

SPEED MANAGEMENT REPORT

1.0 INTRODUCTION

- 1.1. This report sets the background of speed management in Luton. It discusses the setting and enforcement of speed limits.
- 1.2. Luton Borough Council is the Traffic Authority for roads within the borough (excluding the M1 motorway).
- 1.3. The majority of Luton town is deemed as built-up and therefore, many of the roads within the town are defined as restricted roads and have a default speed limit of 30mph.

2.0 LEGAL FRAMEWORK OF SPEED LIMITS IN URBAN AREAS

- 2.1. The Road Traffic Act 1984 makes it unlawful for driver of a motor vehicle to travel at speeds in excess of 30mph on a restricted road. Section 82 of The Road Traffic Act 1984 defines a restricted road in England and Wales as roads with a system of street lighting with street lamps placed not more than 200 yards apart.
- 2.2. The Road Traffic Act 1984 also makes provision for other speed limits to be set by legal order. These can be continuous, over a limited period or when signs indicate.
- 2.3. The Secretary of State for Transport must approve speed limits less than 30mph, excluding 20mph speed limits and zones.
- 2.4. Under Section 85 of the Road Traffic Regulation Act 1984 a driver cannot be convicted of driving at a speed in excess of a speed limit if there is not adequate signing unless it is a 30mph speed limit and there is a system of street lighting furnished by means of lamps places not more than 200 yards apart. The Act makes it a duty of the Traffic Authority to erect and maintain traffic signs in such positions as may be suitable for this purpose.
- 2.5. The Traffic Signs Regulations and General Directions 2016 (TRGD 2016) also prescribes 20mph zones (Figure 1).



Figure 1 - 20mph zone sign

2.6. 20mph zones are areas where a maximum speed limit of 20mph is in force. However, the regulations stipulate that they can only be used where no part of the road is more than 50 metres from a traffic calming feature. A traffic calming feature may include:

- any type of road hump, speed cushion or speed table
- pedestrian refuge (constructed after 15th June 1999),
- variations in width of road (constructed after 15th June 1999),
- a horizontal bend in the carriageway through which all traffic has to change direction by no less than 70 degrees within a distance of 32 metres as measured at the inner kerb radius,
- a 20mph repeater sign,
- a 20mph road marking.

This restriction does not apply to cul-de-sacs less than 80 metres long.

Guidance on the setting of local speed limits

2.7. The Department of Transport gives guidance on the setting of speed limits through Circular 01/2013 – Setting of local speed limits.

2.8. The circular states that ‘speed limits should be evidence-led and self-explaining and seek to reinforce people’s assessment of what is a safe speed to travel. They should encourage self-compliance.’

2.9. It also states that ‘Traffic Authorities keep their speed limits under review with changing circumstances, and consider the introduction of more 20mph limits and zones, over time, in urban areas and built-up village streets that are primarily residential, to ensure greater safety for pedestrians and cyclists using criteria given in the circular’.

2.10. The Circular further suggests that successful 20mph zones and limits are generally self-enforcing. i.e. the existing conditions of the road together with other measures leads to a mean traffic speed compliant with the speed limit.

2.11. Safety is at the heart of designing roads so that mistakes made by the road user do not result in death or serious injury. Effective speed management is part of building a safe environment where road users are encouraged to adopt appropriate and safe speeds below the speed limit. They are also an important source of information to the road user especially as an indicator of the nature and risks posed by the surrounding environment and therefore, should be evidence-led and self-explaining.

Signing of speed limits

2.12. Schedule 10 of the TRGD 2016 prescribes speed limit signs. Chapter 3 of the Traffic Signs Manual gives the best practice guidance for signing speed limits.

2.13. Signs should be erected at the start and end of the restriction.

- 2.14. Repeater signs should be erected on roads where the speed limit is different to the default speed limit. The Regulations stipulate that **no** repeater signs are allowed on roads that have a system of street lighting with a 30mph speed limit
- 2.15. Table 1 shows the best practice guidance for repeater signing.

Speed limit and type of road (Notes 1 and 2)	Size of sign (mm)	Maximum distance (m) between			CVD (m)
		Consecutive signs on alternate sides of the carriageway (Note 3)	Consecutive signs on the same side of the carriageway	Terminal sign and first repeater	
20mph zone	-	No repeaters	No repeaters	No repeaters	-
20mph	300	200	300	200	20
30mph with street lighting	-	No repeaters	No repeaters	No repeaters	-
30mph without street lighting	300	250	400	200	30
40mph	300	350	500	250	40
50mph	450	450	700	350	50
60mph (dual carriageway)	600	500	800	400	60
National speed limit (lit single carriageway)	450	500	800	400	60
National speed limit (lit dual carriageway)	600	600	900	450	70
National speed limit (unlit road)	-	No repeaters	No repeaters	No repeaters	-

Table 1 – Best practice guidance on repeater signing

3.0 LUTON COUNCIL'S SPEED MANAGEMENT POLICY

- 3.1. Luton Council's Speed Management Policy is set in the Local Transport Plan 2011-2026 and Road Safety Plan. The Local Transport Plan 2011-2026 states that *'most main roads in Luton are subject to 30mph speed limits. In addition, the number of 20mph speed limits and zones on minor roads in residential areas, outside schools and around town/district centres has increased in recent years and will continue to increase in the future. The aim is to retain and maintain a network of 30mph and a few 40mph roads but, by the end of the Area Studies Programme it is anticipated that most residential roads will have 20mph speed limits'*.
- 3.2. Appendix A illustrates the network of higher speed roads which allow drivers to get to businesses, shops and residential areas.
- 3.3. The Speed Management Policy not only encompasses the setting, engineering of speed limits and enforcement but also, is important for the education of road users.

Setting of speed limits

- 3.4. Speed limits are set based on Council Policy, using Department for Transport guidance and through local support. All roads within Luton with a system of street lighting have a default speed limit of 30mph. Traffic Regulation Orders vary this limit.
- 3.5. Speed limits on the A, B and C roads with a limit higher than 30mph were reviewed in 2007. This resulted in the Council's Executive agreeing a number of reductions in speed limits.
- 3.6. Speed limits for most residential roads in Luton have been reduced to 20mph either through the use of 20mph zones or speed limits. This has resulted as part of the council's Area Studies Programme.
- 3.7. Appendix B shows speed limits in Luton. Roads coloured green are 20mph zones/limits.

Education and Publicity

- 3.8. Luton's Road Safety team work in partnership with other local authorities road safety teams to educate and publicise speed limits and speeding.
- 3.9. Vehicle Activated Signs (Figure 2) are used to remind drivers of the speed limit within an area. They are effective where drivers do not realise they are exceeding the speed limit either because they are not sure of the speed limit or because they have drifted over the speed limit. They are not effective for drivers who choose to disobey the speed limit. Luton has 14 vehicle activated signs located in various roads around the borough. Appendix C illustrates where they are located within the town.



Figure 2 - Vehicle Activated Speed sign

- 3.10. Over time the effectiveness of vehicle actuated signs reduces as drivers get accustomed to seeing the sign. Up until 2013 Luton has a programme of moving vehicle actuated signs around twice a year to combat this problem. Unfortunately, due to budgetary constraints this programme has been discontinued.
- 3.11. The Road Safety Team run campaigns to raise the awareness of speed using various outlets such as bus backs, radio and social media. In 2016 Luton's Road Safety Team partnered with The Honest Truth and ran its speed campaign on bus backs (Figure 3) in the area. The Honest Truth is a charitable partnership devised by the Police and Fire Services in Devon and Cornwall.



Figure 3 – Speed bus back

Engineering measures

- 3.12. 20mph zones (with and without engineering measures) have been introduced at various locations as part of the Area Studies Programme. Engineering measures were focused on areas with a history of injury accidents. As the programme progressed, areas experienced fewer injury accidents and engineering measures were focused on areas where residents supported them.
- 3.13. Engineering measures have included vertical deflection ie. road humps, speed tables and speed cushions. These are installed under the Highways (Road Humps) Regulations 1999. The highest point must not be more than 100mm high. Luton uses the industrial standard of 75mm. National studies have found that 75mm reduces the number of vehicles grounding and gives a more comfortable ride to bus passengers.
- 3.14. Vertical deflection is avoided on major emergency routes and speed cushions are installed on secondary emergency routes (these routes have been agreed with the emergency services).

The ambulance service is most effected by vertical deflection not just due to speed of attendance but also when carry patients with skeletal problems or treating patients on the journey to the hospital.

- 3.15. Other features include priority road narrowing where traffic in one direction has to give way to traffic in the other. Road width alterations, mini-roundabouts, traffic islands and pedestrian refuges are also used. Features that do not involve a physical change in direction either around or over do not reduce traffic speeds by more than 1 or 2 mph. However, a reduction of 1mph in traffic speed reduces injury accidents by 5%.
- 3.16. Appendix D shows the approximate cost including design costs of various engineering features.
- 3.17. The majority of schools are within a 20 mph speed zone or limit or have a part time 20mph limit. Part time limits are focused on roads that a full time 20mph speed limit would not be appropriate.

Speed cameras

- 3.18. Speed cameras were first introduced into Luton in 1999 as part of the Local Safety Scheme programme to reduce road traffic accidents.
- 3.19. In 2002 the Safety Camera Hypothecation Scheme was introduced and the Bedfordshire and Luton Casualty Partnership was formed as a vehicle to implement this. The Hypothecation Scheme enabled both the Police and Local Authorities to recover costs in erecting, maintaining and conducting enforcement by fixed and mobile speed camera at sites meeting the speed and collision history criterion.
- 3.20. In 2007 the Hypothecation Scheme was ended in favour of a road safety grant which was given to local authorities to administer. This resulted in a memorandum of understanding between Bedfordshire Police and the three local authorities (Luton Council, Central Bedfordshire Council and Bedford Borough Council) forming the Bedfordshire and Luton Casualty Reduction Partnership and downsizing of the amount of enforcement carried out at fixed and mobile speed camera sites.
- 3.21. Following the complete withdrawal of the road safety grant in 2010 a Service Level Agreement was drawn up whereby the Police funded the enforcement of cameras through income received via the NDORS process and the local authority would maintain and calibrated the core sites.
- 3.22. Bedfordshire and Luton Casualty Reduction Partnership continued to use the guidance for the placing of speed cameras (see Table 2 below). However, some camera systems have been erected for traffic management purposes and not necessarily at locations with a history of speed related injury accidents.

	Fixed speed camera sites	Mobile speed camera sites	Red light or combined red light speed camera sites
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1	Site or route length requirements	Between 0.4 km and 1.5 km	Between 0.4 km and 5km	From stop line to stop line in direction of travel		
2	Number of killed and serious collisions (KSI)	At least 3 KSI collisions per km in the baseline period*	At least 1 KSI collisions per km in the baseline period*.	At least 1KSI collision within the junction in the baseline period*. Selection must be based upon a collision history of red light running.		
		*The baseline period is the most recent 36 month period available where the end date is within 12 months of the date of submission				
3	Total value required	Built up	Non built up	Built up	Non built up	All areas
		22/km	18/km	11/km	9/km	10
4	85 th percentile speed at proposed sites	Speed survey shows free-flow 85th percentile speed is at or above ACPO enforcement threshold. This can apply to all vehicles or a vehicle class but must be compared consistently.				Not applicable

Fatal or serious collision = **5** (i.e. 2 serious collisions = 10)

Slight collision = **1** (i.e. 5 slight collisions = 5)

‘Built up area’ is defined as a road with a speed limit of 40 mph or less.*

‘Non-built up area’ is defined as a road with a speed limit of 50 mph or more.*

Table 2 - Guidance for the placing of Speed Cameras

- 3.23. There are currently has 8 (eight) fixed speed camera sites covered by 11 (eleven) housings and 11 (eleven) mobile camera sites within Luton. All of these sites are signed using camera enforcement and speed limit reminder for camera site signs (Figure 4). All camera sites are now set up with a fibre link to allow transfer of data from the site.
- 3.24. The Police Cameras Tickets and Collisions Department are currently operating the cameras with the new technology, these were paid for from a Capital allocation from Luton BC, this is our contribution towards the enforcement of speed limits, we do not receive any contribution from the FPN's that are issued.



Figure 4 – Speed camera signing

- 3.25. There are two red light camera sites although, these are now obsolete.
- 3.26. There is an average speed camera system within the 50mph speed limit on New Airport Way – the location is shared by Highways England, Luton and Central Bedfordshire highway authorities.

Speed complaints

- 3.27. The Council's Traffic Management team receives speeding related complaints and concerns from residents and other stakeholders. These are included on a list of locations to be considered for a speed survey. Unfortunately, current levels of available resources can lengthen the time for completion of this task.
- 3.28. The survey information will normally be forwarded to Bedfordshire Police, if for a survey on a 30mph speed limit there are more than 10% exceeding the police prosecutable level or if for a 20mph speed limit there is a significant portion exceeding the prosecutable level. Normally the Police do not routinely enforce 20mph speed limits and they will forward relevant information to Community Speed Watch (see paragraph 5.8).
- 3.29. Where engineering measures or additional signing may be of assistance these proposals are added to the request list and considered for inclusion in the annual programme of works (dependent on budget, resources and priorities).

4.0 SPEED LIMIT ENFORCEMENT

- 4.1. Any driver who exceeds a lawful speed limit can be prosecuted. However, this can only be carried out by the Police under the Road Traffic Regulation Act 1984. The Police follow national guidance when enforcing speeds.
- 4.2. The national guidance states that the enforcement of traffic law by police should be guided by the principles of proportionality, targeting, consistency and transparency.
 - 4.2.1. Proportionality – Relating enforcement action against risk to the individual and property and based on the offender choice to offend rather than genuine mistakes (or confusion from unclear limits) and to the seriousness of the breach.

- 4.2.2. Targeting – Enforcement action directed primarily at those whose behaviour poses the greatest risk/highest harm.
- 4.2.3. Consistency – Taking a similar approach in similar circumstances to achieve a similar end.
- 4.2.4. Transparency – Helping the drivers to understand what is expected of them and why. It also makes it clear that all instances of offending is unacceptable. Should the Police become aware of offending and decide to prosecute then (no matter where or when), then this will occur and guidance will not restrict this in any way.
- 4.3. The guidance details the Police Services' position on speed limits (including 20mph roads). This states that:-
 - 4.3.1. *Appropriate speed limits are supported, so long as they look and feel like the limit giving visiting motorists who wish to conform the chance;*
 - 4.3.2. *The desired outcome has to be speeds at the limit chosen so as to achieve safe roads for other and vulnerable users not high speeds and high enforcement;*
 - 4.3.3. *Self-enforcing (with reducing features) not requiring large scale enforcement*
 - 4.3.4. *Only introduce where average speeds are already close to the limit imposed (24mph in a proposed 20mph area) or with interventions that make the limit clear to visiting motorists.*
 - 4.3.5. *Speeding problems identified in an area must have the engineering, site clarity and need re-assessed, not simply a call for more enforcement; and*
 - 4.3.6. *Enforcing against drivers who simply misread the road may not be appropriate.*
- 4.4. Table 2 shows the national guidance on enforcement levels. However, this does not preclude enforcement below these thresholds although the officer must consider the tolerance of the device that they are using to measure the speed.
- 4.5. Drivers caught speeding by an officer are reported to the Cameras Tickets and Collisions Department (CTC) where an assessment process takes place around the disposal method for the offence. Drivers who have attended a speed awareness course within the last three years will receive a Fixed Penalty Notice. Drivers exceeding speeds shown in the last column of the Table 3 below or where the issue of penalty points would result in loss of their driving licence will receive a court summons.

Limit	Device tolerance	Fixed Penalty when education is not appropriate	Speed Awareness if appropriate From To		Summons in all other cases and above
20 mph	22mph	24 mph	24 mph	31 mph	35 mph
30 mph	32 mph	35 mph	35 mph	42 mph	50 mph
40 mph	42 mph	46 mph	46 mph	53 mph	66 mph
50 mph	52 mph	57 mph	57 mph	64 mph	76 mph
60 mph	62 mph	68 mph	68 mph	75 mph	86 mph
70 mph	73 mph	79 mph	79 mph	86 mph	96 mph

Table 3 – National Guidance on enforcement levels

- 4.6. Fixed penalty tickets for speeding result in a fine of £100 and 3 penalty points. All revenue from Fixed Penalty Notices goes to the Government Treasury.
- 4.7. Drivers may be prosecuted for other offences for example dangerous driving or driving without due care and attention when the speed is inappropriate or inherently unsafe above or below the speed limit.

Speed Awareness Courses

- 4.8. Speed awareness courses are part of the National Driver Offending Retraining Scheme (NDORS).
- 4.9. There are three courses about speed
- offences detected by Automatic Camera Devices and Police Officers on the roadside within the range of (10% + 2) mph to (10% + 9) mph,
 - 20 mph zones and
 - Motorways where the speed limit is posted on variable roadside and overhead gantry signs (there are separate courses for these offences).

The course lasts for four hours and is based entirely within a classroom.

5.0 BEDFORDSHIRE POLICE SPEED ENFORCEMENT

- 5.1. Bedfordshire Police carry out all speed enforcement in the area. They have a hierarchical approach to define the severity and scale of reported speeding issues to determine the appropriate level of enforcement.
- 5.2. The highest priority is given to areas with known speed related killed and seriously injured accident (KSI) problems. Essentially these are areas with the existing speed camera sites both fixed and mobile and are enforced by the camera team.

- 5.3. High/medium priorities are roads with a known speed related casualty problem that do not have fixed/mobile camera sites. These sites are addressed by Roads Policing officers and/or the camera team.
- 5.4. Medium priorities are roads with speeding problems and without any known casualty problem. In the first instance these sites are addressed by Community Speedwatch and/or the local policing teams.
- 5.5. Low priorities receive limited intervention.

Speed Awareness course

- 5.6. Bedfordshire Police Speed Awareness workshops are organised by AA Drivetech. Their contract comes to an end in January 2018 but it is likely that they will be given a one year extension. The courses costs £91, (£45 of which is reimbursed to the Police to cover the costs of the CTC). Any surplus is given to the Police Crime Commissioner.
- 5.7. The Police Crime Commissioner has a Road Safety Grant fund and there are currently ongoing discussions between the Police, the PCC's office and local authorities in Bedfordshire in relation to reinvigorating the Bedfordshire and Luton Casualty Reduction partnership and look at ways of funding including the possible use of the PCC's road safety fund.

Community Speedwatch

- 5.8. Community Speedwatch is a scheme to help people reduce traffic speeding through their neighbourhood. The scheme is led by the Police and enables trained volunteers to work within their community to raise awareness of the dangers of speeding and to help control the problem locally.
- 5.9. Volunteers use a speed indicator device (Figure 5) to measure the speed of vehicles driving through an area and it records date, time, colour, make, model and registration number of any vehicles exceeding the speed limit. These details are forwarded to Bedfordshire Police, who contacts the registered keeper by letter to detail the offence. The information is also stored on the Police database and if the same vehicle is caught again another letter is sent. The Police also use this data to inform their enforcement activity e.g. if a Community Speedwatch observe a vehicle is speeding at a particular time every time they are at a particular location then a Police officer can attend and carry out enforcement.



Figure 5 – Speed Indicator Device used by Community Speedwatch

- 5.10. Community Speedwatch was launched in Luton in 2014. However; it wasn't until early 2017 when a volunteer co-ordinator came forward to manage the volunteers that the scheme took off in Luton. There are currently 17 trained volunteers in Luton. However, only 4 regularly carry out operations and 1 volunteer occasionally. There have been 13 operations carried out up to Oct 2017.
- 5.11. Luton's Road Safety Team support Community Speedwatch by delivering leaflets to the area a few days before an operation is first planned. This is to highlight the operation to local residents and to try to encourage volunteers to join.

Appendix A – Network of 30/40mph roads



Appendix

Appendix B – Speed limits in Luton



Appendix

Appendix C – Vehicle actuated signs in Luton

Road	Location	Description
Hancock Drive	LC 9	30mph slow down
Kestrel Way	Opp Bunting Road	30mph slow down
Leagrave High Street	o/s 488	Your speed is
Mountgrace Road	Op Swift Green Road	20mph slow down
Park Viaduct	Near Cumberland Street	30mph slow down
Stoneygate Road	o/s school	Your speed is
Whitehorse Vale	Opp Cicerco Drive	30mph slow down
Wigmore Lane	Opp Handcross Road	30mph slow down
Wigmore Lane	Near Buckingham Drive	30mph slow down
London Road	o/s 44	30mph slow down
Eaton Green Road	Opp Raynham Way community centre	30mph slow down
New Bedford Road	Opp 255	30mph slow down
Ravenhill Way	o/s 42	30mph slow down
Whipperley Way	o/s 63	20mph slow down

Appendix C - Cost of measures

The following table shows the estimated cost of various measures engineering measures

Measure	Capital cost	Revenue cost
Vehicle Activated Sign (each)	£3,000	£170 annually
Digital Fixed Camera (each)	£50,000	£675 (calibration annually plus maintenance)
Average Speed Camera system (3 mast system)	£100,000	£3700 (calibration annually plus maintenance)
Road hump 3.7m long	£900	15 year life
Flat topped speed table 8.3m long	£3000	15 year life
Priority narrowing	£5000	10 years for the illuminated bollards
Pedestrian refuge	£7000	10 years for the illuminated bollards
Terminal speed limit sign and post	£350	15 year life
Repeater speed limit sign (on existing post)	£30	15 year life
Speed limit road marking roundel	£30	3 year life

References

ACPO Speed Enforcement Policy Guidelines 2011-2015: Joining Forces for Safer Roads (May 2013)

Department for Transport Circular 1/2007 - Use of Speed and Red Light Cameras for Traffic Enforcement: Guidance on Deployment, Visibility and Signing

Department for Transport circular 01/2013 – setting of local speed limits

The Highways Act 1980 – Section 90a – i

Highway (road humps) Regulations 1999

Road Traffic Regulation Act 1984 – part VI Speed Limits

Traffic Signs Regulations and General Directions 2016