

BRIGHTON & HOVE CITY COUNCIL

**ENVIRONMENT AND COMMUNITY SAFETY OVERVIEW AND SCRUTINY COMMITTEE AD
HOC PANEL - 20MPH SPEED LIMITS/ZONES**

10.00am 19 JANUARY 2010

COUNCIL CHAMBER, HOVE TOWN HALL

MINUTES

Present: Councillor West (Chairman), Mitchell, Watkins, Wells, Bennett

Also present: Mark Dunn, John Stewart, Sam Rouse, Tim Nichols, Phil Clarke, Libby Young

PART ONE

1. PROCEDURAL BUSINESS

1a Declaration of substitutes

1.1 Substitutes are not allowed on Scrutiny Panels.

1b Declaration of interest

1.2 Cllr West declared that he had previously supported a petition for a 20 mph speed limit in one area of his ward. Cllr Wells declared that he is a member of the Woodingdean speed watch team. Cllr Watkins declared that he had in the past offered support to many of his constituents who wanted 20 mph speed limits in their area. Cllr Bennett declared that she had also supported residents in her own ward and been involved in historic discussions around 20 mph speed limits.

1c Declaration of party whip

1.3 There were none.

1d Exclusion of press and public

1.4 In accordance with section 100A(4) of the Local Government Act 1972, it was considered whether the press and public should be excluded from the meeting during the consideration of any items contained in the agenda, having regard to the nature of the business to be transacted and the nature of the proceedings and the likelihood as to whether, if the members of the press and public were present, there would be disclosure to them of confidential or exempt information as defined in section 100I of the said Act.

1.5 **Resolved** – That the press and public are not excluded from the meeting.

2. CHAIRMAN'S COMMUNICATIONS

- 2.1 The proceedings were opened by welcoming all those present and introducing the members of the panel, the witnesses, and the officers present. The chairman thanked everyone for their involvement, particularly the witnesses and officers for taking the time to attend the public meeting and for being involved in the evidence gathering process.
- 2.2 It was noted that included in the agenda were the agreed Terms of Reference for the members of the panel to refer to should they need to.
- 2.3 For the benefit of all attendees the purpose of the scrutiny review was reiterated as: to investigate the effects of reducing the speed limit in some residential and built-up areas of the city to 20 mph. Speed reduction initiatives could include either redesigning roads within the city to include traffic calming measures, or simply reducing the default speed limit on roads to 20 mph through the use of signs only.
- 2.4 The evidence gathering process for the review, previously agreed by the panel, was also reiterated as: there are three public meetings being held, including this one, where various expert witnesses will be invited to attend to give verbal evidence to the panel. There will be a fourth public meeting where residents and local groups will be invited to give evidence to the panel. The panel may also undertake a site visit to collect further evidence. Various other organisations are being contacted and invited to submit written evidence for the panel to consider.
- 2.5 The format of the meeting was outlined, and it was noted that as members of the public are invited to apply to give verbal evidence to the panel at the panel's fourth and final meeting, or to submit written comments, there was no time allocated at this meeting for members of the public to ask questions or make points.
- 2.6 The panel agreed to proceed as outlined by the Chairman.

3. EVIDENCE-GATHERING SESSIONS

- 3.1 The panel heard evidence from a number of witnesses.
- 3.2a **Evidence from Mark Dunn, Traffic Management, Road Policing Unit, Sussex Police**

There are a number of DfT (Department for Transport) circulars offering guidance to highway authorities on the enforcement of 20 mph speed limits. Currently, Sussex Police follows the guidance in the DfT circulars, which are also supported by the Association of Chief Police Officers (ACPOs). Sussex Police will, therefore, support 20 mph speed limits only where they are self-enforcing; either because the nature of the road means that the mean speed of traffic is 24 mph or less, or because traffic calming measures are introduced to force traffic to travel at 20 mph. Where roads are not conducive to slower speeds or not engineered to slow traffic, Sussex Police would not expect to undertake enforcement in respect of a 20 mph limit which has been introduced without being in accordance with the DfT guidelines.

Speed enforcement currently involves either a fixed penalty notice, or a court summons. The only means of dealing with 20 mph excess speed offences is by way of summons. This could have an impact on HM Court Services if they have to deal with a large increase of cases due to 20 mph limits, which would impact on the court's time. This is one reason why there is an expectation that 20 mph limits should be self enforcing. Many drivers find it difficult to stick to a 30 mph speed limit and breaking the speed limit is something that every driver does, even if they claim not to. Achieving compliance to a 20 mph speed limit is likely to be difficult, particularly on roads which are wide and straight as drivers will not understand the need for a lower default speed limit. Additionally, there is the added danger that a variety of speed limits will confuse pedestrians who may expect traffic to be travelling at slower speeds than they actually are, and so lead to more collisions.

The ACPO revisited their advice on supporting 20 mph speed limits in 2009 and concluded that they still view compliance with 20 mph speed limits which are not self-enforcing as problematic. The DfT is currently reviewing its guidance on enforcement of 20 mph speed limits and ACPO will review its advice only in light of any significant changes to the DfT guidance. The tenor of the DfT letter of December 2009 indicated that any change in the guidance is unlikely.

As well as problems with compliance, there are some technical difficulties with the equipment which would be used to enforce 20 mph speed limits. Most speed cameras and other technologies currently in use are not approved by the Home Office for use under 30 mph, and therefore not suitable for use in a 20 mph context. With the increased use of digital technologies this is changing, for example some London Boroughs are using average speed cameras to support the introduction of non self-enforcing 20 mph speed limits; however, it will take some time for the appropriate technology to become widely and readily available.

In conclusion, Sussex Police will only support 20 mph speed limits which are self-enforcing, either because roads are already conducive to mean speeds of below 24 mph or because traffic calming measures are introduced to force traffic to drive at 20 mph. To achieve compliance to a 20 mph speed limit no additional enforcement activities should be required of the police.

- 3.2b The panel thanked Mark for his evidence.
- 3.2c Members of the panel asked about how drivers can be helped to comply with 20 mph speed limits when they are indicated by signs only.
- 3.2d The panel heard that traffic calming measures are required to force drivers to stick to a 20 mph speed limit and that the use of 20 mph speed signs alone will not guarantee that traffic will travel at 20 mph or below. This is particularly the case on long, straight, wide roads, such as the seafront road and other major through roads. A lot of traffic calming measures would be required to slow traffic on these types of roads. So, whilst the use of 20 mph signs may have an impact on some drivers it won't force all drivers to slow down. A lot of the enforcement issue is dependent upon what type of road a 20 mph speed limit is being imposed on.

Education campaigns also have a part to play in encouraging drivers to slow down and can be used to bring about a long-term change in driving behaviour. The Sussex Road Safety Partnership is trying to educate drivers to stick to the current 30 mph speed limits. However, speeding is an offence which most drivers will commit. A lot of road safety education campaigns focus on educating children in schools; however, there is only a limited amount of time in the timetable that this topic can be taught and as many young people leave school just as they reach the age to drive, education campaigns don't always target drivers at the right age.

- 3.2e Members of the panel noted that the evidence given appeared to indicate that roads suitable for 20 mph speed limits need to be properly identified, with engineering introduced to back them up if necessary, and with adequate and targeted road safety education campaigns. Members of the panel were interested to know if Sussex Police had a view on the proximity of 20 mph speed limits to each other and what issues needed to be considered when introducing either a blanket 20 mph speed limit or 20 mph speed limits in select areas. Members of the panel were concerned that drivers may become confused should they be faced with a variety of speed limits. The panel were also interested to know more about average speed cameras and how they could work in 20 mph areas.
- 3.2f The panel heard that targeting known problem areas is one of the better ways of introducing road safety initiatives. Such an approach offers clarity to road users as they become aware that lower speeds are there for a reason. Simplicity to speed limits is the key; use major through routes to keep traffic moving, and then judge other roads by their merits. There is no straight forward solution. Each case should be looked at, and ideally the whole city should be mapped and the whole transport infrastructure of the city considered when introducing 20 mph speed limits.

The speed of traffic on a road can be measured in a number of ways; however, the mean speed is always an indicator of what speed most motorists drive on a particular road most of the time. Speed cameras tend to work by taking a snapshot of the speed of a vehicle at a particular time and point on a road. Average speed cameras work by recording the speed a vehicle travels between point A and B and identifies whether the vehicle travelled faster than it should have according to the speed limit in place on that particular road.

- 3.2g Members of the panel noted that many other areas of the country are introducing 20 mph speed limits on their roads through the use of signs only, and that many drivers are law abiding and will drive below 30 mph and therefore will surely abide by a 20 mph speed limit which is not self-enforcing.
- 3.2h The panel heard that in the right conditions 20 mph speed limits can be a useful tool to reduce the speed of traffic and make roads safer, however, the location and type of road is important. For example, on the seafront road, drivers are unlikely to abide by a 20 mph speed limit unless physical interventions are introduced, however on side roads, 20 mph speed limits may work. ACPO and Sussex Police are not opposed to speed reductions on roads, as long as it requires no extra enforcement resources from the police. It is unlikely at the present time that additional police resources will be made available specifically for the enforcement of 20 mph speed limits in areas where they are

not self-enforcing. Finally, whilst many drivers think that they will and do abide by speed restrictions in place, many do not.

- 3.2i Members of the panel were interested to know whether 20 mph speed limits and 20 mph zones contribute to rat running, traffic displacement, and higher speeds on roads adjacent to and close by, but not included in, 20 mph areas or zones.
- 3.2j The panel heard that there is a possibility that rat running, traffic displacement, and higher speeds could occur on roads adjacent to roads with 20 mph speed restrictions. Local residents tend to know the roads around where they live and will always try to pick the most direct and easiest route in and out of their area. The potential of displacement of traffic and problem areas, and of rat running needs to be considered when introducing speed reductions.
- 3.2k Members of the panel were interested to know if the city was to take a blanket approach to introducing 20 mph speed limits where all major through fares were to remain at 30 mph and all other roads were reduced to 20 mph, would road users understand the logic of the system and would Sussex Police support such a measure.
- 3.2l The panel heard that such a proposal would need to be carefully considered by the police before support could be offered, however, such an approach does appear to be a logical solution. If, however, the city has many roads which are long, straight, and very wide then traffic calming measures would need to be installed to force traffic to drive at 20 mph, otherwise motorists would be unlikely to abide by the 20 mph speed limit. Any approach to speed reduction should not be a piecemeal approach but well thought out and integrated into the transport infrastructure of the city, and this is likely to require considerable resources.

3.2m The panel thanked Mark Dunn for his time and contributions.

3.3a Evidence from Sam Rouse, Senior Technical Officer, Air Quality, Brighton & Hove City Council

The legislation surrounding air quality standards has its roots in the 1990s. Air quality is the responsibility of the local authority as well as Defra, (Department for Environment, Food and Rural Affairs), the Environment Agency, and other organisations. Areas with poor air quality have set up Air Quality Management Areas (AQMAs) with the aim of improving air quality. 235 local authorities have AQMAs (60%) and this is likely to only increase. In 2004, Brighton and Hove declared its first AQMA. Locally, nitrogen dioxide is the biggest air polluter. Brighton and Hove has had an action plan aimed at increasing air quality in its 2004-AQMA in place since 2007.

Driving styles greatly impact on the amount of pollutants and emissions emitted from a vehicle. Generally speaking if a car is being driven at its most efficient then the impact on the environment is at its lowest. Regular acceleration and breaking increases fuel consumption and the amount of pollutants emitted. Dispersion of pollutants is less effective when traffic is moving slowly. Higher concentrations of pollutants causes lower air quality and potentially negative impacts on people's health. Generally speaking lower speeds result in more pollutants being emitted by vehicles; until speeds of over 60 mph are reached in which case levels of pollutants emitted begins to rise again.

Please see Appendix 1 for a copy of the Power Point presentation containing the graphs modelling various air quality scenarios in relation to different traffic speeds and types.

- 3.3b The panel thanked Sam for his presentation.
- 3.3c Members of the panel noted that there is a need to take into consideration both the road safety aspects of speed reduction as well as the potential increases in pollution and lower air quality, and that this may be a difficult balance to strike.
- 3.3d The panel heard that the graphs included in the presentation are based on models predicting worst case scenarios, and that the speeds were calculated based on traffic travelling at a constant speed, 24 hours a day, 7 days a week. The panel also heard that at much higher speeds, pollutants and emissions emitted by vehicles increase slightly.
- 3.3e Members of the panel noted that the evidence suggested that smooth moving traffic appeared to have the least impact on the environment and that if 20 mph speed limits were introduced then there is the likelihood of re-directing traffic on to busy corridors which may be part of the AQMA. Careful consideration needed to be taken around implementing speed reductions and traffic management needed to be considered as part of any speed reduction scheme.
- 3.3f Members of the panel asked what the percentage difference in pollutants emitted is between a vehicle travelling at 30 mph and 20 mph. And, if a model was introduced into the city whereby residential roads alone were reduced to 20 mph and major roads left at 30 mph, would this impact on air quality in the city.
- 3.3g The panel heard that air quality is effected by speed which is dependent on a variety of factors, such as comparable driving speeds and styles. In simplistic terms by reducing the speed of a vehicle, the efficiency of a vehicle is reduced and journey times are increased, and this will all effect emissions. There are also other factors to consider such as how pollution is dispersed, and the displacement of traffic. However, it should also be noted that anything which makes it less easy to use a car and to encourage people to use more sustainable forms of transport is likely to improve air quality.
- 3.3h Members of the panel considered that for areas of the city, such as Lewes Road, if 20 mph speed limits were introduced on all side and residential roads off Lewes Road then there may be less traffic on the residential roads but more on Lewes Road itself, but as this may encourage more people to walk and cycle, then traffic on Lewes Road may reduce.
- 3.3i Members of the panel heard that a slight reduction in car traffic is unlikely to change air quality on Lewes Road.
- 3.3j The panel were informed that the difference between driving at 20 mph and 30 mph on air quality is dependent on the proportion of heavy vehicles on the roads, but could be estimated as being about a 4 or 5% difference in air quality. The panel should note that this difference may be enough to take air quality levels over the standards advised by current legislation.

3.3k Members of the panel noted that it was interesting to hear that the biggest contributors to air pollution are heavy duty vehicles; such as buses, coaches and trucks. The contribution from cars to air pollution varies around the city and is expected to be highest on heavily trafficked arterial routes where counts of heavy vehicles are less than 3% of the total.

3.3l The panel thanked Sam Rouse and Tim Nichols for their time and contributions.

3.4a Evidence from John Stewart, Chair of the UK Noise Association (UKNA)

The UKNA is a lobbying group which is concerned with all aspects of noise and its influence on people's quality of life. It is estimated that 12 million people in the UK are disturbed by traffic noise; this is approximately one fifth of the population. The problem of traffic noise is also getting worse. To date there has been little work done in the UK about the impacts and costs of high levels of noise. Research conducted in the Netherlands, however, suggests that noise can cause chronic health problems and stress. The cost of noise for the European Union was as much as €40 billion in 2007. It is reasonable, therefore, to assume that the cost of noise to local authority areas is high.

There is a measurable link between the speed of traffic and noise. If a vehicle is travelling between 20 mph and 30 mph and speed is reduced by 6 mph then noise can be cut by 40%. Therefore, reducing the default speed limit from 30 mph to 20 mph would help to reduce noise by well over 50%. Reducing the speed of traffic is hugely significant to reducing the levels of noise on roads, it is not only the fastest way of reducing noise but it is also the most equitable.

For many residents, the main roads in a city are their residential streets. Those residents living on main roads are often more deprived than those living in residential areas, and more likely to rate traffic noise as being one of their biggest concerns; bigger than crime. Introducing 20 mph on residential roads is likely to increase dispersion of traffic onto main roads and make main roads noisier. It is important, therefore, to consider reducing traffic speeds on main roads as well as residential roads, and to introduce a blanket reduction in speed limits in the city to 20 mph.

Traffic calming measures can help to reduce overall noise levels on roads. However, for those residents living directly next to a calming measure, such as a speed bump, noise levels may increase. Any traffic calming measures implemented should be purpose built for the road and use the most up-to-date technology; then they may help to reduce noise.

It should also be noted that in-car speed limiters, which prevent traffic from exceeding the speed limit, are currently being developed and are likely to be a useful bit of technology as they force vehicles to drive within speed limits, which will reduce noise levels.

It may appear that reducing noise through reducing speed limits is in conflict with air quality standards; however, if you reduce traffic speeds you are likely to bring about a modal shift in road use and encourage more people to walk and cycle. People often say that the biggest deterrent to walking and cycling is speeding traffic. The more people

walking and cycling, the fewer vehicles there will be on the road emitting pollution, and the more improvements to air quality will be seen.

- 3.4b The panel thanked John for his presentation.
- 3.4c Members of the panel asked if it is the increase in volume of traffic that has caused the increase in noise levels on roads and whether modern technology has had an impact on noise emitted by traffic.
- 3.4d The panel heard that technology has developed and the noise from vehicle engines has reduced considerably. There is, however, still a problem with the tyres of many vehicles. A recent new tyre directive from the European Union means that new guidelines should have a significant impact on the noise emitted from vehicle tyres. However, regardless of the improvement in technology, average noise levels on average streets in the UK are higher because there is more traffic on the roads.
- 3.4e Members of the panel were interested to know whether quieter cars could in fact contribute to more collisions as pedestrians will not hear them approaching.
- 3.4f Members of the panel heard that in general newer cars are much quieter, however, bicycles are also very quiet and pedestrians don't hear them either. However, if drivers have to drive slower because there are 20 mph speed limits then it is much less likely that pedestrians will be seriously or fatally injured if a collision was to occur. It is also, better to educate people to look out for quiet cars if it means that benefits can be realised for overall quality of life and well-being.
- 3.4g Members of the panel asked for a clarification on the impact of high noise levels on people's health.
- 3.4h The panel heard that noise impacts on people in different ways, some people will live on busy streets all their lives and perceive themselves not to be affected by noise, but will actually have higher levels of body stress they just won't be conscious of it, whilst others will complain of high levels of stress, have heart problems, and suffer from depression. The impact of high noise levels is not necessarily obvious, but the emerging evidence is making all of this much clearer.
- 3.4i Members of the panel noted that it is definitely more difficult to engage with and have conversations with residents living on busy streets.
- 3.4j The panel heard that lots of work has been conducted in America to demonstrate that those living on busy streets are less likely to interact with neighbours and even other family members.
- 3.4k Members of the panel noted that the evidence appeared to be suggesting that there was a definite tension between increasing air quality and reducing noise levels.
- 3.4l Members of the panel heard that this could be the case, unless a modal shift is achieved and that traffic is reduced and more people walk and cycle. Whilst there may appear to be some tension in noise levels and air quality, they are not at opposite ends of the spectrum. If road surfaces are maintained and tyres are improved then this can

contribute to reducing noise and more efficient vehicle movement i.e. lower emissions. Defra is in the process of mapping noise levels across the country and, in consultation with stakeholders, will be producing local noise reduction action plans. There may be an opportunity for feeding lower speed limits into the action plans as a tool to reducing noise in local areas.

- 3.5a The panel members, witnesses, and officers present held a general discussion around the issues raised by the evidence given.**
- 3.5b The panel heard from Phil Clarke, the Road Safety Manager at Brighton & Hove City Council, that identifying the need to reduce speed on various roads in the city is being done as part of the non A and B roads speed limit review. There are indications that there are some roads in the city where a 20 mph speed limit would be well complied with as traffic is already moving at relatively slow speeds during the day due to the nature of the road, although speeds may be less likely to be adhered to during the night time. Additionally, the council has a policy of encouraging a modal shift to more sustainable forms of transport, and such a policy supports noise reductions and improvements to air quality, but it should be noted that there are some people that will always need to bring their vehicles into the city.
- 3.5c Members of the panel noted this final point but also considered that most days, 67% of traffic movements start and end in the city whilst only about a third of traffic comes from outside the city.
- 3.5d Members of the panel asked if different road surfaces could have an impact on traffic.
- 3.5e The panel were informed that if road surfaces are very smooth and use high quality asphalt, when coupled with high tech tyres, then road surfaces can contribute to making cars more efficient; which results in a 'win, win' for noise, air quality and transport. Furthermore the smoothest roads are more attractive to slim-tire road cyclists. High quality road surfaces using the best available technology and materials are more expensive. However greater durability and resistance to freeze-thaw is likely to save money in the long run because annual road-patching and hole filling would not be necessary. Frequent road mending causes disruption to public and private road transport and introduces additional congestion.
- 3.5f Members of the panel noted that there are many factors which may contribute to increasing road safety, for example, 20 mph speed signs designed by children help to slow traffic, and using different road surfaces to make drivers aware that they are entering an area where there are concentrations of vulnerable road users can induce drivers to slow down. In Stanford ward there is a 20 mph zone which is traffic calmed through the use of signs and humps and raised platforms, and an area which is traffic calmed uses different road surfaces. Many residents appear to dislike the speed humps, but few complain about the alternative road surface which appears to be effective at slowing traffic down.
- 3.5g The discussions were drawn to a conclusion and the witnesses thanked for their time and contributions. It was agreed that the witnesses would be asked to provide some further written evidence to back up the evidence they had given.

4. DATE OF NEXT MEETINGS

- 4.1 26 January 2010, at 10 am, Lecture Room, Friends' Meeting House
- 11 February 2010, at 10 am, Committee Room 3, Brighton Town Hall
- 23 February 2010, at 10 am, Council Chamber, Hove Town Hall

5. ANY OTHER BUSINESS

- 5.1 None.

The meeting concluded at 11.40am