

## **Committee: Sustainable Communities Overview & Scrutiny Panel**

**Date: 16<sup>th</sup> October 2013**

Agenda item: 6

Wards: All

### **Subject: Scrutiny Review – 20 mph limits / zones update**

**Lead officer:** Chris Lee, Director of Environment and Regeneration

**Lead member:** Councillor Andrew Judge, Cabinet Member for Environmental Sustainability & Regeneration

**Forward Plan reference number:** N/A

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#### **Recommendations:**

- A. That Sustainable Communities O & S Panel considers the information in the report and the council's approach to Speed Management.
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## **1 PURPOSE OF REPORT AND EXECUTIVE SUMMARY**

- 1.1 The purpose of the report is to provide an overview to Members regarding the council's approach to 20mph zones and limits.

## **2 Details**

### *Background*

- 2.1 There are still a high number of casualties on urban roads in the UK. In 2008, there were 771 fatalities and 92,714 injuries reported on built up roads in Great Britain. A large proportion of these collisions occurred on residential roads.
- 2.2 The majority of pedestrian casualties also occur in built up areas: 24 child pedestrians and 278 adult pedestrians were killed in 2010 on such roads. In total there were 24,950 pedestrian injuries. Pedal cyclists are also vulnerable in built up areas and there were 59 cyclist fatalities and 15,995 casualties of all severities.
- 2.3 Merton has demonstrated positive progress in order to meet collision reduction targets over the last 15 years. Between 1996 and 2011 Merton experienced a 65% reduction in those Killed or Seriously Injured (KSI's), along with a 34% reduction in the number of slight casualties during the same period.
- 2.4 Speed significantly increases the chance of being injured in a collision. Studies which compare injury severity with vehicle speed show that accidents at speeds above 20mph are more likely to result in severe injuries, rather than slight injuries. The risk of being fatally injured increases too, and a UK study of accidents found that at 20mph there was a 2.5% chance of being fatally injured, compared to a 20% chance at 30mph.

### *History*

- 2.5 In December 1990 the Department of Transport issued Circular Roads 4/90 which set out guidelines for the introduction of 20mph speed limits; local authorities had to apply for consent from the Secretary of State to introduce a 20mph zone.
- 2.6 In 1999, the law was changed by the Road Traffic Regulation Act (Amendment) Order 1999, which gave Highways Authorities more flexibility so they no longer had to apply for permission to introduce a zone. The updated legislation made two distinct types of 20mph speed limit possible:
- 20mph limits**, which consist of just a speed limit change to 20mph which is indicated by the speed limit (and repeater) signs, and
- 20mph zones**, which are designed to be “self-enforcing” due to the traffic calming measures that must be introduced along with the change in the speed limit.
- 2.7 The Department for Transport’s current guidance is set out in DfT Circular 01/2006 which encourages and supports Local Authorities to implement 20 mph limits and zones in situations where there is a particular risk to vulnerable road users. The guidance sets out that the purpose of 20 mph areas is to create conditions in which drivers naturally drive at around 20 mph as a result of traffic calming measures or the general nature of the location.
- 2.8 It, therefore, suggests that 20mph limits are appropriate for roads where average speeds are already low (below 24mph) or can be reduced to this level following the introduction of traffic calming. Ultimately the Local Authority is responsible for deciding which of these is the most appropriate.
- 2.9 The Department for Transport has recently announced its intention to revise and reissue “*Circular 01/06, Setting Local Speed Limits*’ with a key aim of increasing flexibility for Local Authorities when considering the introduction of 20mph zones and limits.
- 2.10 The guidance in the document on 20mph zones and 20mph limits has been expanded to make it clearer that highway authorities have flexibility in the use of 20mph zones and limits, and should apply the option best suited to the local circumstances and that brings the most benefits in terms of casualty reduction and community benefits. This amends the previous advice that 20mph zones without traffic calming should generally be restricted to single or small groups of streets, and traffic authorities are reminded that they can, over time, introduce 20mph zones or limits into:
- Major streets where business on foot is more important than slowing down traffic and;

- Lesser residential roads in cities, towns and villages, particularly where this would be reasonable for the road environment, there is community support and streets are being used by pedestrians and cyclists

*Characteristics of 20mph zones and speed limits*

- 2.11 There is a significant difference between the characteristics of a 20mph speed limit and a 20mph zone.

**20mph limits** are areas where the speed limit has been reduced to 20 mph but there are no physical measures to reduce vehicle speeds within the areas. Drivers are alerted to the speed limit with 20mph speed limit repeater signs.

20mph limits are most appropriate for roads where average speeds are already low, and the guidance suggests below 24mph. The layout and use of the road must also give the clear impression that a 20mph speed or below is the most appropriate.

**20 mph zones** use traffic calming measures to reduce the adverse impact of motor vehicles on built up areas. The principle is that the traffic calming slows vehicles down to speeds below the limit, and in this way the zone becomes “self-enforcing” . Speed humps, chicanes, road narrowing, planting and other measures can be introduced to both physically and visually reinforce the nature of the road.

*Effectiveness of 20mph limits*

- 2.12 Transport Research Laboratory (TRL) carried out research on 20mph limits in 1998 which examined the effectiveness of 20mph limits without traffic calming measures. It found that traffic calming was a more effective way of reducing vehicle speeds than signs only, which only produced a small reduction in speed. There was some evidence that public awareness campaigns and enforcement further reduced traffic speeds.
- 2.13 In 2009, an interim analysis was conducted of the 20mph limits introduced in Portsmouth, which cover 91% of the 438km of the city’s roads. The evaluation was taken from 158 sites which were monitored for vehicle speeds, one year after the limits were implemented.
- 2.14 It found that 20 mph speed limits reduced the average speed by 0.9 miles per hour, which was not statistically significant. However, at sites where the average speed was above 24mph before the new limit was introduced, there was a statistically significant average speed reduction of 7 mph.
- 2.15 An analysis of accidents found that there was an overall reduction in casualties but it was not significant when compared to the national trend. Further research after 3 years of the scheme will hopefully clarify its effectiveness.

*Next Steps*

- 2.16 Focusing specifically on 20 mph limits, Islington became the first borough in the country to introduce the limit on all side roads after introducing a scheme in early 2012. On 12<sup>th</sup> October 2012 Camden also announced that it 'would consider introducing the 20 mph limit on all roads under its control in a bid to reduce the number of accidents and encourage more people to walk and cycle.'
- 2.17 Within Merton, like a number of other London Boroughs, there is a combination of roads with 20 mph limits and 20 mph zones, the majority of which have been implemented during the last 4 years.
- 2.18 In order to assess the effectiveness of the current schemes that have been implemented in Merton, monitoring analysis has recently been commissioned. This has focused on a comparison of before and after accident data at each of the individual limits and zones, along with before and after traffic flow and vehicle speed data at each of the individual limits and zones.
- 2.19 The Audit was carried out in July 2012 and used the following methodology.
- Analysis of before and after accident data at each site
  - Analysis of before and after Traffic Flow and Speed at each site
  - Overall comparison of accidents, traffic flow and speed measures at each site.
- 2.20 A total of twenty three 20mph Zones / Limits were reviewed as part of this audit. These are:

**20mph Zones**

High Path area  
Pelham Road area  
Parkway area  
Pollards Hill area  
Easfields area  
Ridgway area  
Lake Road area  
Hillcross area  
Commonside East area  
Cromwell Road area  
West Barnes area

**20mph Limits**

Trinity road  
Merton Hall Road  
Quicks road  
Merton Park

Melrose Avenue  
Wandle Road  
Ashbourne Road  
Cambridge Road  
Claremont Road  
Ernle Road  
Edge Hill  
Farm Road

2.21 The majority of the speed reducing measures was introduced in 2009 with the rest in 2010/11. The report concluded that:

- Both zones and limits experienced an increase in Personal Injury Collisions per year with an increase in Zones greater than that of Limits.
- Limits delivered a significant reduction in pedestrian and child accidents
- Zones experienced a greater reduction in 85<sup>th</sup>ile speeds (3.7% reduction (0.9mph – change from 26.69 to 25.79mph) on average per Zone compared to 2.7% (0.75mph – change from 27.65 to 26.9mph) in limits). Limits experienced a greater reduction in average speeds
- Overall vehicle speeds were down by 5.5% (1.19mph) in limits and 7.8% (1.73mph) in zones.
- Zones performed best with regards to traffic flows with a marginal increase in traffic flows across the zones.
- Pelham Road and Eastfields Zones and Merton Park 20mph Limit were the worst performing in terms of collision reduction.

2.22 Reducing speed remains the most effective way of reducing the severity and number road casualties the outcome of the Audit does not support a borough-wide approach to the introduction of 20mph limit in Merton. This is supported by the results of the audit which shows that both zones and limits have shown a slight increase in the annual accident rates. This could be due to the short before and after assessment period. A longer before and after assessment period (over 5 years) would be required to get a better understanding of the impact of 20mph limits on mean speed, average speed and casualty reduction. It is however clear that inappropriate or excessive speed remains a concern to both residents and the Council. The Council will therefore focus its resources on developing Home / School Zones aimed at reducing speeds in key areas such as in the vicinity of schools, areas with high pedestrian footfall and major trip generators such as Town Centres and also in residential areas. Speed reduction measures will also be considered to encourage sustainable local travel by making cycling, walking and the use of public transport more attractive and effective.

2.23 Enforcement will also remain a key consideration in achieving the objectives of reducing the number and severity of road casualties. The Council has no legal powers to undertake speed enforcement and caution drivers in breach of speed regulations. Only the Police have the necessary powers to undertake enforcement and prosecute offenders. It is however recognised that the Police is not sufficiently resourced to undertake local speed enforcement and the Council will continue to work with them to encourage a pro-active Police participation in managing speeds on local roads.

### **3 ALTERNATIVE OPTIONS**

3.1 Not applicable – this report is for information only.

### **4 CONSULTATION UNDERTAKEN OR PROPOSED**

4.1 N/A

### **5 TIMETABLE**

5.1 Performance information is monitored annually as a requirement of TfL.

### **6 FINANCIAL, RESOURCE AND PROPERTY IMPLICATIONS**

6.1 There are no financial, resource or property implications arising from this information report. All related services are delivered within existing resources.

### **7 LEGAL AND STATUTORY IMPLICATIONS**

7.1 This report is for information only.

### **8 HUMAN RIGHTS, EQUALITIES AND COMMUNITY COHESION IMPLICATIONS**

8.1 There are no specific human rights, equalities or community cohesion

### **9 CRIME AND DISORDER IMPLICATIONS**

9.1 There are no specific crime and disorder implications arising from this information report.

### **10 RISK MANAGEMENT AND HEALTH AND SAFETY IMPLICATIONS**

10.1 There are no risk management or health and safety implications arising from this information report.