# Committee: Sustainable Communities Overview & Scrutiny Panel

Date: 11<sup>th</sup> November 2014

Agenda item: 8 Wards: All

# Subject: Scrutiny Review – 20mph zones & limits

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 Contact officer: Richard Lancaster

#### **Recommendation:**

A- That the Sustainable Communities Overview & Scrutiny Panel consider the information in the report in relation to the council's approach to speed management and comment specifically on the recommendations regarding the future policy approach to 20mph zones and limits

# 1 PURPOSE OF REPORT AND EXECUTIVE SUMMARY

- 1.1 The purpose of the report is to provide an overview to Members of the Overview & Scrutiny Panel in relation to the council's approach to 20mph zones and limits.
- 1.2 The report has been prepared in response to a motion and resolution from Council in November 2012, set out as follows:

'Council notes that between 1996 and 2011 Merton experienced a 65% reduction in those killed or seriously injured, and a 34% reduction in slight casualties, due to traffic collisions on our roads. However, even one fatality as a result of a traffic collision is one too many and this council will continue to do all in its power to reduce these figures still further.

As part of the work to increase road safety and reduce casualties, Merton has a combination of roads with 20 mph limits and 20 mph zones, the majority of which have been implemented during the last 4 years. In order to assess the effectiveness of the current Merton schemes, monitoring analysis has been commissioned. This is focusing 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. This work will be reported in the next few months. The intention is to examine this evidence alongside the evidence from Boroughs such as Portsmouth and Islington which have implemented 'area wide' 20mph speed limits to determine what has and will work best to reduce road traffic casualties in an outer London Borough like Merton. This Council affirms that: (1) it is important that road traffic policy and schemes are based on empirical evidence and

(2) asks that this work is completed with due urgency as a priority and
(3) asks that a Report is presented to both Cabinet and Scrutiny with balanced recommendations for future policy including practical measures to maximise road safety for all road users.

- 1.3 Since this original council resolution there have been two reports to the Overview & Scrutiny Panel, one on 16<sup>th</sup> October 2013 (Appendix A) and one on 26<sup>th</sup> February 2014 (Appendix B).
- 1.4 The borough has since taken forward two discrete pieces of work in response to the recommendation:
  - A high-level research project to investigate the impact of 20mph speed limits and zones, undertaken by Steer Davies Gleave on behalf of the London Environment Directors' Network (LEDNet). This report is included at Appendix C and is referred to as the 'SDG Report' in this paper.
  - 2) Local investigative work to assess the impact of 20mph zones and limits currently operating in the borough (Appendix D).

# 2 Details

Legal & Regulatory Context

- 2.1 Detailed information in relation to the legal and regulatory context in relation to of 20mph zones and limits is documented in the SDG Report at Appendix C. The salient points are as follows:
- 2.2 DfT Circular 01/2013 'Setting local speed limits' provides guidance to highway authorities who are considering setting local speed limits, including 20mph zones and limits.
- 2.3 The most important distinction to be made is the difference between 20mph zones and limits:
  - 20mph zones are supported by traffic calming and other features;
  - 20mph limits are implemented using speed limit signage, and are not necessarily supported by traffic calming or other features.
- 2.4 The features included in 20mph zones are prescribed, and must generally be placed at intervals no greater than 100 metres. Previously, only certain physical traffic calming measures could be used to meet this requirement, but recently more flexibility has been allowed. The implication of this is that it may reduce the cost of implementing 20 mph zones by reducing the number of physical traffic calming features required.
- 2.5 As 20mph limits do not require any features (aside from the necessary regulatory signs), they are generally cheaper to implement compared

to 20mph zones. However, the DfT Circular states that 20mph limits are only suitable when the mean speeds are already at or below 24mph.

- 2.6 In terms of enforcement, the DfT guidance states that 20mph zones and limits should be self-enforcing, with no expectation from the police to enforce them. Enforcement of 20mph speed limits is possible and does take place in a few locations, notably Edinburgh and Southend, but the Police's recently revised guidelines state that whilst enforcement of 20mph limits will be considered, it cannot take the place of proper engineering.
- 2.7 The DfT is currently in the process of undertaking further detailed investigative work in relation to the impact of 20mph zones and limits. The results of this 3-year study are scheduled to be reported in 2017.

#### Policy Context

- 2.7 Recent London-wide policy documents and strategies support the continued roll-out of 20mph schemes. Of particular relevance is the work of the Roads Task Force that identified 20mph as being a suitable speed limit for specific street types where the 'movement' and 'place' functions need to be more balanced, where there are high levels of pedestrian and cycle activity and where safety issues need to be tackled. Further information in relation to the work of the Roads Task Force on street types is included in the SDG report.
- 2.8 Transport for London's recently produced Road Safety Plan, 'Safe Streets for London: The Road Safety Action Plan for London 2020 (June 2013)' also endorses the role of 20mph limits and zones, supporting their expansion on both borough and Transport for London roads, subject to the consideration of the function of each road taking into account Roads Task Force principles.
- 2.9 20mph schemes can also contribute to the discharge of the council's public health duty.

#### 3 20mph zones and limits across London

- 3.1 As part of the high-level research work undertaken by SDG a questionnaire was sent to all 33 London Boroughs. The purpose of this work was to generate a comprehensive understanding of the different approaches by boroughs to the issue of 20mph zones and limits. A total of 15 boroughs responded to the questionnaire, which helped identify a number of key themes:
  - A borough-wide approach is becoming more widespread, particularly in inner London—Camden, Islington and the City have implemented blanket 20mph schemes, and several other boroughs also plan to implement this approach;

- There is variability as to whether borough main roads are included or excluded from the blanket 20mph approach;
- A number of boroughs implement 20mph schemes on an area-by-area basis, particularly in outer London, commonly prioritising areas based on collision history, resident requests and in some cases the presence of schools;
- The use of 20mph limits appears to be becoming more common, partly because such schemes are cheaper and avoid the issues that physical traffic calming measures often attract;
- Whilst some ancillary publicity is usually undertaken alongside scheme implementation, behaviour change campaigns to encourage sustained driver compliance have generally not formed a core part of 20mph schemes;
- Before and after monitoring is often undertaken. However, the postimplementation monitoring period is often carried out over a shorter period (generally one year). Reductions in collisions and vehicle speeds are generally achieved, although the effect is smaller for schemes without physical measures;
- Enforcement remains an ongoing challenge for all boroughs. Whilst it seems that police are becoming more willing to consider possible options for enforcing 20 mph, their position remains that there should be no expectation for additional police resources. However, it should be noted that since the production of the SDG report LB Islington has announced that from 7<sup>th</sup> October 2014 that Police Enforcement will take place on borough roads, based on a financial agreement between the council and the Police.

# 4 Rationale for 20mph speed limits

- 4.1 The available evidence shows a clear link between average vehicle speeds and the number / severity of collisions that occur. A reduction in vehicle speeds would be expected to both reduce the number of collisions that occur and decrease the severity of those that do occur.
- 4.2 Reducing the speed limits is one way to lower vehicle speeds. There are also a number of other factors (apart from the legal speed limit itself) that influence drivers' speed, including physical measures and the levels of enforcement. However, a key factor in achieving a sustainable decrease in vehicle speeds is via cultural change, so that 20mph is seen as the appropriate speed in urban areas.

# 5 Impact of 20mph Schemes (High Level Research)

5.1 There is strong evidence that 20 mph schemes result in significant casualty reductions, although the available studies focus predominantly on zones with physical traffic calming. Such zones result in a decline of speeds of about 9 mph on average. The evidence in relation to vehicle emissions is mixed and traffic noise is negligible. There is also some evidence that in conjunction with other measures, 20mph zones have

the potential to reduce traffic volumes and increase the use of sustainable modes, such as walking and cycling.

- 5.2 Signed-only 20mph limits generally achieve relatively small speed reductions of 1 2 mph. Due to the limitations with monitoring, that has generally take place over one year, it is difficult to draw confident conclusions.
- 5.3 Research by the University of the West of England indicates that it is crucial that an integral programme of 'soft' measures be included as part of signed-only 20mph limits. The aim is to effect cultural change amongst drivers, so that driving in 20mph areas becomes normal.

#### 6 Impact of 20mph Schemes (Local Research)

- 6.1 In addition to the high level research, the borough has undertaken its own local research to investigate the effectiveness of 20 mph zones and limits. Detailed information in relation to this work is included at Appendix D. Whilst this work provides useful information in relation to traffic volumes, vehicle speeds and collisions, it does not provide a 'before' and 'after' comparison for volume and speed due to the lack of available pre-scheme data.
- 6.2 It should also be noted that in a number of locations the 20mph speed limits or zones were introduced on roads that already benefited from a form of traffic calming, therefore the impacts on speed, volume and collisions are likely to be less than in cases when completely new schemes have been established.
- 6.3 The survey results provide an interesting relationship with the work of the Roads Task Force on street types. Specifically, the function of the road has a strong correlation with the way it is used. On roads with high traffic volumes, where the 'function' is predominantly about movement, vehicle speeds are generally higher. On roads with lower traffic volumes, where the 'place' function is more predominant and walking and cycling is more common, vehicles are much more likely to keep to a 20mph speed limit. For example, on roads with a weekly traffic volume of less than 10,000 vehicles, approximately 20% travel above the 20mph limit, whereas on roads where the weekly traffic volume exceeds 25,000, approximately 64 80% of vehicles travel above 20mph.
- 6.4 The collision data is less easy to interpret at a high level, as the implication is that there has been a decrease in collisions in areas with 20mph limits and an increase in collisions in areas with 20mph zones. However, interrogation of the data indicates that the increase in collisions in zones has come almost entirely from one road, Tamworth Lane. Further work will be undertaken to investigate the specific reasons for this increase.

- 6.5 It should also be noted that there was a 50% decrease in the number of serious injury collisions across both zones and limits, whilst there was no change in slight injury collisions. In addition, there was a 46% decrease in pedestrian collisions, a 31% decrease in pedal cyclist collisions, no change in motorcycle collisions and an increase in 19% for vehicle collisions.
- 6.6 The local review also provides an officer-level recommendation of the highway improvements that are required to improve the overall operation of specific zones or limits. The delivery of such improvements will be subject to funding and prioritisation.

# 7 Conclusions

- 7.1 Based on the evidence that has been compiled, the key conclusions are as follows:
  - The evidence is clear that reducing vehicle speeds results in fewer and less severe collisions, particularly for vulnerable road users;
  - Historically, 20mph zones have been successful at reducing speeds by using physical traffic calming measures. Limited resources and relaxed regulations have increased the focus on 20mph limits. However, these tend to achieve smaller decreases in vehicle speeds;
  - The lack of resources to enable effective enforcement remains a major issue;
  - Changing driver attitudes and behaviour is a major challenge, in order for 20mph to be seen as the appropriate speed in urban areas. Therefore, supporting measures that foster cultural change need to be an integral part of all 20mph schemes.

# 8 Recommendations for Discussion

- The research evidence indicates that outer London boroughs generally roll-out 20 mph zones and limits on a case-by-case basis. This is considered to be a reflection of the different characteristics of the street environment, when compared to inner London. This is the approach that has been adopted by Merton, and the approach that should be maintained moving forward at this time;
- However, this approach may need to evolve in response to changed circumstances. A useful point to review 20mph policy may be in 2017, when the current Department for Transport study is expected to report and there should be more monitoring evidence available. In the longerterm, a 'tipping point' may be reached when a borough-wide approach may warrant consideration, which may be triggered if Merton's 20mph coverage (through the case-by-case approach) grows to encompass a large portion of roads in the borough, and/or if neighbouring boroughs were to adopt a blanket approach;

- The work of the Roads Task Force in relation to Street Types provides an appropriate policy framework to help determine the appropriateness of 20mph zones and limits moving forward. For example, roads with a high place and low movement function, where there are high levels of pedestrian and cycle activity, will be better suited to 20mph speed controls than roads that have more of an important movement function. This is also reflected in the local investigative work where 20mph zones and limits have proved to be much more successful at containing vehicle speeds in areas that experience lower vehicle movements. There will be some exceptions to this, based on local circumstance;
- Measures to foster cultural change have an important role to play in reducing vehicle speeds, and should be considered to be a fundamental part of the approach, rather than a 'bolt-on';
- Post-scheme monitoring should be comprehensive and continue for a minimum of 3 years to ensure that the scheme objectives continue to be met. A portion of scheme funding allocations should be set aside for this purpose;
- Police enforcement is limited to available resources. Islington has adopted a new approach to enforcement that should be monitored. The possibility of local authorities enforcing speed controls should be explored;
- New technology should be investigated when appropriate. An example would be Intelligent Speed Adaptation, which has the potential to influence or control a vehicles speed based on the speed limit.

# 9 ALTERNATIVE OPTIONS

9.1 Not applicable – this report is for information only.

# 10 CONSULTATION UNDERTAKEN OR PROPOSED

10.1 N/A

# 11 TIMETABLE

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

# 12 FINANCIAL, RESOURCE AND PROPERTY IMPLICATIONS

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

# 13 LEGAL AND STATUTORY IMPLICATIONS

13.1 This report is for information only.

#### 14 HUMAN RIGHTS, EQUALITIES AND COMMUNITY COHESION IMPLICATIONS

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

#### 15 CRIME AND DISORDER IMPLICATIONS

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

#### 16 RISK MANAGEMENT AND HEALTH AND SAFETY IMPLICATIONS

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

#### **APPENDICES**

Appendix 1:	Sustainable Communities Overview & Scrutiny Panel Report – 16 <sup>th</sup> October 2013
Appendix 2:	Sustainable Communities Overview & Scrutiny Panel Report – 26 <sup>th</sup> February 2014
Appendix 3:	Research into the Impacts of 20mph zones and limits – October 2014

Appendix 4a, Appendix 4b, Appendix 4c:

Local Research into the Impact of 20mph zones and limits in Merton – October 2014