

<b>Committee:</b>	<b>Date:</b>	
Planning and Transportation	27 November 2012	
<b>Subject:</b> 20 Mph Benefits and Disbenefits Investigation	<b>Public</b>	
<b>Report of:</b> The Director of the Built Environment	<b>For Information</b>	
<b><u>Summary</u></b>		
<p>The <i>City of London Local Implementation Plan 2011</i> contains a proposal for the “Investigation of the benefits and disbenefits of a 20 mph speed limit or a 20 mph zone across the City, preferably including the Transport for London road network”. This proposal is supported by the government’s draft revised <i>Setting Local Speed Limits</i> circular (July 2012), which states that:</p>		
<p><i>12. Traffic authorities are asked to:</i></p> <ul style="list-style-type: none"> <li>• <b><i>keep their speed limits under review with changing circumstances;</i></b></li> <li>• <b><i>consider the introduction of more 20 mph limits and zones, over time, in urban areas, to ensure greater safety for pedestrians and cyclists....</i></b></li> </ul>		
<p>Your officers now intend to commence work on this investigation in accordance with the approved Local Implementation Plan. The bulk of the investigation work will be undertaken in April–June 2013 with reporting of the conclusions to your Committee in late summer 2013. However, some items will be able to be advanced prior to that period, to ensure that the investigation can proceed promptly once all necessary inputs are available.</p>		
<p>There will be a financial cost involved in undertaking this investigation of the benefits and disbenefits of a 20 mph environment in the City. At this stage the scale of this funding requirement is unknown as the inputs required by the Department for Transport’s speed limit appraisal tool are as yet unknown. However, your officers anticipate that the investigation will largely be able to be undertaken using existing data sources, such as the City’s regular traffic speed surveys and road traffic collision and casualty data compiled and held by Transport for London, and that it can therefore be contained within the Director of the Built Environment’s existing local risk resources.</p>		
<b>Recommendation</b>		
I recommend that your Committee receives this report.		

## Main Report

### Background

1. On 10 January 2012 the Deputy Mayor for Transport, under the delegated authority of the Mayor of London, approved the *City of London Local Implementation Plan 2011* (“the plan”). This plan is the City Corporation’s set of proposals for the implementation of the Mayor of London’s transport strategy in the City.
2. The plan contains seven programmes of work. In addition, since the plan’s preparation a new area of work focussing on the air quality impacts of transport has been established and has benefitted from grants from the Department for Environment, Food and Rural Affairs (DEFRA) and the Greater London Authority (the GLA).
3. One of the seven programmes of the plan is the road danger reduction programme. This programme includes a proposal for the:

*Investigation of the benefits and disbenefits of a 20 mph speed limit or a 20 mph zone across the City, preferably including the Transport for London road network.*

4. The plan does not set out a timeframe during which this investigation should take place; the purpose of this report is to provide that timeframe.
5. In July 2012 the government published a draft revised *Setting Local Speed Limits* circular and called for comments on it. This draft circular is **attached** to this report as Appendix 1. The circular sets out that appropriate speed limits are an important part of a transport system that is an engine for economic growth and asks traffic authorities to consider the introduction of more 20 mph speed limits and zones in urban areas (not just residential areas). Paragraphs 1 and 12 of the draft circular state that:—

*1. The Department for Transport has a vision for a transport system that is an engine for economic growth, but one that is also more sustainable, safer, and improves quality of life in our communities.*

.....

*12. Traffic authorities are asked to:*

- **keep their speed limits under review with changing circumstances;**
- **consider the introduction of more 20 mph limits and zones, over time, in urban areas, to ensure greater safety for pedestrians and cyclists....**

### Current Position

6. The “brief” for the investigation as contained in the approved plan is to look at both benefits and disbenefits (i.e., economic, environmental and other costs). It is, however, to focus on a City-wide scheme, preferably one that includes the Transport for London road network (“the TLRN”) within the City.
7. There are already a few very small 20 mph speed limit areas in the City covering five streets over four small discontinuous areas. On 2 February 1998

the City introduced a 20 mph speed limit covering (i) Watling Street between the eastern kerb-line of Bread Street and the western kerb-line of Queen Street and (ii) Watling Court. On 27 July 2010 your Committee gave consent to the London Borough of Islington introducing 20 mph speed limits on three boundary streets, i.e., Baltic Street West, Chiswell Street and Golden Lane, and that borough has used the City's consent to subsequently put 20 mph speed limits in place on these three boundary streets.

8. It was discussed by your Committee at the time of considering the various drafts of the plan whether or not a 20 mph speed limit or a 20 mph zone would be likely to be effective given the low average speed of vehicle traffic in the City. The average speed of motor vehicle traffic in the City in April 2012 was measured by the City's comprehensive traffic speed survey as being just 7.86 mph. However, this average figure obscures two important considerations.
9. Firstly, the City's traffic speed survey, while comprehensive, only covers the three peak periods of 7 a.m.–9.30 a.m., 12 p.m.–2.30 p.m. and 4 p.m.–6.30 p.m. Outside these peak periods traffic speeds are likely to be considerably faster because of the lower levels of congestion.
10. Secondly, the City-wide average masks the large range of traffic speeds in the City. While it is true that during the three surveyed peak periods motor vehicle traffic travels at or below 20 mph for 89% of the time, for 11% of the time it is travelling above 20 mph. And even this masks some considerable variation, with traffic on the City's London distributor roads\* travelling above 20 mph for 25% of the time and traffic on the City's borough distributor roads† travelling above 20 mph for 14% of the time.
11. Table 1 *below* sets out full details of the speed ranges from the April 2012 traffic speed survey and Appendix 2 to this report depicts the City's highway hierarchy. All of the strategic roads and all of the London distributor roads are part of the TLRN, as is one anomalous route of local distributor roads (the A3/A10 Norton Folgate-Bishopsgate-Gracechurch Street-Eastcheap-King William Street-London Bridge).

Street Type	Percentage of Time in Speed Range		
	0–6 mph	6–20 mph	over 20 mph
strategic roads	55.37%	35.51%	9.12%
London distributor roads	40.47%	34.64%	24.90%
borough distributor roads	43.62%	42.01%	14.37%
local distributor roads	57.69%	35.15%	7.17%
<b><i>all surveyed roads</i></b>	<b><i>53.07%</i></b>	<b><i>35.94%</i></b>	<b><i>10.99%</i></b>

12. The maximum average speed recorded in the April 2012 survey was 29.1 mph on Blackfriars Underpass in the 12 p.m.–2.30 p.m. period.

\* the A201 Farringdon Street–Ludgate Circus–New Bridge Street–Blackfriars Bridge and the A3211 Victoria Embankment–Blackfriars Underpass–Upper Thames Street–Lower Thames Street–Byward Street–Tower Hill  
† the A40/A1/A1211 Northern Relief Route from High Holborn via London Wall to Aldgate High Street

13. Between January and October 2012 the City of London Police recorded 5,839 vehicles exceeding 30 mph and issued 2,063 penalties for speeding, at an average speed of 40 mph.
14. As a result, there is scope for a City-wide 20 mph speed limit or 20 mph zone to have an effect on actual vehicle speeds. The largest impacts would likely be on the TLRN, as all of the strategic roads and London distributor roads and some of the local distributors roads are part of the TLRN.
15. The government's draft revised *Setting Local Speed Limits* circular states that:

3. ... As well as being the legal limit, speed limits are a key source of information to road users, particularly as an indicator of the nature and risks posed by that road both to themselves and to all other road users.  
.....

It is possible that the City's average peak-period speeds are not a good indicator to drivers of the risks that speeds at the higher ends of the ranges that it is possible to drive through the City at pose to vulnerable road users such as pedestrians and cyclists. A revised City speed limit may provide better information to drivers about the City's road dangers and the expectations that pedestrians and cyclists have about vehicle speeds in the City (i.e., that they will be low).

The investigation of the benefits and disbenefits of a 20 mph speed limit or a 20 mph zone is referenced in the City's draft *Road Danger Reduction Plan* as an important part of that plan's consideration of options for a safer future City. This is particularly in the context of (i) the exhaustion of the effectiveness of some previous tools for reducing the number of road casualties in the City, compared to the need to continue to reduce casualty numbers rather than letting them plateau or increase; and (ii) the City's changing traffic mix, with anticipated continuing strong growth in the numbers of pedestrians and the numbers of cyclists, and therefore in the proportion of City road traffic that these groups comprise.

## Options

16. In accordance with the proposal in the plan, the investigation will include both a City-wide 20 mph speed limit and a City-wide 20 mph zone.
17. There used to be a considerable difference in these approaches to limiting speeds to 20 mph, with 20 mph speed limits involving traffic signs (as with other speed limits) but not necessarily any other measures, but with 20 mph zones requiring physical traffic calming (e.g., speed humps, speed cushions or chicanes) to be installed to enforce the zone. However, recent government reforms have increased the flexibility of 20 mph zones, meaning that 20 mph zones can now also be installed with just traffic signs and no necessary physical traffic calming measures. As a result, the investigation will essentially look at the benefits and disbenefits of a 20 mph environment implemented through traffic signs (including road markings) alone and one involving traffic signs as well as physical traffic calming measures such as speed humps, speed cushions or chicanes.

## Investigation

18. There are three significant inputs that appear to officers to be needed in order to advance the investigation in an efficient and cost effective way.
19. Firstly, the government's **revised Setting Local Speed Limits circular** needs to be finalized and published. This is the circular referred to *above* that includes appropriate speed limits as an important part of "a transport system that is an engine for economic growth". The July 2012 draft of this circular is **attached** to this report as Appendix 1. The government's summary of responses to the draft circular and proposed next steps in relation to it are scheduled to be published by 5 January 2013 at the latest.
20. Secondly, the Department for Transport's **speed limit appraisal tool** needs to be finalized and made available to local traffic authorities to use. This is scheduled to be made available by the Department this calendar year. The speed limit appraisal tool is likely to be the City's principal resource for assessing the benefits and disbenefits of a City-wide 20 mph speed limit and a City-wide 20 mph zone in a consistent way according to the best practice nationally recommended methodology.
21. Thirdly, the study by the Central London sub-regional transport partnership of the **potential air quality impacts** of 20 mph environments in the specific context of Central London needs to be undertaken and published. The City is an active member of this partnership and has taken a lead rôle in developing the brief for this study. Advancing the air quality study is dependent upon the partnership, but at this stage it is anticipated that the final study will be published in April 2013.
22. As a result, your officers anticipate undertaking the bulk of the investigatory work in April–June 2013 and reporting the conclusions to your Committee in late summer 2013. However, some items will be able to be advanced prior to that period, to ensure that the investigation can proceed promptly once all necessary inputs are available.
23. The investigation will need to cover all of the likely principal benefits and disbenefits of a 20 mph environment. These include, but are not necessarily limited to, likely changes:—
  - to average and maximum **journey times** for all road user classes;
  - in the frequency of road traffic **collisions**;
  - in the severity of road traffic **casualties** (fatal, serious and slight);
  - to the environment for **walking**/modal shift to or from walking;
  - to the environment for **cycling**/modal shift to or from cycling;
  - to the environment for **public transport** (principally buses)/modal shift to or from public transport;

- in the emissions of **air pollutants** from road vehicle exhausts, including as a result of modal shifts;
  - in the emissions of air pollutants from road vehicle **brake and tyre wear**, including as a result of modal shifts;
  - in the emissions of **greenhouse gases** from road traffic, including as a result of modal shifts;
  - in **noise pollutants** and vibration from road traffic, including as a result of modal shifts.
24. Enforcement options will be considered as part of the investigation in close conjunction with the City of London Police.

### **Implications**

25. There will of course be a financial cost involved in undertaking this investigation of the benefits and disbenefits of a 20 mph environment. At this stage the scale of this funding requirement is unknown as the inputs required by the Department for Transport's speed limit appraisal tool are as yet unknown. However, your officers anticipate that the investigation will largely be able to be undertaken using existing data sources, such as the City's regular traffic speed surveys and road traffic collision and casualty data compiled and held by Transport for London, and that it can therefore be contained within the Director of the Built Environment's existing local risk resources.

### **Conclusion**

26. In accordance with the approved plan your officers now intend to commence work on the investigation of a City-wide 20 mph speed limit and a City-wide 20 mph zone. The bulk of the investigation work will be undertaken in April–June 2013 with reporting of the conclusions to your Committee in late summer 2013. However, some items will be able to be advanced prior to that period, to ensure that the investigation can proceed promptly once all necessary inputs are available.

### **Appendices:**

Appendix 1: Draft *Setting Local Speed Limits* Circular (July 2012)

Appendix 2: City of London Highway Hierarchy

**Contact:**  
Craig Stansfield  
Team Leader, Transportation Strategy and Programmes  
Transportation and Public Realm Division  
Department of the Built Environment  
[craig.stansfield@cityoflondon.gov.uk](mailto:craig.stansfield@cityoflondon.gov.uk) | 020 7332 1702