Road Estate (Springvale Road, Cemetery Road, Penncroft Lane area)	7	4	43%	1	0	100%
Higham	Mickley Estate	2	0	100%	0	0	N/A
Bolsover	Castle Estate	4	3	25%	2	1	51%
Middlecroft,	St. John's Road, Bond Street, Winster Road area	9	5	44%	3	1	67%
Brimington	Wikeley Way area	4	1	75%	1	0	100%
Brimington	Coronation Road, Rother Avenue etc	0	2	N/A	0	0	N/A
South Normanton	Lansbury Drive, Downing Street, South Street etc	3	2	33%	0	0	N/A
Brimington	King Street, Queen Street, Victoria Street	1	0	100%	0	0	N/A
Dronfield	Fletcher Avenue, Vale Close and Green Lane areas and adjoining roads	1	0	100%	0	0	N/A
Total		102	68	33%	17	7	59%